United Nations COPUOS/T.577

Committee on the Peaceful Uses of Outer Space

Unedited transcript

577th Meeting
Wednesday, 13 June 2007, 3 p.m.
Vienna

Chairman: Mr. G. Brachet (France)

The meeting was called to order at 3.08 p.m.

The CHAIRMAN (*interpretation from French*): Ladies and gentlemen, please be seated. I would like to call to order the 577th meeting of the Committee on the Peaceful Uses of Outer Space. I trust you found the documentary provided by Ukraine informative. Tomorrow, there will be three documentaries screened during lunch. The first from Germany, on remote sensing data for disaster management. The second, from South Africa, on South African large telescope. The third will be a short movie by ESA on its activities.

This afternoon we will begin with our continuation of consideration of agenda item 13, other matters. We will then continue and I hope conclude our consideration of agenda item 7, report of the Scientific and Technical Subcommittee. Agenda 10, space and society and agenda item 11, space and water. Time permitting, we will also continue our consideration of agenda item 12, use of space-derived geospatial data for sustainable development.

At the end of this afternoon's meeting there will be four technical presentations. The first by Mr. Sdunnus of Germany on enhanced flood prediction based on mobile GNSS applications. The three other presentations will be under agenda item 10, by Ms. Takemi Chiku of Japan, on enhancing human development through space education, attempts by the JAXA Space Education Centre and by Mr. Abdul-Rahman Al-Shaikh of Saudi Arabic, on space image atlas of the Kingdom of Saudi Arabic: a new way of education for sustainable development and Mr. Peter Lillie who will make a presentation on behalf of ESPI on civil society and outer space.

Distinguished delegates, I would now like to continue our consideration of agenda item 13, other matters. We will start off by hearing some States contributions on the subject, future role of the Committee, that I introduced this morning. Then, upon the request of various delegations, we will be going back to another item, which is the examination of the candidacies for observer status of the Committee, following the discussion that took place yesterday afternoon.

On agenda item 13, I would like to give the floor to Mr. Vladimir Kopal, Czech Republic.

Other matters (agenda item 13)

Mr. V. KOPAL (Czech Republic): Mr. Chairman, the delegation of the Czech Republic has supported, from the very beginning, the idea of holding a discussion on the future role and activities of the Committee and asking its Chairman to draft a working paper on this subject.

We consider the document L.268 a thoughtful basis for a meaningful discussion because it presents not only an evaluation of the main results but it also includes a number of initiatives that could lead to further useful outcomes of COPUOS work. We feel, however, that there still remains a certain lack of balance between the thrust on scientific and technological matters, on the one hand, and the interest in legal issues on the other. This is, of course, a reflection of tendencies prevailing at present within

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COPUOS itself. Therefore our comments will mostly relate to legal aspects of the document and to the possible input of the Legal Subcommittee to the activities of the Committee as a whole.

Document L.268 deals with the work of the Legal Subcommittee, mainly in paragraph 10, and it is possible to agree with this evaluation. Indeed, the consideration of the concept of the launching State which led to the adoption of a special General Assembly resolution and of practice of States and international organizations in registering space objects, which hopefully will lead to another special General Assembly resolution, represent the most substantive outcomes of the efforts of the Legal Subcommittee to clarify and develop certain implementation aspects of the legal regime of outer space. These items have been considered by special working groups on the basis of multiyear work plans and the discussions thereon have belonged to the most fruitful debates within the Subcommittee in recent years. It is also possible to welcome the agreement reached at the last session of the Legal Subcommittee to include on its agenda a new item of this category, namely, general exchange of information on national legislation relevant to the peaceful exploration and use of outer space.

At the same time it should not be neglected that, unlike the Scientific and Technical Subcommittee which now has on its agenda five multi-year items, the Legal Subcommittee has had but one such item for several years on its agenda. These subjects did not lead to a further development of international space law but rather to facilitating the application of existing rules of space. There are a number of issues which would deserve the consideration and regulation by the Legal Subcommittee and some of them have been suggested, even repeatedly, by members of the Subcommittee for years. This is a problem which should not be omitted when considering the future activities of COPUOS and the contribution of the Legal Subcommittee to these aims.

Possible roles of the Legal Subcommittee are also mentioned in some paragraphs of the document. Thus, for example, in paragraph 21, the idea of inviting the Chairman of the International Committee on GNSS to report, not only to the Scientific and Technical Subcommittee but also to the Legal Subcommittee, on the legal aspects of delivery of global satellite navigation services addressed within ICG. This ought to be welcomed. The Legal Subcommittee should be encouraged to develop recommendations to the Committee on further actions in this direction and for this purpose. An appropriate item might be included in the Legal Subcommittee agenda as a single issue for one-year consideration.

On the other hand, some other parts of the report would deserve further consideration and elaboration with due regard to a possible participation of the Legal Subcommittee and eventually, also, to participation of the non-governmental organizations engaged in the field of international space law.

Firstly, paragraphs 27-30 deal with the topic of rules of the road though the aim of these topics should not be orientated to modifications of the present treaty regime. The development of recommendations to deal with the new realities of space operations should lead to adoption of appropriate rules and who else would qualify to help in this effort than loyal delegates to the Legal Subcommittee and members of competent non-governmental bodies. Therefore, if a working group on analysis of the concept of rules of the road for future space operations should be established, not only ITU and ICEO should be encouraged to participate actively in this working group but also a cooperation with the Legal Subcommittee should be sought in order to come to various venues and possibilities to develop such rules.

Another issue that would require a cooperation of competent legal bodies is protection/ conservation of designated areas of the Moon and other bodies of the solar system or of certain parts of outer space itself, as suggested in paragraph 34-36 of your document. The necessary steps to be taken would consist not only of the selection of the site but also of the measures for reaching effective protection. In this respect, not only the participation of COSPAR and IAA should be encouraged but also the participation of the Legal Subcommittee, International Institute of Space Law and the Space Law Committee of the International Law Association. The more so that one of the United Nations space treaties, the 1979 Moon Agreement, in its article 7, paragraph 3, has already envisaged the possibility of designating some areas of the Moon and consequently also of other celestial bodies of the solar system as “international scientific preserves for which special protection arrangements are to be agreed” and the 1967 Outer Space Treaty, the main space law instrument of our times, as a role, must be taken into due account when dealing with this issue.

Finally, the consideration of the development of passenger space transport envisioned in paragraphs 37-39 would need a thorough analysis of related legal aspects. It is to agree that the International Institute of Space Law and the International Academy of Astronautics, with the support of the International

Astronautical Federation, should be invited to consider the non-technical aspects of future commercial space transport system. However, the first and foremost place in such consideration that should lead to proposing a long-term view of such development and report back to the Committee belongs to the COPUOS Legal Subcommittee. As a preparatory step to such consideration in this body at least a single issue item for discussion should be included in the agenda of the Legal Subcommittee in due time.

Certainly there also some major topics that should be discussed in greater detail in COPUOS and both its subcommittees. One of them is the legal regime of the exploration and use of the Moon and other celestial bodies including the future exploitation of their resources. Its basis has been established by the 1979 Moon Agreement which, however, reached so far a limited number of adhesions. Nevertheless, the Moon Agreement has been one of the United Nations space treaties, it should be considered as such and eventually reviewed in the light of progress in the exploration of the celestial bodies of our solar system. The examination of legal issues involved has already been the subject of several recent non-governmental discussions. Also in the working group of the Legal Subcommittee this point has been raised and its discussion is now within the mandate of the working group on the status of the five United Nations space treaties, but it should become sooner or later a major concern of COPUOS and appear as a full-scale item on the agenda of the Legal Subcommittee in the foreseeable future.

The CHAIRMAN (*interpretation from French*): Thank you Mr. Kopal, distinguished delegate of the Czech Republic. Thank you for your statement and all the suggestions that you have made with respect to the legal dimension of various issues broached in L.268 and on yet other suggestions which are not referred to in that document and which should be taken into consideration, which are sometimes already factored into the work of the Legal Subcommittee.

Now, since as you know, as from next year, Mr. Kopal is going to be the chairman of the Legal Subcommittee. I am sure that these legal considerations of the various issues broached in L.268 will indeed be properly taken into account in debates that will be ensuing there.

I would now like to give the floor to Mr. Raimundo González of Chile on this point.

Mr. R. GONZÁLEZ-ANINAT (Chile) (*interpretation from Spanish*): Thank you so much, Mr. Chairman. In connection with this item in particular I have some comments to bring to your attention.

The first comment is that I would like to thank you for the many efforts you have put in on a subject which, in our opinion, is fundamental. This text is an evolution, we assume, and we are thus able to continue our deliberations as to how we can make substantive progress and how we can really forge ahead in terms of the items on the agenda and, indeed, I would say the global agenda. This is part of the global agenda and there are clear ties.

I have some comments to make but, having closely listened to Professor Kopal, the truth of the matter is that I think that I can merely join in with his main concerns. It is important in this document to establish appropriate balance between the work that the Legal Subcommittee must necessarily do and those that are the responsibility of the Scientific and Technical Subcommittee. That Committee, the Scientific and Technical Subcommittee, is, in our opinion, one that comes prior to the Legal Subcommittee not just for chronological reasons but also for substantive reasons because that is where we prepare the tools and elements that then go to the Legal Subcommittee to be turned into legal standards and principles. That has happened with many principles, unfortunately not with space debris. We do hope we can revert to this subsequently but that is the general rule and a rule which is even more necessary since space science and technology are advancing and progressing very fast. We have repeated this and there is a backlog in terms of legal standards and norms that is why we have to set the balance right again and this means that in your document there is a lot of merit and a huge amount of work is consigned here. The Legal Subcommittee, or space law for that matter, as a concept which appears in all General Assembly resolutions does not appear there or only in very few places. I would even say that one of the central areas of this document is sustainable development and that is a legal concept in itself, it is not a scientific concept. So we cannot refer to sustainability of space activities unless we clearly define the conceptual framework where this activity will be able to progress and develop. I did not invent this, this was invented in 1972, in the environmental declaration, I think it is article 1, paragraph 1 of that declaration, that stipulates what we are to understand by sustainability and sustainable development, present generations, future generations and so on and so forth.

All this was taken up again very clearly on the environment and development, Rio de Janeiro Declaration 1972. If we focus on the crucial, conceptual element of this document, it is sustainability and, I would like to congratulate you because you have pointed your finger at the very crux of this issue and we are willing to continue providing our cooperation so that the document, on this basis, may also move ahead in an appropriate manner. We cannot say, of course, that you have covered everything nor could we ask for that because it is a daunting task, huge, but we do believe that an effort needs to be made to set the balance right in terms of the essential standards that are space treaties, that is, equitable treatment and positive discrimination for developing countries. I am not saying this, others have said this and the declaration on international cooperation contains reference thereto.

