

**Committee on the Peaceful
Uses of Outer Space***Unedited transcript***563rd** Meeting

Thursday, 15 June 2006, 3 p.m.

Vienna

*Chairman: Mr. G. Brachet (France)**The meeting was called to order at 10.19 a.m.*

The CHAIRMAN (*interpretation from French*): Good afternoon distinguished representatives, I hereby declare open the 563rd meeting of the Committee on the Peaceful Uses of Outer Space.

This afternoon we will continue, and I hope conclude item 8 of the agenda, Report of the Scientific and Technical Subcommittee on its Forty-Third Session. We will continue with item 14, Other Matters, and I would just like to remind you that at the end of this afternoon's meeting, we have two technical presentations scheduled. The first on "The Japanese Programme on Space and Water Applications", by Mr. Igarashi of Japan, and the other on "Water Management" by Mr. Radhakrishnan of India.

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

So now we will continue with item 8 of the agenda and I hope we will conclude it. So this is the Report of the Scientific and Technical Subcommittee.

Now, I would propose that we spend a few moments reading the document that was distributed on the DMISCO project. We have a non-paper. This has some paragraphs that could then be included in the report that will be submitted to the General Assembly with regard to its recommendations for disaster management and an Ad Hoc Expert Group. And the Director of the Office for Outer Space Affairs will be joining us in just a moment, but in the meantime, we could be looking at this document.

I now propose to give the floor to the Director of the Office for Outer Space Affairs so that he can kind of explain the structure of this document, which I think you have had a moment to peruse.

You have the floor Sir.

Mr. S. CAMACHO-LARA (Director, Office for Outer Space Affairs): Only very briefly. The non-paper that is in front of the Committee right now has text that would serve as the basis of the discussions that the Committee would have to make a decision. And the first three paragraphs, we believe, are essentially factual so those do not have any brackets. Of course, the text of everything is draft. So those also are open for comments of the distinguished representatives.

And then the paragraphs that follow are a proposed text on what might be an agreement. As nothing has been agreed yet, then everything is in brackets. The Section would have the usual introductory paragraphs of the item, like reference to the work plan, the third(?) and so on. And then there are other interventions that have been made by delegations that are not related to DMISCO. And then there would be paragraphs that would reflect the presentations that were made by delegations.

Thank you Mr. Chairman.

The CHAIRMAN (*interpretation from French*): Thank you Mr. Camacho.

Now, we might want to see if any delegations would like to take the floor at this time with regard to the DMISCO/SPIDER project because we have a draft

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

Corrections should be submitted to original speeches only. They should be incorporated in a copy of the record and be sent under the signature of a member of the delegation concerned, within one week of the date of publication, to the Chief, Conference Management Service, Room D0771, United Nations Office at Vienna, P.O. Box 500, A-1400, Vienna, Austria. Corrections will be issued in a consolidated corrigendum.



text before, and, as I said, we might want to include, or part of it, in the Committee Report.

Would anyone like to take the floor and say something beyond what was said this morning?

The United States, Mr. Hodgkins.

Mr. K. HODGKINS (United States of America): Thank you Mr. Chairman. Mr. Chairman, I appreciate the effort by the Secretariat, or their effort in drafting this document, and I certainly am encouraged that we seem to be making some progress.

However, I do think that for some of these bracketed paragraphs, we will need more discussion. Yesterday, I asked the question and I will repeat that today, which is, what does it mean for SPIDER or this entity being implemented as a programme of the Office for Outer Space Affairs under the Director of the Office. A very important question because, in my understanding or reading of that paragraph, what we are saying is that the Director will be responsible for the operation of this entity and I am not entirely clear how that would work, given the existing staff that the Office has.

The second question that I have pertains to the sixth paragraph on Page 1, which suggests that the Director of the Office for Outer Space Affairs would be responsible for the overall management and oversight of the proposed platform. Again, I do not know how that works in practice. What is going to be the relationship between the Office and the offices in Beijing and in Bonn? Because I do not know if it is possible for the Office for Outer Space Affairs to manage and oversee the operations in these two countries. You know, physically, they are quite separate. And I am not sure what, in fact, the responsibilities would be for the Office in implementing that management oversight responsibility.

And my third observation is on Page 2, the next to last paragraph, where we talk about establishing an Advisory Board. Now, I note the explanation today, one possibility of having the Committee nominate people to an Advisory Board to oversee this particular activity, but I am not quite sure if that is appropriate or even consistent with how the United Nations is set up in this regard because if we call this a programme of the Office, then the Office is responsible to the Committee as well as to the other administrative bodies in the United Nations system. What exactly would the Advisory Board be doing that the Committee could not do? And what would be the process of nominating

experts to that Advisory Board. So I think that we have to discuss whether there would be a need for an Advisory Board and how would that Advisory Board actually relate to the Committee.