We note that, for example, in some of the paragraphs we clearly have reference to concerns and possibilities of developed countries, such as (f) and (g) basically. They do not fully represent developing countries, this may be the preoccupation of a small group of academics but are not a main policy consideration. We are interested in application of space technology for the benefit of citizens of our countries in order to overcome backlog in terms of development, lack of education, poor public health and so on and so forth. This is crucial in terms of this session, lack of access to drinking water. In the last UNDP report, as I mentioned and this refers to human development, it does not mention space technology but it does refer to water, poverty, every citizen needs 20 litres of water a day and not more remote than a kilometre away from the dwelling. We have to define the necessary mechanisms for space applications to have a bearing on the population, on our peoples and that is what we did in the context of the Space Conferences of the Americas.

As part of that context, let me say already that I would make a suggestion. We do not expect there to be a decision here and now, it could be in the form of an appeal. We have to consider setting up a working group on space applications for the benefit of developing countries and, possibly, an element which has the greatest impact on our countries and has an adverse impact, as all natural disasters do. We might set up a working group not just on the Moon or space transport and, in fact, this has no practical application but rather a group of work that has to do with issues that would put us up to date. In this connection we have José Luis _____ (*inaudible*) work, excellent indeed, he hails from Brazil, where there is a very detailed consideration of each and every one of the observation tools at this point in time and their practical repercussion. That is why we insist that this would be an excellent document even more so the fact that we have that document has given us food for thought and that mere fact means that it deserves our consideration and we think it is a valuable document.

Finally, in the context of the considerations, and in general, I would like to say that we can go along with this. Many of the comments made by Professor Kopal are noteworthy and our particular attention is retained by the fact that there is no special attention paid to training for developing countries. For example, interpretation of satellite imagery so there is no possibility of solving economic and social problems via this form of technology. What we need, by way of a reference framework for future COPUOS work, is science and space technology at the service of the citizens of our countries.

The CHAIRMAN (*interpretation from French*): Thank you Ambassador González for that statement clearly showing that when we consider future activities of the Committee we of course notice that there are so many subjects that could be considered by both subcommittees, both the legal dimension of these issues and also, of course, the practical applications which, in general, are considered in the Scientific and Technical Subcommittee. I am sure that in the years to come when many of these suggestions will then find their way onto the agenda or either the creation of a working group as you have just suggested.

I would like to call on the representative of the United States, Mr. Higgins.

Mr. J. HIGGINS (United States of America): Thank you, Mr. Chairman. I wanted to take the floor under this agenda, other matters, for two purposes. The first will be concerning document L.268, I would also like an opportunity at some point to provide some comments concerning Conference Room Paper 3.

First, I will turn, because this is the discussion at hand, to your paper concerning the future work of the Committee. Let me first commend you for an excellent job in drafting this document, we greatly appreciated your efforts and we think is a document that will serve the Committee well in the future as we look to the work of the Committee and its subcommittees. We do have some specific comments about some of your proposals but let me just make a couple of general observations and then at a later stage we can discuss some specific ways forward.

I agree with the observation that this is a text that is evolving, clearly there are some areas where we think greater specificity would improve the text. We do also believe that some of these elements in your paper should be forwarded to, in this case, the Scientific and Technical Subcommittee. There are a couple of items here that we think could actually be forwarded to the Subcommittee, as early as next year, for their consideration and their review as to what work might be undertaken, not necessarily to direct them to undertake specific work but to look at the topic and report back to the Committee.

I also note that there are several items that you have suggested in the paper that, in one form or another, we are taking up either within the Committee or within the Scientific and Technical Subcommittee, we think that is perfectly fine but we do note that for some of those items there is additional work that you are suggesting. The item concerning sustainability of space activities we believe holds great promise, however, this is one item that will require a considerable amount of thought as to what work we could undertake and what the likely outcomes would be. This is an item that clearly could be addressed in the future and we think will demand more intensive discussion, either informally or in the form of perhaps a working group or an action team, on exactly what it is that the Committee could do in this regard.

At this point I will conclude my remarks with the understanding that I could come back at a later stage with more specific suggestions. Thank you.

The CHAIRMAN (*interpretation from French*): Thank you for that statement on behalf of the United States delegation and your first reactions and comments on the document L.268 which, no doubt, will be the subject of additional comments, tomorrow morning as well.

I will next call on the distinguished representative of France, Mr. François Pellerin.

Mr. F. PELLERIN (France) (*interpretation from French*): The French delegation would like to thank you for this document. The document contains a long-term vision of the Committee on the Peaceful Uses of Outer Space. The document proposes to extend the work of the Committee while preserving the overall guidelines and methods that have stood it in good stead. France would like to display a particular interest in two subjects, the contribution of space systems to sustainable development and launching a long-term consideration on safety of space activities.

The French delegation particularly appreciates the fact that the Committee has attempted to list all the new solutions based on space tools in the area of sustainable development to make them accessible to all. In particular, we have in mind the contributions that might come from several of our partners, including Algeria, for example, with the Alsat programme or Thailand, thanks to the THEOS satellite.

On the subject of safety of space activities, France has noted with interest your suggestions. The identification of guidelines in this area is a requirement that the Committee could usefully respond to in good time, extending the work on registry of space objects and mitigation of space debris. A consideration of this subject would necessarily be part of a pluriannual approach as for the method France has no preconceived views. The setting up of a working group in the context of the Scientific and Technical Subcommittee would, no doubt, be the most appropriate way to do so but our delegation remains open to other suggestions that can get that consideration started.

As you have underlined the contribution of organizations active in this area would, no doubt, have value-added in terms of participating in this exercise. Thank you.

The CHAIRMAN (*interpretation from French*): Thank you Mr. Pellerin who has just made a statement on behalf of the French delegation and has particularly focused on two of the items contained in L.268 and I next call on the representative of Greece.

Mr. V. CASSAPOGLOU (Greece) (*interpretation from French*): First, I would like to thank you, as indeed I have done in my general statement, for your efforts to try to come forward with, as I would say, standards to look ahead to the future role and activities of our Committee and of the subcommittees. You may recall that I had mentioned the possibility or at least the necessity to have a strategic plan in the widest meaning of the word. Let me now explain why, because a strategic plan is to a certain extent, mandatory, and will give us the possibility of continuing our work in plenary and in the two subcommittees without having to revert to discussions every year on agenda items, so, perhaps we need to have some consideration of this practical item. As regards the content of your suggestion, I would like to fully associate with the remarks brought forward by our distinguished colleague, Professor Kopal and, in this regard, I would suggest that Mr. Kopal's statement be included *in extenso* in the report of this Committee. I do not know what the final denomination will be of L.268, what its final form and title would be but what I

would like to have is Professor Kopal's comments reflected because they are very well taken, there is a systematic approach so that colleagues who do not have access to the electronic records. Anybody who reads the report of the Committee to the General Assembly should have direct access to those suggestions. As for how we can do this I leave it to you and to the Secretariat to reflect these concepts made in the context of this debate so that we have a final text annexed to the report of the Committee.

On the particular agenda item, that on future meetings, I will repeat this and have been doing so for the past ten years, that we should at least start discussions on the two important issues which are, having an international treaty, if we accept a defragmented system of course, regulations that apply to space activities, remote sensing and also direct radio broadcasting especially since technological but also geopolitical circumstances have very much changed since way back when we adopted the two declarations of principles on these two activities.

Subsequently, I would like to say by way of a reaction to Mr. Kopal's suggestions and also those of the Ambassador of Chile, Mr. González our colleague, on the participation of international organizations and major international scientific associations and bodies. In my opinion, we should find out what is underway in major intergovernmental organizations, for example, we have no knowledge of the outcome of the meeting of the Interparliamentary NATO Group in Majorca and the Interparliamentary Group on Safety of the western European Union in Paris, which only finished three days ago. Then we have to have access to the regulatory and practical experience of ICEO and of the IAEA and furthermore ITU. As you know, there is an evolution in terms of space policy in the European Union as well as UNESCO and especially the COMEX group.

Those are my comments, Sir, and I would like to find out what your reactions are, although not of course immediately, on such a compiled text which we mentioned.

The CHAIRMAN (*interpretation from French*): Thank you Mr. Cassapoglou for those comments on the particular item of proper wording and what will appear in the report of the Committee. I think I will have to consult with the Secretariat on this and we will have an answer ready for you by tomorrow.

Because of time limits we will have to stop our discussions in ten minutes on item 13 and we still have four delegations on the list intending to speak, so I would ask each delegation, if possible, to be as short as possible in making statements now so that we can finish on time. Venezuela please.

Ms. N. ORIHUELA-GUEVARA (Venezuela) (*interpretation from Spanish*): Very briefly, this is a first round of discussions. On paragraph 8, I would really like to have the most salient feature here to be a system of standards on the risk element. The most important aspect is tied to the result, the product of that exercise and, the topic is so important that, it would deserve a separate paragraph in the document now under consideration. Very specific tasks of this forum to make sure that the recommendations are implemented and adequately applied.

On 8, 10, 21, 25 and 32, there is also a recommendation for these international fora. The Venezuelan delegation believes it is so important to have constant contact with other organizations and make sure that they attend our meetings as well. Here I am referring to the statement made by the Czech Republic and I agree with Greece in that we should reflect the full statement. We cannot rely on this unless we have specific action and that necessarily requires standard setting and approval in these fora.

Since this is the first time I take the floor, I would like to refer to paragraphs 32 and 33, preservation of outer space. It would be very important for the Venezuelan delegation, before we take any decisions in this regard on designated areas of the Moon and other bodies, to become fully aware of the impact of space activities on the Moon and other bodies of the solar system. We believe that we were not able to preserve outer space and our planet, we should not make the same mistakes beyond, we have to consider the impact of our activities, first and foremost. Thank you.

The CHAIRMAN (*interpretation from French*): I thank the distinguished representative of Venezuela for that statement and the suggestions made, very interesting indeed and positive in respect of how we could possibly make headway on the various items, in particular those items she drew our attention to.

I would next call on the distinguished colleague and representative of India.

Mr. B. SURESH (India): The Indian delegation is very pleased to receive the document L.268 which gives _____ (*inaudible*) the future role and activities of the Committee. We also would like to compliment you for the excellent work done in

bringing out a well-structured paper defining the future role. We all know that this Committee has been discussing, in the last 50 sessions, a wide range of issues relevant to all space-faring and space using countries and has achieved very concrete results. Some of them are capacity building, satellite technology for sustainable development, debris mitigation guidelines, formation of SPIDER for disaster management and many more. Now the renewed interest in all space operations by several countries there are very important issues like there is a need to develop a common mission for space acceleration and particularly to protect the interests of all space-faring and space using countries.

There is also a case to define suitable exploration architecture, it should be sustainable in the long run and also we know that exploitation of planetary resources always brings in the question of sharing the commercial benefits which has a legal angle, we need to define how to get going.