Mr. Chairman, we probably need to consider the paper in more detail. My delegation remains concerned about the process for the Office to get additional resources because I think in reading this paper, it does not really deviate much from the original texts in CRP.13 and the concerns we have about the ability of the Office for Outer Space Affairs to get additional funding through the established budgetary process, still remains a concern to us. Although I do note that we have some language in the fourth paragraph at the end dealing with re-arrangement of priorities within the framework of the United Nations reform process, but again, in all honestly, that is not a decision that this Committee can make. And it is not a foregone conclusion that those who are running the reform process agree that additional activities of the Office for Outer Space Affairs would be funded through that reform process. I do not know enough about the reform process to speak authoritatively but it just strikes me that that is something that is being considered at a much higher level than the delegates here and broader implications. So for us to assert, as a Committee, that the United Nations reform process is going to rearrange priorities in such a way that they will then be in a position to fund us is, I think, assuming quite a lot.

Thank you Mr. Chairman.

The CHAIRMAN (*interpretation from French*): Thank you Mr. Hodgkins for your statement on behalf of the United States delegation and for the questions which you have posed which are directly related to the issues we discussed yesterday.

Have we any other requests for the floor on this draft document, the draft paragraph to be precise?

I see none.

I give the floor to the Director of the Office for Outer Space Affairs who will make a few comments following the United States' statement.

Mr. S. CAMACHO-LARA (Director, Office for Outer Space Affairs): Thank you Mr. Chairman. I will try to see if I can clarify at least, from the point of view of the Secretariat, how we envision the participation of the Office would relate to the other offices that will be carrying the work.

As I see it, if DMISCO was to be established as a programme within the Office, it should not impact on the delivery of the Programme on the Peaceful Uses of Outer Space, which means everything we do, not just the Programme on Space Applications, but all the work that we do, servicing the Committee, inter-agency, maintaining the Register and so on. The staff that would strengthen the Office would be the ones that would carry the additional work.

That relates to the second question of, what does it mean that the Office for Outer Space Affairs would have a responsibility for management and oversight? Here, what is intended would be, it is not the management, and especially not the assignment of work and allocation of money resources of the offices in Beijing and in Bonn. That would be up to them to do that allocation of resources to carry out the work that they should carry. But if it is a programme under the United Nations, that means for the part that is financed through the regular budget, then that has to be included into all the planning, executing and reporting procedures of the United Nations. So the Office would then be doing that part, management and oversight. Here, oversight is actually more related to accountability. It is not so much on ensuring that the process in Bonn and in Beijing runs in a certain way. The intention of the concept of DMISCO was that it should be experts that are working to carry out the tasks that are in the report of the Experts. So the Office, in my view, should not interfere with that process.

The other work that the Office should do, and this would be part of that coordination with the offices in Bonn and in Beijing and eventually regional focal points as well, as we have discussed, would be to be an interface with the Committee so that the reports of the entity would come to the Committee or the Scientific and Technical Subcommittee as do right now the reports of the activities of the Office. It could be that there might be one report that would be the report of the Expert on Space Applications that just summarizes. It maybe that the specific issues a report on which the Committee is being asked for guidance would also be presented. That would be also part of the work that would come under this category of management and oversight.

Regarding the Advisory Board, that would be an issue that would be up to members of the Committee and I would leave that untouched.

And regarding the ability of the Office to get more funds, I would repeat that I have no guarantee that we are actually going to be successful. There is

that process that eventually it goes to the Fourth Committee and that Programme Budget Implication document is presented together with the resolution. So it will depend on whether we can actually raise the importance of the function that DMISCO would be performing with respect to disaster management that would convince then delegations in the Fourth Committee of assigning it a high enough priority so that it would receive the funds.

I also mention that I do not anticipate that it would go forward if it was to raise the total budget of the United Nations. That goes against the United Nations reform process. So by putting that text, it is suppose to emphasize that it would be within the ceiling that has already been approved by the General Assembly. That budget was approved last December so there would no expectation that it would be increased. And I cannot guarantee it, but at the same time, I believe if it does not go forward to that point, then we can guarantee that it would not proceed. So it is a question of whether the use of space technology to support disaster management is brought to a high enough level of priority by the member States, which are these member States plus others that are not part of the Committee.

Thank you Mr. Chairman.

The CHAIRMAN (*interpretation from French*): Thank you Mr. Camacho for the additional information you have provided us. I have a small question, probably a terminology issue. In the document which we have before us, we often see the word "entity" appear here, and from the sixth paragraph on, we see the word "platform". And I think perhaps we should think about aligning the terms for an entity, a platform, I do not(?) think actually the same thing. An entity, as seen by those who will read this document within the General Assembly, is an organization. However, what we are proposing is a programme. And later on we use the word "platform". I am not entirely sure that this is entirely understandable, at least for the people who read this in New York. And so, therefore, what I would suggest is that we perhaps polish up the terminology in the document to ensure cohesion. And if we use such a word as "platform", we will have to stipulate what we mean by this but a suggestion.

France. No, Venezuela had requested the floor first.

Ms. N. ORIHUELA (Venezuela) (*interpretation from Spanish*): Thank you Mr. Chairman. Concerning this issue, the delegation of

Venezuela believes that the concerns of the delegations which have been voiced here are fully warranted ones. However, I have thought about the following.