Important issues, the global environment and global warming which is causing a very major threat to humanity, this is another important aspect that we need to look at. We also know that today, with the excessive cost of space acceleration as well as a dwindling budget support, there is a need to have much larger international cooperation. In fact all these issues have been comprehensively brought out in this particular document and we believe that the document presented here is timely and we fully endorse that. We also strongly believe that this should really form the basis for our future activities in this Committee and we would recommend to include some of the important issues as agenda items in the forthcoming Scientific and Technical and Legal Subcommittees. Thank you.

The CHAIRMAN (*interpretation from French*): Thank you Mr. Suresh for that statement supporting this document and the activities of the Committee that will be developed as we go along and based on the exchange of views we have had which was the very purpose of this exercise.

I will now call on the distinguished colleague and representative of the United Kingdom.

Ms. C. LAVERY (United Kingdom of Great Britain and Northern Ireland): Thank you, Mr. Chairman and thank you also for this very useful document which we feel will be a good basis for discussion for the future work of the Committee. As we are a bit short of time I can be quite brief on this.

Generally speaking, we could go along with all the recommendations in the paper looking ahead to the next two or three years which is in the short term. In the longer term, particularly when looking at item (d) the sustainability of space activities, we can see that there would be a whole series of proposals required for this to be carried out and that indicates to us that there is a great deal of background work and preparation which we would need to do before we can move forward quickly in this area. Just looking at some of the areas that we would need to look at, we would need to consider the space environment, radiation effects as well as planetary protection and the observation of space required for space traffic management. There is probably other areas that will also need to be looked at because this is a very technical subject. Generally speaking, we welcome this paper, we think it is a good basis for discussion and something that we can work with and we look forward to hearing the results of expert consideration on these various items. Thank you.

The CHAIRMAN (*interpretation from French*): I thank our distinguished delegate, the representative of the United Kingdom for that statement. I can confirm that indeed some subjects, such as the one in (d), are particularly ambitious and require quite a lot of analysis work to truly make headway.

I next call on the Russian Federation and I will stop there on this item since in any event we have every chance to continue tomorrow and other delegations will get an occasion to express their views. Russian Federation please.

Mr. I. VESELOV (Russian Federation) (*interpretation from Russian*): We would like to join the words of gratitude expressed to you with respect to the document that you have prepared. We think that the discussion on this topic is very significant and the work that you have done provides us a very sound basis for such a discussion. This discussion will allow us to better sense the requirements of the time and to hammer out the outline that would most perfectly correspond to these requirements.

Especially important is that the preparation of this document was based on active exchange of views and that among interested governments and organizations. We have not tabled any written comments on the document but we are certainly very interested in it and we are going to be giving our comments in the course of the discussion that will be ensuing.

We would like to point out that the last version of the document, the new wordings of the solutions which have been proposed and some of them have been disseminated very recently, we have not really been given the opportunity of examining them with any great detail. We suppose that this is going to be the subject of further and complementary discussion.

Our delegation agrees with the analysis in 10 of the document with regard to the achievements of the Committee. We certainly do have sound reason to be proud and we are certainly looking forward to an _____ (*inaudible*) in the future. At the same time, we agree that it would be good to set rather more ambitious goals before the Legal Subcommittee. It has been several times that we have given our approaches with regard to the further development of international space law especially on the basis of the development and preparation of a comprehensive convention, I will not be going into that at this juncture. We know that the views of the members of the Committee vary on this point but we certainly do believe that this should be referred to in the programme for this Committee.

Just as with other delegations, we have specific comments on specific sections of this document, on (b) in particular, that is coordination of global Nav satellite systems. On (f) as well, that has to do with protection, conservation of designated areas of the Moon and other celestial bodies and we hope to be able to share this with you shortly. Thank you very much.

The CHAIRMAN (*interpretation from French*): Thank you representative of the Russian Federation and for your contribution to our debate.

We are going to stop our discussion on this, for the time being, we will go back into this tomorrow, possibly various delegations might have some further comments that they would like to share on this with the Committee then.

As I have already indicated to you, at the beginning of this session, I would like to get back for a couple of minutes to the other item under 13 of the agenda. You will recall that yesterday we had a fairly long debate on the possibility of having a non-governmental organization as a permanent observer and we have decided to defer our decision in that regard. In the interim, consultations have taken place amongst certain delegations and the distinguished delegate of Greece has asked me to give him the floor on this.

Mr. V. CASSAPOGLOU (Greece) (*interpretation from French*): Yesterday we had a very lively debate, if I could put it that way, on issues of principle having to do with the acceptance of various organizations or non-governmental entities as permanent observers, during our sessions of the plenary as well as the Subcommittee sessions. We did have an exchange of views which, however, did not really allow us to solve certain minor problems which emerged in the course of the discussion, possibly we just did not enough time to enable us to evaluate the presentation, not of our former colleague but our friend Mr. Aldworth, who acted as the advocate on behalf of the Secure World Foundation.

We had some conversations, some clarifications have been given us which have proved to be entirely satisfactory. The Greek delegation had been very attentive to the financial resources as well as the potential contribution of any observer organization to the development of space technologies especially in countries subject to economic difficulties and, after the dialogue we had and the exchange of views that we had, I am very happy to come back to this issue and through you to propose to the representatives of the other members of the Committee that we should subject this to a second thought and, in this second thought, to rather approve the candidacy of this Foundation.

Before I close, I would like to say that we really did appreciate your brilliant and competent handling of this which was so objective in guiding yesterday afternoon's debate on this matter.

The CHAIRMAN (*interpretation from French*): Thank you very much Mr. Cassapoglou for your statement and for the very kind words that you have just pronounced.

I would like to give the floor to Mr. González of Chile now.

Mr. R. GONZÁLEZ-ANINAT (Chile) (*interpretation from Spanish*): First of all, I would like to say how strange I think this is. We are having a debate on a subject and it is taking now the size, scope of the election of a permanent member to the Security Council. It was my privilege to preside over the space committee, not as ably as you are doing but I did preside over a number of committees over the years, and always, without any exception, we accepted all those who wished to join as observers.

In this specific case of the Secure World Foundation, I read this statement, unfortunately I was

not able to be here yesterday, made by our colleague on the subject. The reasons of being of that organization were mentioned there and I am sure that it is a fitting member as an observer of this Committee. This Committee should not be a small arena for debate where we lose sight of the basic issues. We are ready to defend principles and, for those principles to have real meaning, we should give all players and especially civil society and all those other players who have been identified by the Secretary-General, Mr. Kofi Annan, when he signed the global pact. Industry, business, private sectors, civil society and NGOs all represented and obviously governments, of course. This is no novel element in the international arena and we think, therefore, that we are wasting our time if we were to get involved in a debate on something that was decided at the very outset, there being no particular problem. We are not willing to close the doors to any NGO or any member of civil society, we think they make a contribution to democratic dialogue which is thereby strengthened, a dialogue which ultimately is of benefit to developing countries.

The CHAIRMAN (*interpretation from French*): Thank you Ambassador González for that statement.

I will next call on the distinguished colleague, the representative of Venezuela.

Ms. N. ORIHUELA-GUEVARA (Venezuela) (*interpretation from Spanish*): I would like to recall the decision taken yesterday. Yesterday we did not turn down the request of any NGO to join as an observer, we merely deferred the decision for a year.

I think it is important that we should analyse in an objective manner, in equanimity and with all due responsibility which we have in this room as government representatives, what our real task is and what our responsibilities are. I would like to start off by clarifying that Venezuela has no pre-conceived views in respect of any NGO. All we are saying and all that we said yesterday and repeat today in this room is that we would like to be better acquainted, not just in the case of this observer, in the case of any organization requesting the possibility of becoming an observer. Venezuela would like to be acquainted in greater depth with the organization. Secure World Foundation, is a young foundation, a recent foundation, it was clearly established in this room and, as such, they still have a lot to do. The possibility of entering in the capacity of an observer is not denied, the decision is merely deferred and this does not in any way prevent or stand in the way of this Foundation's decision to continue to discharge its duties for which it was set up. Being an observer in this organization is just an additional element in terms of their strategy for consolidation and their world role but this does not stand in the way of their day-to-day operations.

I reiterate the Venezuelan position, it is very important for us to be clear in our mind in that Venezuela is not denying anybody's entry. We would never do that in fact, it is an issue of principle and respect but Venezuela, represented by this delegation this afternoon, believes that in this and indeed in any other case we need to look into this, analyse the situation, before we take a decision. We do not believe that merely completing the requirements is enough for an organization to join. This comes to our attention because it requires the adoption and approval of this Committee, so one thing the decision to apply and another thing is the approval, here. We do not want any conflict here or any problem or difficulty, we are merely discharging our duty in a responsible fashion as a delegate of a democratic government, a representative government, always willing to engage in serious work. We are not denying anything, we believe that we simply need more time. Possibly you are aware of the track record but that is not our case, I am representing my country here and, I reiterate, that Venezuela is not sufficiently acquainted with the characteristics, features, track record, statutory texts of this Foundation and, indeed, other aspects, which we need to consider before we take a decision. Therefore, we ratify the stance adopted yesterday in this room. Thank you.

The CHAIRMAN (*interpretation from French*): Thank you very much distinguished representative of Venezuela.

Have I been correct in thinking that Chile wishes to speak.

Mr. R. GONZÁLEZ-ANINAT (Chile) (*interpretation from Spanish*): I have closely monitored the arguments put forward by the distinguished representative of Venezuela. I heard nothing that was legal in nature and would have to do with the acceptance or rejection of a given organization. That it is an organization of old standing or a recent one would require that we scrutinize all organizations. She may be aware of when other observers were set up, created or given authority to participate in this organization. My delegation is not willing to set a precedent, which we think is very dangerous indeed, which would be to deny a recognized organization with well-known people, coming from countries that inspire trust and confidence, where they have clearly expressed their views in the statement they made, their rules and

regulations, their purpose, where we are not willing to set a precedent or prolong the debate. We will not accept this to be deferred until next year because that is how we will enter into arguments and counter-arguments that would ultimately undermine the very essence of this Committee's work and precisely invoking our responsibility as a deeply democratic society just like Venezuela. Their civil society plays a very important role, a country where and a government for which we have lots of respect and where NGOs and civil society are not measured by longer or shorter lifetime which has no implication in the Charter of the United Nations nor in the terms of reference of this Committee. That is why we have to be sufficiently clear and explicit to settle this problem once and for all. My delegation cannot go along with the deferral of this until next year unless we do not have consensus. Lack of consensus would be because one delegation objects, well in that case, my delegation will ask that all others that have been accepted in the capacity as observers and in future should likewise be dealt with in this manner. Thank you.

The CHAIRMAN (*interpretation from French*): I see that Canada has asked for the floor. After Canada speaks I intend to wind up this debate. I will be conducting some informal consultations after this afternoon's session and before we meet again tomorrow to see whether we can take a decision on that matter. Canada has the floor.

Ms. A-M. Lan PHAN (Canada) (*interpretation from French*): I would just like to point out that Canada would like join the statements made by Chile and Greece to give our firm support to the Secure World Foundation candidacy. As we understand it this organization has fulfilled all the criteria to become permanent observer and the Committee has indicated the principle of openness to this sort of candidacy. We also believe that the presence of the Secure World Foundation will significantly contribute to the work of our Committee. You have all listened to the presentation made by the Foundation and the activities that they have spoken about are very interesting for COPUOS.

The CHAIRMAN (*interpretation from French*): Thank you very Ms. Lan Phan, distinguished representative of Canada. As I have already indicated I am going to be putting an end to the debate right now because we have spent enough time on this afternoon. With your agreement I will be conducting some information consultations this evening before tomorrow morning's session and then, in the course of the morning, I will indeed give you the conclusions that I will have reached. So, I believe that Greece will understand.

Mr. V. CASSAPOGLOU (Greece) (*interpretation from French*): I would just ask on a procedural point hoping thereby to facilitate your work and the position of the colleague from Venezuela.

The distinguished representative of Venezuela said that she is not against and is not rejecting out of hand the application to participate on the part of an NGO. I do not think that one has to weave a very fine legal line of argument here. Yesterday we went into the entire problem and today we have reconsidered the views that we expressed yesterday and we have stated that we are satisfied with the new information provided. Our colleague from Venezuela will not be able to object to our recognizing that now there is consensus or rather quasi-unanimity with regard to this candidacy. To satisfy her concerns, as from next year we could possibly discuss whether it might be possible to adapt the regulations that exist, through you, Mr. Chairman, I just wanted to turn to the distinguished representative of Venezuela and ask whether possibly she could go along with the clarification that I have just presented.

The CHAIRMAN (*interpretation from French*): I am turning to Venezuela. Would she like to respond to Greece?

Ms. N. ORIHUELA-GUEVARA (Venezuela) (*interpretation from Spanish*): I think we should resume on this tomorrow.

The CHAIRMAN (*interpretation from French*): So, I will be having those informal consultations I mentioned. Let us go back to item 7 which has to do with the report of the Scientific and Technical Subcommittee. On that item we had examined the beginning of the implementation of the SPIDER programme and, on that, I would like to straight away give the floor to the Director of OOSA who is going to be tabling the two documents on this, CRP.13 and CRP.14.

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

Mr. S. CAMACHO-LARA (OOSA): The Committee has now before them two conference room papers, Conference Room Paper 13 and Conference Room Paper 14, that deal with the new programme SPIDER and I would like to do a brief introduction on those documents and their contents.

As you aware in its resolution 61/110, the General Assembly decided to establish the United Nations Platform for Space-based Information for Disaster Management and Emergency Response, that for short, we refer to as SPIDER. The General Assembly decided that the new programme should be established as a programme of the Office for Outer Space Affairs, under the Director of the Office, as an open network of providers for disaster management support and that the Director of the Office would be responsible for the overall supervision of the programme.

In February of this year, the Scientific and Technical Subcommittee, at its forty-fourth session and I should mention there is a mistake in CRP.4, it makes reference to the forty-ninth session it should of course be the forty-fourth session of the Subcommittee. In paragraph 137, the Subcommittee agreed that the implementation of the new programme should include the following steps:

(a) That the Office should work with China and Germany in setting up, at the earliest possible date, the offices in Beijing and Bonn and should coordinate with the various partners in the implementation of the activities for 2007.

With your permission, Mr. Chairman, we would give a report on this through a PowerPoint presentation.

(b) In implementing the activities to be carried out in 2007 and in developing the plan of work for the biennium 2008-2009, the Office should consider the contributions and commitments of the network of regional support offices.

These regional support offices represent the offers of support that have been made explicitly by a number of governments and we describe the regional support offices in CRP.14 and we will cover that as well in the PowerPoint presentation.

(c) The Office should correspond with all member States inviting them to make cash and in-kind contributions to implement the SPIDER plan of work for 2007 and to indicate possible commitments of support for the programme in the biennium 2008-2009.

We have done that, we have communicated with all 192 member States of the United Nations and we have received additional replies so that now there are 19 member States that have indicated previously to date, support for SPIDER. Today, in the statement from Saudi Arabia, we heard that Saudi Arabia intends to provide support to SPIDER in particular the use of the receiving stations and other things.

(d) The Office should develop a plan of work for the biennium 2008-2009, to be considered by the Committee at this session, taking into consideration the indication of commitments received for the biennium 2008-2009 and building upon the opportunities provided by the network of regional support offices. That means the entire set of regional support offices.

This has covered the work plan we have in Conference Room Paper 13 and with respect to building upon the opportunities provided by the network of regional support offices. We will see in our presentation that there are _____ (*inaudible*) meetings of experts from the regional support offices. I believe that this would be one or more meetings that would be held on a yearly basis. I believe that one of those meetings should bring together, particularly in the beginning, high-level representatives of the SPIDER offices and of those regional support offices who intend to be involved, on a continuous basis, at the regional level for coordination of specific activities to be carried out during the year in course and future years.

(d) continues and says

The plan of work for the biennium 2008-2009 should also include a proposal for activities to be carried out by a liaison office in Geneva.

This we will cover as well in the PowerPoint presentation.

(e) The Office should report to the Scientific and Technical Subcommittee at its forty-fifth session on the activities carried out by SPIDER in 2007.

This of course is still to be done and the Subcommittee will have a report with activities carried out in 2007 as well as any developments of work carried out and refinements with respect to the work plan in 2008-2009. That is because the work carried out in 2008-2009 needs to have the planning part of that work done even in 2007.

The last step indicated by the Scientific and Technical Subcommittee says that the Office should submit, for consideration by the Committee at its fiftieth session, a report that presents a summary of the background of the establishment of SPIDER including the main considerations put forward by the ad hoc expert group, a framework for the operating procedures of the programme including the coordination of

activities among the offices and the network of regional support offices. The resources required to carry out its work plan for the biennium 2008-2009 and the need for the establishment of an advisory board as put forward by the ad hoc expert group in one of its two reports to the Committee. That is what you will find in Conference Room Paper 14, paragraph 137, subparagraph (f) is covered then in paragraph 14. I would draw your attention to the covering note to paragraph 3, which indicates what the contents of Conference Room Paper 14 are and that is that sections 1-3 contain the background, the main considerations put forward by the ad hoc expert group as far as the agreements reached by the Committee and the General Assembly. Sections IV and V contain the framework for the operation and coordination of the Programme in order to take advantage of all contributions of support and expertise offered and to be offered by member States and the resources required to carry out the SPIDER work plan for 2008-2009 and future years.

The two draft documents are for the Committee's consideration and subsequent approval. Once this is accomplished the SPIDER team and particularly the Director of the Office for Outer Space Affairs will have guidelines to continue their work for 2007. I would like to mention that OOSA will prepare a report on the work, as I had mentioned, to be carried out in 2007 and the developments, work carried out and refinements with respect to the work plan for 2008-2009, we present it then to the Scientific and Technical Subcommittee, in addition to the work plan that we have currently in front of us. Thank you.

The CHAIRMAN (*interpretation from French*): I thank the Director and next I call on Mr. Stevens who will be speaking on this and showing us some slides.

Mr. D. STEVENS (Secretariat): I would like to follow-up with the status and some information and some discussion on the work plan as presented.

First of all recalling the General Assembly in its resolution 61/110 establishing SPIDER as a programme of the Office of Outer Space Affairs, under the Director of the Office, as an open network of provider support for disaster management support and that the Director of the Office would be responsible for the overall supervision of the programme. Also the mission statement of the new platform which encapsulates what is the main objective to be achieved by the new programme. It is to ensure that all countries have access to and develop the capacity to use, all types of space-based information to support the full disaster management cycle.

This is an organigramme of the Office and it strengthens the fact that it is a programme of the Office, it is a new section created in the Office, perhaps unique because it will have staff distributed in four locations but nevertheless it is an integrated team, an integrated staff working under the Director of the Office. Another characteristic of SPIDER is based on the work of the ad hoc expert group which was well defined what was identified as needed to carry out its mission, in three main areas. The need to have activities as a gateway of information, in other words, ensure that all information out there was available to anyone who wanted to access it, at the same time, ensure that information got out through awareness raising and through outreach activities and also the development of more information through regional and country profiles, so that is the function of a gateway.

The second big function of SPIDER is a bridge. What we always say about connecting the space community and the disaster community and bringing it all together, so there are three specific activities involving SPIDER as a bridge.

Finally, SPIDER is a facilitator working at the national level helping countries, at the national level, to incorporate space-based technologies for disaster management policies and planning and activities and also a support to capacity building, so SPIDER is defined in terms what it is going to achieve.

Furthermore, another characteristic of SPIDER is the way it was set up within the opportunities we had put forward to us with three offices. The offices do not divide the work geographically, the offices divide the work through activities. There are 11 activities spread out in three of the offices, so you would have each office carry out specific activities. There is a certain overlap and that is where you need coordination but this is how, basically, the work is divided and with the addition of the opportunity of having a liaison office in Geneva. The fourth office, which in a way over supports the work of all the other offices in the sense that, it brings to Geneva specific activities the other offices are developing, like awareness raising which is done in Beijing would work together with the Geneva office and do awareness raising in Geneva. Capacity building which a Vienna task would be also done in Geneva with the support of the liaison office in Geneva.

Activities we have begun. We have already begun with the last Scientific and Technical Subcommittee, we agreed on a platform programme for 2007-2009 and a plan of work for 2007. To give an idea of what we have really developed since we began

activities after the Scientific and Technical Subcommittee. In terms of the gateway, we already are disseminating information, we have got the first web page up with information, we have an e-newsletter already, first one gone out, second one going out next week and mailing list. We do have a mailing list of the community already now with 10,000 names, this is an incredible way of getting a lot of information out which we are already working on.

Outreach activities, which include workshops. We have a number of workshops being confirmed for the second semester in Sudan, in Bonn, in Guangzhou China and in Salzburg and Geneva. There are a number of workshops which we are already planning to implement.

Participation in conferences. There are a number of conferences that we have gone to and there are a number of conferences already which we have provided support for participants in developing countries to go to these meetings. We had participants from Indonesia and Thailand to go to a workshop in Beijing supported by the National Disaster Reduction Centre of China.

A bridge. We are working on a number of items on bridge in terms of bringing communities together. One of them is the _____ (*inaudible*) CB0702 and task DI0609, in fact just today, we have the meeting of one of the tasks here in Vienna, many of you had the opportunity to participate. We are working with relevant forums, GEO, UNISDR, the International Charter of Space and Major Disasters and Sentinel Asia, these are activities we have had. We have a meeting with Sentinel Asia since last February. International Charter, OOSA is a cooperating body to the Charter, we went to the last secretariat meeting where we strengthened our work with the Charter in terms of bringing the benefits to the United Nations systems.

Contributing to coordinating among United Nations initiatives. First step in terms of facilitators, we are requesting member States to nominate national focal points and I will talk further on about the national focal points. We have already begun drafting capacity building framework which we hope to be able to discuss in one of our workshops in the second semester. So we have already begun activities even though we have probably an even more important task which is setting up two or three offices of SPIDER.

First of all, the status of one office. The host country agreement, we are working on it, we are already working also on to change the letters which we will enable us to begin already operations on 1 August. We have a target date for the Bonn office for 1 August. The office space has already been reserved on the 23rd floor and we have already got two senior experts offered us, to come from Germany, which we hope to take advantage and already have them available on 1 August.

This is the floor plan and we have reserved five offices for 2007 with an expectation of another three offices in 2008. What is important, the floor plan. It is on the 23rd floor, right below the ISDR platform for the promotion of early warning, right below the UN University Institute for Environment and Human Security. We are in the same building but this is a lot of synergies in terms of what we will be building in Bonn of similar organizations. There are a number of UNEP programmes also within the building. There is a lot of synergy and this, in particular, we look forward to being with ISDR, literally, probably sharing the same meeting room and the same kitchen.

The Beijing office status. We are also working on the host country agreement. It will take a bit longer we do expect to have it ready by January 2008. Because it will take a bit longer we want to start working immediately. China has offered to have an implementation team, basically it is a staff of the National Disaster Reduction Centre of China, which are already available to start implementing tasks. So it is not a SPIDER team, it is a team of five staff members from the National Disaster Reduction Centre, China, which are already available, part-time, to already begin working on SPIDER tasks for China, for the Beijing office.

The facilities are already available, that is a picture of the room which is already being used. It is co-located within the National Disaster Reduction Centre, China. This room in particular was the first room because this is on the 11th floor. the 12th floor they are remodelling. That is the room where SPIDER will open up its office but, more importantly, by 2009, within the new building which is being built for the National Satellite Disaster Reduction Centre, 800 square metres is being put aside for the SPIDER office in Beijing. That is a lot of potential in terms of what we can build upon in terms of space and facilities being provided.

Like I mentioned, this implementation team is already working on activities of the 2007 plan of work and is already working in organizing a China workshop. Here we have actually a picture of the five people we met while in China early May and this is

when we discussed with them about the activities and they are currently working on the activities.

The Geneva liaison office status. We also had extensive conversations with Switzerland in terms of defining the tasks. From the resolution we had basically a guideline that the Office was there to disseminate and integrate the work of SPIDER, within the Geneva community. We then discussed with Switzerland and with a proposal of the actual activities to be developed and that is contained in paragraph 51 of the summary report. What is important it is co-located with UNISDR and UNOSAT, this is the synergy we wanted to build upon, the opportunity of being, first of all, next to UNOSAT in terms of the potential that brings and also co-located with one of the main partners we would be working with in Geneva from the United Nations perspective, which is ISDR, UNDP being the other one and _____ (*inaudible*) being the other one as well and within an international environment house too. At the same time, we are working with Switzerland to implement the liaison office also as soon as possible.

Commitments. For 2008-2009, we did send out a note verbale mid-April to all 189 member States, Germany and China already had made commitments for 2008-2009. Also, in this note verbale, requesting to nominate a focal point. The idea was to have one person with whom we could then start discussing how to involve this contribution, this commitment, into the work plan. We did get, so far, answers from five countries but this is only less than six or seven weeks ago and we have had indication from many more countries to expect answers to this note verbale and in the case of commitments and contributions and also the name of the focal point we will be working with. Also with Switzerland, of course, we had correspondence defining the activities of the Geneva liaison office.

Based on these commitments and based on the work we have been developing in 2007 and based on the platform programme 2007-2009, we developed what we are submitting in the CRP today, a 2008-2009 plan of work. Some of the highlights of this plan of work, it is an extensive plan of work, it is quite detailed, but I just wanted to present some of things we will be developing in 2008-2009.

First of all within the framework of a gateway, we will continue dissemination information, web page, e-newsletter, mailing list and also RSS feeds, take advantage of other Internet-based solutions. Design and implementation of a knowledge portal. Basically put together a knowledge portal where all information can be accessed and used by both the space community and end-user community.

Awareness raising strategies with an objective of carrying out at least two campaigns annually. Outreach activities which include at least three workshops annually, participation in conferences and support development seminars and workshops, also at least one workshop in Geneva annually specifically for the Geneva community and then developing the regional country profiles.

Within the bridge. Support of establishment of the community practice as virtual communities where end users and space communities can come together at the national level, at the local level.

Prepare and implement a knowledge management and transfer framework bringing together case studies, best practices and end user requirements. Have one place where this knowledge can be accessed, shared, improved and thrown back to the end user. Continue working with relevant forums including GEO, UNISDR, the International Charter Space and Major Disaster, Sentinel Asia and others and contribute to the coordination among United Nations initiatives.

Finally, some of the highlights of the work plan for 2008-2009 in terms of facilitator. First of all, it is defining the national focal points and then, with these national focal points, working to develop disaster management policies and plans, ensuring that space is considered at the policy level, in same way in the _____ (*inaudible*) of action, space is recognized as contributing to risk reduction also at the national policy level ensure that the language is there and also within the disaster management plans, work with the national focal point to ensure that space is also considered. The objective is to reach five countries in 2008 and ten countries in 2009, perhaps a bit conservative but also more in function of the fact that we are beginning and the fact, of course, of the funding we do have already committed. Contribute also to the definition of national action plans together with national focal points in terms of helping national focal points identify activities and also help national focal points identify possible partners in implementation of these activities.

Finally, also once again, capacity building framework. Work on it in terms of developing one for the community and one that also includes e-learning environments.

Based on this work plan, what would be the staffing needed in terms of SPIDER to implement the programme. This would be the ideal quantity based on

the commitment that we received. We hope to mobilize this team based on the commitment indication we have already had in terms of the four offices and also in terms of the liaison office in Geneva.

In terms of cost, based on the activities we will be developing, based on the realistic staff we would be getting, this would be the projection in terms of the annual cost of SPIDER, $1,780,000. What do we actually already have committed for 2008-2009. We have $450,000 cash plus seven professional posts coming from the three core contributors, the three member States that are making SPIDER possible which is Austria, China and Germany and also fully equipped facilities in Beijing and Bonn, that is not actually included in the budget but SPIDER is receiving fully equipped facilities in Beijing and Bonn. We have a proposal from the United Nations regular budget, the need for three programme coordinators. The issue of having a distributed team leads us to the need to having a very strong coordination to bring together all this and also with all the other support we will be getting from the various support offices. There is a need to have a three-pronged coordinators and also support from the regular budget to an annual expert meeting of the network and regional support offices. One meeting where representatives of the network and regional support offices could come together and discuss better. There is a balance in this budget between what we need and what we got of $300,000 and from indications that we have received from member States we would expect, we would hope, that this funding will be made available. It is just that in order for member States to make a commitment it takes more time than just six weeks or seven weeks since the note verbale went out.

Talking a bit about SPIDER, there are three cornerstones make up SPIDER. We talked about the SPIDER team among the four offices but based precisely on what this Committee requested, was that we build SPIDER also to take advantage of the opportunities being made by many member States including from developing countries and the idea of having a network of regional support offices. From the indications of commitments we received, from the opportunities, there is a large potential of involving many more partners in implementing SPIDER activities and that would be the network of regional support offices.

The other cornerstone are the national focal points. The national focal points would be the one person, preferably within the disaster management community of their country, where SPIDER would work in terms of developing the policies, the planning the activities within that country. The idea to have one focal point to work at the national level so we would hope that every country would nominate one national focal point so that SPIDER could work with their national focal point.

The network of regional support offices are the regional and national centres of expertise in the use space technology and disaster management which agree to form a network for implementing the activities of the programme in their respective regions in a coordinated manner, enabling UN SPIDER to take advantage of the important experience and capabilities being offered and to be offered by member States particularly by developing countries. These regional support offices should be leading national or regional institutions with notable expertise in the use of space technology for disaster management, nominated by their government or by their respective governing body in the case of a regional institution, and we see that a lot of the commitment we received from the member States indicate that we will be able to form a very strong network of regional support offices. We did have a stakeholders meeting last Monday where we brought together nearly all of the 23 member States that so far have indicated an interest in contributing to SPIDER. The 20 member States that had already indicated an interest at the last Scientific and Technical Subcommittee and in addition, Greece, Spain and Saudi Arabia had also indicated and they also had the opportunity of participating on Monday.

In the report we discussed a proposal based on the commitments. How could we build upon the opportunities being made and we would expect that these support offices will be able to contribute to any other specific activities included in the UN SPIDER work plan by taking on the responsibility for funding and implementing of specific activity jointly and in coordination with UN SPIDER with the lead office in that activity. Such activities could include and some suggestions and, based on the commitment we received, there are many more suggestions we could make but some of them would be hosting a regional workshop promoting capacity building activities in the region, carrying out missions within a region to support national disaster management planning. There would be a lot of technical backstopping missions to countries and we would hope that expertise from one country could join us in a technical advisory mission to another country. Supporting national and regional vulnerability assessments, providing mapping support during emergencies, in fact providing mapping support during any phase of the disaster management cycle. Contributing to the systematic compilation of relevant information including the development of country

profiles and the compilation of specific geospatial databases. Supporting awareness raising campaigns and promoting the establishment of regional and national community practice. There is a huge potential in terms of what we can build upon with this network of regional support offices.

What would be the next steps. First of all would be the agreement on the 2008-2009 plan of work, agreement on the implementation of the Geneva liaison office. Next step would be OOSA to ensure integration of contributions and opportunities provided including consolidating and implementing this network of regional support offices, continue carrying out the funded activities as defined in the 2007 plan of work and set up the offices in Bonn, Beijing and Geneva. Then OOSA to report on the progress of the UN SPIDER programme at the next session of the Scientific and Technical Subcommittee.

The CHAIRMAN (*interpretation from French*): Thank you, Mr. Stevens, for that presentation. Your statement has shown that the SPIDER programme is moving ahead, that regional offices in Bonn and Beijing are being established, that prospects for the liaison office in Geneva are confirmed.

I have a single delegation asking to speak and that is Switzerland. I draw your attention to the fact that we have four technical topics still this afternoon and we will have to suspend the consideration of item 7, which will very likely be taken tomorrow. Switzerland please.

Ms. N. ARCHINARD (Switzerland) (*interpretation from French*): Thank you, Mr. Chairman, distinguished delegates, we would like to indeed express our utmost satisfaction and the honour that we feel to have been accepted as a member of this Committee, indeed, we are very, very happy to be the liaison for SPIDER and our Government has officially committed itself to this. The commitment of our Government has been given in writing to OOSA so this is no longer just a possibility but a certainty, contrary to what was said in the presentation that we have just had delivered.

The Swiss Government has committed itself to supporting the setting up of the SPIDER programme in Geneva and we are going to do everything to ensure the continuity and the work of the SPIDER platform. As is stipulated by resolution 61/110 of the General Assembly and is mentioned in CRP.14, summary report of UN SPIDER which was distributed this morning, the Geneva SPIDER liaison office will contribute to coordinating and disseminating programme activities in disaster prevention management and emergency response. Our delegation is very satisfied to note, in CRP.14, that the UN SPIDER programme is going to be coordinated with existing United Nations entities such as GEOS, GMS, which are not all UN entities such as GEO, GMS, CSDR and the International Space and Major Disaster Charter. All of these are entities with which the UN UNOSAT programme is already cooperating. My delegation is happy to have before us CRP.13 which gives a presentation of the proposed plan of work for the future SPIDER programme. Upon the request of OOSA in CRP.13, our Government has submitted a work plan for 2008-2009 for the Geneva liaison office and our delegation is astonished, therefore, to note that this document makes no mention of the activities proposed by Switzerland for the biennium 2008-2009.

Our delegation is certain that this is but an omission but we would certainly ask for this rectification to be made. Our Government certainly intends to support the activities of this Office by supporting conferences, activities, workshops and by the secondment of an expert from Switzerland to this liaison office.

In summing up, our delegation would request that the SPIDER Geneva office as well as its work plan be systematically in the future indicated with its liaison function along with the other SPIDER offices along with its programme work plan and activities.

The CHAIRMAN (*interpretation from French*): Thank you very much, Ms. Archinard, for your statement on behalf of Switzerland which confirms the Swiss commitments in support of the SPIDER programme.

I have noted the request to speak on behalf of the Russian Federation.

Mr. I. VESELOV (Russian Federation) (*interpretation from Russian*): Thank you very much Mr. Chairman for giving me the floor. The Russian Federation has carefully considered the documents tabled in plenary, that is the report on the work done on the SPIDER programme and the proposed 2008-2009 plan of work as well.

We support the SPIDER programme, we would like to note that the documents and discussions which have taken place reflect the fact that over the last six months the SPIDER programme has already scored significant progress and the Russian Federation hopes that, after a full-scale commencement of programme operations when all of the offices go into full swing,

the programme will start practically assisting in rescuing people's lives, in protecting communities and territories from emergency situations. The Russian Federation has already come into contact with the national focal points in our country and we are starting up work in organizing these activities. I also wish to indicate that we are working on the issue of organizing a special seminar in Russia for which we are going to be convening experts, where we will be exchanging our experience on space information and exactly how to get organized to mitigate emergency situations and we will be sending our contribution in writing in due time.

Once again, I would like to thank the working group on SPIDER and we certainly hope that we are going to have very fruitful cooperation in the future.

The CHAIRMAN (*interpretation from French*): Thank you very much, Russia, for your statement and for your active support for the SPIDER programme.

We are going to have to draw to a close our debate on this right now because the time is passing and we no longer have any time left, given the four technical presentations which are scheduled to close today's meeting. My apologies to those delegations having asked to speak, they will be given the opportunity to speak when we get back to item 7, tomorrow morning.

I will now start the technical presentation part of our work. I would like to ask the presentations to keep within 13 minutes each so that we will be able to finish in due time. Representative of Germany to start off, he will be speaking about flood prevention mitigation with satellite services information.

Mr. H. SDUNNUS (Germany): Dear Mr. Chairman, dear delegates, thank you very much for giving us the opportunity to talk about enhanced flood prediction based on mobile GNSS application. I am giving this presentation on behalf of the German delegation, I am from etamax space, a company in Germany and we are developing this project, together with a Danish company which is called DHI. The problem as such is, I believe, well known to everybody, flood catastrophes caused by rivers are a permanent threat all over Europe and worldwide.

Two illustrations for this we have floods in Italy, for example, and the well known Elbe flood in Germany in 2002.

The CHAIRMAN (*interpretation from French*): Could I please ask delegations who are talking to please talk outside the room if they must. It is very difficult to listen attentively if there is too much sideline conversation going on. Please be so kind as to speak outside the room, not inside. This also applies to Ms. Sylvie _____ (*inaudible*).

Mr. H. SDUNNUS (Germany): So the flood catastrophes caused by rivers are a permanent threat all over Europe and worldwide. The damages caused by floods are enormous and still represent a significant economical and social problem in the affected regions. According to UNESCO, more than 2,200 major and minor water-related disasters occurred between 1990 and 2001 and river floods accounted for half of these disasters, that means that we have more than 1,000 river floods in this time span.

Flooding annually affects about 520 million people and their livelihoods, claiming about 25 lives worldwide. The question is, why highly developed countries cannot even disseminate flood warnings in sufficient time to reduce the disastrous events of floods significantly. This question led to the system I would like to present.

The key issue is that measured water levels are a keystone for model calibration and flood forecasting. Today, water level measurement systems mainly rely on so-called fixed gauging stations. Even in highly developed countries, like Germany, only a few measurement stations exist even in large river systems and the water level measurements, for example, in the Elbe river consist of gauging stations every 30 kilometres and in some regions, like in the region between the Czech Republic and Germany, the distance between the gauging stations is about 150 kilometres. The reason, gauging stations are complex and expensive causing problems also for emerging countries and this is the key issue the G-WaLe system, I am presenting today, addresses in the demand for a system capable of providing near real time data on water levels during extreme situations with both highly spatial and temporal resolution.

G-WaLe stands for GNSS based measurement of water levels. G-WaLe consists of several, that means in between 30 and 50 self-contained so-called mobile floaters, which you see in bullet 1, with integrated GNSS receivers connected to a fixed housing containing a power supply system, data storage system and data transmitter. The idea is to have these G-WaLe systems with 30 to 50 floaters being deployed in rivers where they are needed.

The G-WaLe system is mobile and the G-WaLe floaters are deployed in the river and they anchor at their positions after being deployed.

The vertical component of the measurement provides information on the water level at a floater position and the vertical component is established by means of the GNSS receivers, together with the reference station which is located on the shore of the river, that is bullet 2 in this figure on the right hand side. The position of the floater is either then stored internally or transmitted, via GSM radio or satellite links, to a central or mobile or stationary unit standing right next to the river and then further transmitted to the bullet 3, that means to water management institutions who are keeping the databases and who are then forecasting the data they have received from the G-WaLe system for the river. The water management institutions then process the data to establish ad hoc or short term water level forecasts and then issuing alerts for the regions downriver. In case of critical situations alerts are established and distributed.

I have a mock up of this floater with me, it is standing on the right hand side on the table and you can have a look at it how it looks like. That is a picture of it.

A floater consists of GNSS receiver, a storage unit, a communication unit, energy unit, a controlling unit and an anchor. The principle is that, after being deployed, the floater measures its vertical position by the change of the water level with the flood wave rolling through the river.

The advantages of the G-WaLe system is that it provides data with very high spatial and temporal resolution, it is highly mobile, floaters may be deployed by land vehicles, helicopters or ships, the system may be operated also in remote regions or emerging countries. It is not necessary to install major infrastructure, the system is operational on very short notice, it is cost-efficient because only a limited number of actually needed measurement units have to be maintained and, having said this, the G-WaLe system may provide a contribution to better calibrate river models needed for preventive flood prediction, to support operational forces in the event of a crisis and thus to decrease the economical and social impacts of river flooding events.

The proposed approach is probably provides its best performance when it uses the future Galileo system but it is also possible to use it with the existing infrastructure. Galileo will provide enhanced accuracy in the vertical position information and integrity information but we are currently working on the question whether existing systems, like GPS + EGNOS enhancement, will be usable.

The accuracy of about 25 cm in its vertical position component is one of the key issues. It is intended to reduce the effect of accuracy issues by different methods. We are using correction information by differential measurements, filtering techniques of the data from many receivers and reference stations which are located next to the system.

In summary, G-WaLe is a GNSS-based system for measuring the water level and rivers in flood affected areas. The services possibly provided by G-WaLe represent a significant improvement of the flood modelling and forecasting process. G-WaLe may provide a contribution to decrease the social and economical impact of water floods worldwide and its mobility as well as low cost make the system well applicable also in remote areas or emerging nations.

Thank you very much, this concludes my technical presentation.

The CHAIRMAN (*interpretation from French*): Thank you very much, Mr. Sdunnus, for your presentation. I would have a question to put to you. Is this system that you have described already operational or even if it is just a prototype or is this just the future?

Mr. H. SDUNNUS (Germany): It is in the development phase. What we have operational is a prototype of one floater and we are working on a system of several floaters and the infrastructure behind it.

The CHAIRMAN (*interpretation from French*): Thank you. I believe that Nigeria also wishes to put a question.

Nigeria: As this system becomes operational what do you foresee as an anticipated cost of deploying one?

Mr. H. SDUNNUS (Germany): There are two different ways of using the system. The first way would be to rent it, to use it part time, there would be a daily charge, somebody or some institution would have to pay for it. The second way is to buy the system and buying the system would mean to have a couple of floaters and an infrastructure behind it, so one floater would be in the order of €1,000 + the infrastructure behind. I would not give any estimation of the cost today but it is less expensive than maintaining systems like the gauging stations.

The CHAIRMAN (*interpretation from French*): Thank you. I see that we have another request for the floor, from Bolivia.

Mr. H. BAZOBERRY-OTERO (Bolivia) (*interpretation from Spanish*): I am very grateful for the presentation. I have a question, if I may. What could be a use of this mechanism that they are promoting? Some floods occur in Bolivia and have the following features. Every year you see in the eastern part, the lowlands, because of heavy rains that occur during four days or a whole week on occasion, obviously the tributaries of rivers then overflow. Half of this is due to rainfall because this is a level area and the water simply stays there and does not run off properly.

So, how could this mechanism help, how would it be useful in this occasion because you are telling us that it is only waterways, rivers and the like, not rainfall? How could this apply to our type of problem where heavy rainfall leads to masses of water that are backed up because of the level area, as I was saying, the water does not flow away and this is over quite large areas? This is a technical question, I would, of course, be very grateful for an answer from Germany.

Mr. H. SDUNNUS (Germany): The system plays its best role when monitoring flood waves rolling through a river. The answer to the question how high is the wave, how fast is it and what will happen in the areas downriver in the next hours. In your case the system would be able to provide measurements of the water level. What I did not understand from your question is whether there is some kind of a flood wave rolling through there or whether it is some kind of a stationary situation you are talking about, so maybe we could clarify that afterwards.

The CHAIRMAN (*interpretation from French*): Thank you very much for your presentation and for the answers to the questions addressed to you. Since we really do not have much time I suggest that if you have further information to exchange maybe you could put your heads together with other delegations interested in this, after the meeting.

I would now like to call upon Ms. Takemi Chiku, Japan. JAXA Space Education Centre efforts to enhance human development through space education.

Ms. T. CHIKU (Japan): Thank you Mr. Chairman for giving JAXA Space Education Centre an opportunity to brief the Committee on what we have done and also to share _____ (inaudible) on further expanding space education activities.

Our Space Education Centre uses space subjects and materials to get young people not only interested in science and technology but also in many other things that we do in our life. We want young people to see a link between space and nature, life, our history, our present cultural civilizations and our future. We continue to follow these principles on the slides to carry out our activities. Importance of life continues to be the most important message that we want to get across to young people for our activates and as we study more and more about the origin and evolution of the universe and life and as we continue our search for Earth-like planets, we come to appreciate more all forms of life on our planet Earth.

This is something that we always stress in our education activities for young people. The spirit of never give up, is another important message that we always stress as it is essential for almost everybody who wants to do something significant and meaningful in this challenging world. We also want our young people to understand how important and how rewarding it is to be part of the society to build a better future together.

To some extent we work on the minds of children and we use space education as a tool to enhance human development at the individual level. We want our young people to be full of curiosity, adventure spirit and inquiring mind, always aiming for the best in whatever they do and we try to achieve this meaning through our educational support to schools and teachers and through our onsite hands-on activities.

We provide viable support to teachers to carry out their unique classroom activities that address space subjects. We work very closely with them because we believe that they have better understanding of young people’s needs and feelings through their daily interaction.

In the past year we had some rewarding moments that helped us reaffirm our commitment to provide customized support in response to various needs of teachers in spite of the increasing demand of our time and also heavy workloads on every one of us. I will just mention one story. The activity to build and fly water rockets using pep bottles, water and pressurized air will change the personality of one elementary school boy. The teachers at that school were struggling to deal with this boy who had been emotionally unstable, isolated from the rest of the class and had been identified as an autistic child. But once

he went through the water rocket session, he always stayed focused in the class to concentrate on making better rockets to fly higher and even took the initiative by himself to call upon the entire class to join the rocket club that he declared to establish. That change in his attitude and behaviour was a pleasant surprise for all the teachers at school.

Hands-on activities are mainly provided as part of what we call cosmic college which aims to achieve these objectives on the slide. Depending on the age and the level of knowledge, we offer different levels of courses covering the primary school to high school students.

We have been involved in an increasing number of cooperative activities as we expand our partnerships to entities of other countries and international organizations. We use as much as possible the existing framework for cooperation in space activities and this guide tries to summaries the approach that we take in expanding space education through international cooperation. As much as the circumstances allow we try to create synergies among the initiatives that are undertaken and the different frameworks of cooperation.

In the next few slides, I would like to show some of those examples through for instance, water rocket and CanSat activities. One of the frameworks that we support is the International Space Education Board (ISEB), the membership is open to any public organization carrying out space activities and pursuing education programmes. There are already several joint activities currently pursued by ISEB under the chairmanship of NASA. We in JAXA have been taking the lead in promoting CanSat development and experiments at basic space engineering, hands-on training for students. The original idea of putting all basic satellite functions into a 350-millilitre alumina juice can, actually came from Stanford University of the United States. The activities to build CanSat and to compete for the accuracy of bringing them back after they are released by the captive _____ (*inaudible*) amateur rocket from up in the air, have really flourished among Japanese universities that have aeronautical engineering programmes.

We consider it very important to work with entities of the United Nations system, such as Office for Outer Space Affairs and UNESCO, as they provide opportunities for cooperation that benefit a far larger number of countries and people that we could possibly do by ourselves. We appreciate the opportunities provided by UNESCO to participate in its space education activities held in multiple series in Colombia, Viet Nam and Ecuador to introduce water rockets as an educational activity. We are happy to support the hands-on session with water rockets and for teacher's seminar in Buenos Aires, Argentina in October this year. We are very pleased with the results of those UNESCO activities that we participated in. The water rocket activities really took off as educational activities in Bogota through the planetarium and also in Ho Chi Minh through the high school for gifted students. While we provide assistance to more teachers and educators in developing countries, they help us improve the content of our teaching methods and materials by giving us their feedback and for us this is the mutually beneficial way of cooperation. In view of the past feedback that we have received from many teachers and educators, in Colombia and Ecuador for example, we are now working with UNESCO to make an educator's water rocket manual and DVD, available not only in Japanese and English but also in Spanish.

In the region of Asia and the Pacific, we use the framework provided by Asia Pacific Regional Space Agency Forum (APRSAF) and it was within this framework of APRSAF that we had first introduced the idea of water rocket competitions as a regional event for secondary school students. After two regional events, the number of participating countries increased to 13 and, to further promote water rockets as an educational activity in the region, we are widely distributing the educator's manual and DVD for water rocket activities for any interested teachers and educators.

_____ (*inaudible*) space education workshops and seminars for school students and teachers to give them opportunities to learn about various subjects related to space activities and also to take part in hands-on activities within the framework of APRSAF. We also tried to organize those workshops together with UNESCO in accordance with the agreement of APRSAF. The last meeting we also agreed to start joint activities for university students with CanSat activities and the _____ (*inaudible*) Space Education Centre organized the International CanSat workshop in February in Tokyo. It was held within the framework of both ISEB and APRSAF. It was attended by more than 150 students, university teachers, educators and space experts from 15 countries including Colombia and 10 from Asia and the Pacific.

As for other regions, we consider it important to work with those entities that serve as the focal points for cooperation in the region. For example, in Europe, cooperation with the European Space Agency (ESA) is very important too and we use the annual ESA/Japan

meeting as the well-established framework for cooperation over more than 30 years. In Latin America and the Caribbean region we try to maximize opportunities to work with those countries serving as pro temporary secretariats of the Space Conference of the Americas in the past, present or future. We also take opportunities to work with other regions, as offered by development agencies of Japan, one of such examples is the introductory training session that we offered to a group of science teachers of secondary schools from eight African countries to learn about how to introduce space education in their classroom activities.

As I describe initiatives that we undertake, within the framework of ISEB and APRSAF, I tried to show how we are making efforts to create synergies between those initiatives and, as we are invited to participate in any intergovernmental meeting, we share our success for examples of regional initiatives. When there is also enough interest in educational materials we then make those materials in other languages rather than Japanese.

We are often asked by teachers and educators in developing countries how they could start space education in their countries and the answers vary, of course a lot, depending on the local situation but we often indicate the effectiveness of taking approaches both through formal and informal education at the same time. The idea would be, of course, that the space subjects are fully integrated into the school curriculum but normally the school curriculum is already too packed with too many subjects to teach but, even in such case, selected appropriate space materials could be effectively used as introductory education materials to stimulate the interest of students in the subjects that they are about to study in accordance with the existing textbooks or curriculum.

It would also be important to have the support of the ministries or local government agencies responsible for education. In addition to addressing space-related subjects in the curriculum they could also consider supporting space education activities as pilot projects at selected schools. As for informal education, having space-related entities organize onsite hands-on activities is one way of doing it but, in order to give opportunities to many more young people to participate, we need to have a lot of collaborators who could carry out such activities in their local communities and this way space education activities could also contribute to community building efforts. With appropriate programmes, materials and guidelines it could also be done even at home.

To some extent, we, in our Space Education Centre, are trying to establish a network of space education efforts at various levels through various cooperation frameworks and through organizations as well as individuals who share our goals and principles.

Mr. Chairman, with this house, it is an outstanding example of how committed and dedicated individuals could have significant positive impact on the international cooperation in space activities through the accumulation of extra effort that they make over the years. As far as the space education is concerned we value what each individual can do to have positive impact on the development process of young people.

Mr. Chairman, in our efforts to highlight the importance of space activities for society, we have stressed the benefits of space science and technology and their applications, for example, they enhance safety, security, predictability, responsiveness, stability and the convenience at the societal level aiming for the enhancement of the society as a whole.

While these efforts should continue perhaps we could also play a little more attention to individual needs particularly those of young people and what our Centre is doing now is perhaps a reflection of the lessons that we learned in the Japanese society. In the excessive pursuit of material richness, efficiency and productivity, we might have forgotten something very important in the pursuit of happiness as human beings. Our attempts to establish a network of space education efforts is an attempt to create a coalition of forces around the world who want our children to lead lives that are full of happiness and joy of living.

Through our interactions, particularly with teachers and educators in developing countries, we have gained confidence that what we are doing will eventually bear fruit in the future. In the past two years we came to this Committee to present activities and achievements, this time we came here perhaps to thank many of you in this Committee for the encouragement and moral support for what our Centre does. It is our belief that the enhancement of human development, at the individual level, for space education will contribute to the establishment of a solid foundation for global peace so that one day when human beings start living in space, far in the future, there will be no more human sorrows and tragedies that we have often observed on this planet Earth. Thank you very much for your attention.

The CHAIRMAN (*interpretation from French*): Thank you very much for your presentation, very interesting indeed, extremely well done and it

shows not just the amplitude of activities within your Space Education Centre but also the considerable international dimension these efforts have _____ (*inaudible*), so congratulations.

Would there be any questions for Ms. Chiku? I see none but certainly congratulations for the quality of your presentation of the work itself.

Mr. Abdul-Malik Abdul-Rahman Al-Shaikh, Saudi Arabia, who will be speaking to us about space image atlas of the Kingdom of Saudi Arabia, a new way of education for sustainable development.

Mr. A-M. AL-SHAIKH (Saudi Arabia): Mr. President, Chairman of the fiftieth session of the United Nations Committee on the Peaceful Uses of Outer Space. Distinguished ladies and gentlemen, it is my pleasure to have the opportunity to contribute again to the activities of the fiftieth session of the United Nations Committee on the Peaceful Uses of Outer Space and to announce the release of the Satellite Images Atlas of the Kingdom of Saudi Arabia.

The Atlas of satellite images of the Kingdom of Saudi Arabia derives its significance from the fact that it is the first of its kind in the Kingdom. It employs remote sensing techniques and digital satellite images, processing with advanced techniques to obtain precise data, objective research, and a comprehensive view of all features of the Kingdom's surface from space. The Atlas is designed to cover the lands of the Kingdom at different scales with concise commentaries about what can be interpreted from the images and what information can be collected about the regions that they cover. It comprises an important reference that will enable researchers and specialists to better understand the Kingdom's history and archaeology, its geographic features, modes of land use, urban expansion and distribution of natural resources. It offers major examples of Earth's phenomena and it can be a starting point for the initiation of specialized projects. The Atlas also helps one obtain information on changing environmental phenomena in the Kingdom, which can contribute to protection of the environment from pollution, combating desertification, limiting sand dune encroachment and the solution of numerous problems associated with natural hazards.

This Atlas is produced in two forms, a book and a DVD digital atlas. The Atlas is divided into a number of chapters, beginning with a general and concentrated introduction to remote sensing techniques, digital satellite images, processing and Geographic Information System. The first chapter then takes up the geography of Saudi Arabia by displaying summarized and condensed information on most of its geographic phenomena, with the overlay of a map of each of these elements over the mosaic of satellite images of the entire Kingdom. The second chapter displays the major cities of the Kingdom through SPOT satellite images and summarizes information on these cities. The third chapter includes satellite images of selected sites, displayed at various scales, taken by different satellites and showing the most important morphological and specific characteristics of the Kingdom and its major environmental phenomena, geographic features and natural resources. The images are accompanied by summary information on each of them. The fourth chapter presents a series of sheets of satellite images taken by Landsat-5, which are geometrically corrected and colour enhanced and processed in a unified manner at the scale of 1:500,000. As a group they cover all regions of the Kingdom, each sheet includes the names of the most important sites.

The Prince Sultan Research Center for Environment, Water and Desert at King Saud University has administrated the Atlas project and contributed effectively to its design and implementation in cooperation with a group of national, specialized, scientific institutes and researchers participated from King Saud University, the Space Research Institute at King Abdulaziz City for Science and Technology and General Commission for Survey and King Fahd University of Petroleum and Minerals. The Austrian company, Geospace, contributed extensively to the design and processing of satellite images as well as publishing and producing the Atlas to a most excellent standard. In this great event, I wish to thank all efforts undertaken to make this Atlas a reality. Thank you very much.

The CHAIRMAN (*interpretation from French*): Thank you Mr. Abdul-Malik Abdul-Rahman Al-Shaikh for that presentation on Space Image Atlas of the Kingdom of Saudi Arabia, a very educational tool, showing the efforts exerted by the Kingdom of Saudi Arabia is space imagery and education. I thank you for that.

Any questions please for Mr. Abdul-Malik Abdul-Rahman Al-Shaikh? I see none. Thank you yet again for that statement.

For the last technical item I hand over to Mr. Peter Lillie, the European Space Policy Institute on civil society and outer space.

Mr. P. LILLIE (European Space Policy Institute): Chair, distinguished delegates. Thank you for granting ESPI and through them CONGO, the organization I represent, this opportunity to brief you on a Vienna-based civil society initiative related to outer space.

At this late hour, the operative word is brief. I will try and follow the example of Henry VIII who told one, if not more, of his six wives, I shall not keep you long.

The initiative in question is a forum on civil society and outer space. In the course of this presentation I shall answer six basic questions. Who is organizing the forum, what will be discussed, where will the forum be held, when will it be held, which organizations will attend and, how can one register.

Now to the question of who. Despite the title of the organization organizing the forum, being both a homophone and a homonym of a nation State, it is, to quote Monty Python, something completely different. CONGO, the Conference of Non-governmental Organizations, in consultative relationship with the United Nations, is an independent international non-profit membership association of non-governmental organizations, over 500 in all. It facilitates the participation of NGOs in United Nations debates and decision-making. CONGO is most active at the major United Nations centres of New York, Geneva and Vienna but its work stretches out to all regions of the world.

CONGO was founded in 1948, since then, it has worked relentlessly to ensure that NGO voices are heard in all international arenas and NGOs are present when governments discuss issues of global concern at the United Nations. CONGO does not take positions on substantive matters, however, it does provide through special and ad hoc NGO committees, of which there are seven in Vienna, fora for discussion of substantive matters by its members with officials of the United Nations Secretariat and United Nations system agencies, United Nations delegations and other experts.

In Vienna, CONGO supports initiatives relating to aging, crime prevention and criminal justice, development, human rights, narcotic drugs and psychotropic substances, peace and the status of women, some of which are specific to agencies and organizations based here in Vienna. It thus seemed a logical step to try and extend the consultative process to outer space, the bailiwick of a Vienna based agency, OOSA, and facilitate a meeting on the topic.

CONGO however is not going it alone, it has secured the cooperation of no fewer than five highly qualified agencies and here the link with ESPI, a major supporter of the initiative, becomes apparent. All of the agencies are active in the steering committee preparing for the forum. The extent of the logistical support being lent by OOSA is beyond measure. It has also secured the financial support of four sponsors without which we could never have envisaged this undertaking. Their generosity is greatly appreciated, our gratitude knows no bounds.

Aimed at civil society the forum is intended to provide as comprehensive an overview as possible of the current situation pertaining to the use of outer space, in particular, those applications responding to a large variety of societal needs. It was thus most encouraging to hear the members of the high-level panel, last Wednesday, speak of the need to enthuse people and get them involved. Human space exploration was acknowledged to be a subject to which most people can relate. The proverbial man and indeed woman in the street, be he or she from a space-faring or developing country, was somebody who could be inspired by creativity, challenge and cooperation. Relentless curiosity and the quest for new knowledge, uniquely human attributes, was seen to be driving factors in a process that demonstrably yielded social benefits.

As a newcomer to all this, I must confess to having been particularly struck by the quotation from Socrates, man must rise above the Earth to the top of the atmosphere and beyond for only thus will he fully understand the world in which he lives. The sky it seems it not the limit. Inspiration and education, as I learnt last week, constitute an integral part of the global space exploration strategy. They will also play a role in the forum which has a distinctly educational angle. It aims at increasing general awareness of the growing beneficial use of space technology and its contribution to sustainable socio-economic development.

The forum comprises four sessions. At each session, under the chairmanship of a respected figure from the world of outer space activities, a different person for each session, a keynote speaker including luminaries such as the COPUOS Chair, will provide a general overview of the topic under consideration and the panellists will focus on various facets of the same. That will then be followed by an extensive question and answer period. Throughout, the overriding principle will be one of making the current situation in outer space and the effective use of space technology as understandable as possible to members of civil

society most of whom are best described as laymen on a very steep learning curve.

The first session will be devoted to the use of space. This slide shows the structure of the first session. The keynote speaker will address the main theme, that is the heading, and the panellists will speak on selected aspects of the same, the bullets, and I am sure you can read more speedily than I can speak.

The second session will be devoted to the relevance and benefits of space applications, the structure is identical, the overall picture being drawn by the keynote speaker, followed by the treatment of specific aspects by the panellists. Having heard the range of applications listed last week, I am sure that space exploration can offer many more benefits to humankind than most laymen imagined or can even imagine.

The third session, same structure, but different topics.

The fourth and final session is somewhat different in that the keynote speaker will address the forum on the expectations of the younger members of the space community. The forum will then discuss and finalize the position paper. It will summarize the main findings and recommendations of pertinence to the work of the NGOs and their contribution to the application of space technology in selected fields for the peaceful use of outer space as well as the security and conduct of space activities.

At a forum on crime prevention, the CONGO organized last October, here in Vienna, in close cooperation with UNODC and OSCE under two local NGO committees, the position paper, an integral part of the final report comprised 19 crisp paragraphs. They touched on regional and international networking, the role of NGOs, the role of United Nations agencies, modalities of partnership, media strategy and specific issues. It is conceivable that a similar approach could be adopted on this occasion. It is equally conceivable that the forum might recommend the establishment of an NGO committee on outer space issues that would join the ranks of NGO committees under the aegis of CONGO. The success of the forum will hinge not only on the substantive inputs by the Chair, speakers and panellists but also and more importantly on the awareness and enthusiasm of the civil society participants and the readiness of all participants, as one panellist put it last week, to think outside the box.

CONGO has already spread the word amongst its own members and the co-organizers have also started publicizing the event via their various networks. However, seeing you all here in the room I will seize the opportunity and ask you to contribute to the success of the forum by drawing it to the attention of any civil society organization, research entity or academic institution, you feel would benefit.

This now brings me to the issue of when, where, which and how. The date, the venue, the attendees we hope to be able to welcome and all enquiries about registration formalities should be sent to email address on the screen. Civil society I trust will prove just as imaginative and visionary as those who have been working on outer space activities, securing tangible benefits for humankind in such diverse fields as medicine, agriculture, environment, sustainable development, disaster management, communications and navigation.

One of the most important changes taking place in the world today is a shift to a knowledge-based society and the opportunities seized, or missed, in the wake of technological advances. The divide is growing from day to day and CONGO fully supports using the tools of communication and knowledge transfer to strengthen links and enhance networking between various groups within civil society and without. I know that we will be seeing some of you as Chairs, keynote speakers and panellists at the forum. I look forward to equally enthusiastic participants from civil society. The synergies created by this new symbiotic relationship will, I trust, bode well for the future. The former Secretary-General of the United Nations, Kofi Annan, has gone on record saying that at one time the United Nations dealt only with governments, by now however, we all know that peace and prosperity cannot be achieved without partnerships involving governments, international organizations, the business community and civil society. In the Secretary-General's words, in today's world we depend on each other. Never has that rung more true in our particular vary of interest we had hoped to achieve that spirit of partnership.

Mr. Chairman, distinguished delegates, your interest in the forum I hope has been aroused. Thank you very much for bearing with me.

The CHAIRMAN (*interpretation from French*): Thank you, Mr. Lillie, for that statement and having introduced the conference that your organization, CONGO, is organizing in October here in Vienna, and of course, I cannot but encourage delegations here to either participate and/or publicize this event in their respective countries.

Any comments please on this event, 8-9 October organized by CONGO? I see one question, our temporary observer for the time being, the Secure World Foundation.

Mr. D. ALDWORTH (Secure World Foundation): Thank you, Mr. Chairman. This session is exactly the type of activity that the Secure World Foundation likes to see, the building of bridges and relationships between civil society, governments and other organizations involved in space and in fact the Secure World Foundation, likely me, will be a panellist on the third session and we look very much forward to participating in this and to see other members of COPUOS and observers participate. Thank you.

The CHAIRMAN (*interpretation from French*): Thank you for that contribution and your announced participation in this event.

Unless I have other questions, distinguished representatives, I will be adjourning this session. As for the programme of work for tomorrow morning, we will meet at 10 sharp, we will then continue consideration of item 7 and, if possible, we will conclude consideration thereof. Then we will continue and conclude items 10 and 11, space and society, space and water. We will continue consideration of item 12, space-derived geospatial data for sustainable development and item 13, other business.

I recall, by way of conclusion, that a reception is hosted tonight by Ambassador and Permanent Representative of France in Vienna at 6.30 p.m. in the residence.

Any additional questions regarding the schedule for tomorrow morning?

If there are no comments I adjourn this meeting.

The meeting closed at 5.58 pm.