If we base ourselves on, well we might find ourselves without any financing if we base ourselves on management in the future and I do believe that it would be difficult to find a more important topic than the one which we have before us here, as far as the potential for applying space technologies is concerned. And as a function of what is being proposed here, or rather what is being proposed here, will determine the pertinence of the very existence of organization. If we can establish DMISCO, this can certainly have a great many positive spin-offs for all of us. And Austria(?) (Australia?) made a statement regarding this this morning.

There is a question which should be viewed at the political level and this is that we should spell out a number of priorities. We must be able to make a proposal to the General Assembly and our work will not end here in this room. Every State which is represented must also carry out a good deal of work within their country to ensure that this proposal be approved by the General Assembly. And I think that is the direction which we should move. This is why I think we should here establish our priorities and, for us, the priority which should be granted to the integrated management of risk is the most important thing which exists on the planet at this day.

The CHAIRMAN (*interpretation from French*): I thank the delegation of Venezuela for its statement.

And I will now give the floor to Nigeria. I apologize to the Algerian delegation. It is a slight communication problem between the Secretariat and myself, but it is my pleasure to now give you the floor.

Mr. A. OUSSEDIK (Algeria) (*interpretation from French*): Thank you Mr. Chairman. Of course, we accept your apologies. The reading of this document reflects the outstanding work which the Secretariat has carried out and the Algerian delegation thanks the Secretariat for this. Indeed, the legal issues which are raised here and which seem to be the focus of our debate, are important ones. It is important to organize all the main links and connections between the entity and the Office for Outer Space Affairs and so forth. But for us, the Algerian delegation, there is something which is even more important than this. What is even more important than this, is that this entity should be effective. It should be designed to be effective. And in yesterday's statement, we did state

that efficiency and effectiveness lies in the establishment of an entity which can project its action throughout the world and cover every region of the world. It can be built up from the top but, however, this space tool contribution to the prevention of natural disasters and management of natural disasters for the world is important and we wanted to see this entity project its action through a regional spread of its offices.

And in our statement yesterday, we said that in the first paragraph of Page 2 of the document, that, in my view, it is somewhat unclear. We refer here to regional structures, regional experts and so forth, but, according to my analysis of it, there is no clear expression here of the way in which this entity will be able to project its action throughout the world. There are a great many poor States which do not have the necessary tools to process this information and so what we have to do is that we have to have this entity's actions felt throughout the world, and this document seems to me excessively focused on legal issues, which, I hasten to add, are very important ones. However, to some extent, we should focus and dwell a little on practical, operational matters because the operational nature of the entity will determine its effectiveness.

This was my comment and I thank you Sir.

The CHAIRMAN (*interpretation from French*): I thank the delegate of Algeria for his statement. I think that this element should be taken into account in the drafting of the paragraph at the top of Page 2 and this should be fairly easy to do.

We will now follow this with the statement by France.

Mr. J. Y. TREBAOL (France) (*interpretation from French*): Thank you Mr. Chairman. I would like to very briefly make a statement because there are a number of concerns, financial and structural concerns which were raised here today and we had already referred to them in our statement two or three days ago.

As my colleague from Canada said this morning, we have never been as close to obtaining something which is so positive from our Committee and it would be a great pity if this project was not taken to a successful conclusion because this, will to some extent, reflect a lack of efficiency on behalf of this Committee. But there are problems. And I wanted to know whether the Office has a general idea as to what this programme would cost, taking into account existing proposed contributions. So, if my memory

does not fail me, we did, to some extent, have a costing of this in the month of February. There had been a number of proposals for contributions. Can we, at this point, by looking between what the initial cost is going to be and what the promised contributions are, how much money we are talking about? What would this really cost?

This was the first thing.

The second thing I would like to know, and this is because we referred to a possible failure at the Fourth Committee. If this were the case, do we have a Plan B? This is terminology which has already been adopted in many organizations. Do we have a Plan B in case there was a refusal in the Fourth Committee, as far as a redeployment of the budget is concerned for there is no question of an increase in the budget but it would rather be a redeployment, a re-allocation of the budget. So do we have a Plan B which would enable us to save these initiatives, initiatives which deserve to be saved, especially as voluntary contributions had already been proposed.

Thank you.

The CHAIRMAN (*interpretation from French*): I thank you Sir. The questions which you have put have been noted.

And if I am not mistaken, I think The Netherlands wanted the floor.

Mr. A. S. REIJNGOUD (The Netherlands): Thank you Mr. Chairman. I fully support the statement of the United States and France about the financial aspect. My two questions tomorrow were about this concern. Are we taking the risk that there will not be enough budget? And if so, is there what the French delegation called a Plan B? And I call it tomorrow, what are we going to do? What does it mean?

There is at least a delay of four months if the proposal will be rejected in New York.

Thank you.

The CHAIRMAN (*interpretation from French*): I thank The Netherlands.

And we have a request for the floor from the United States.

Mr. K. HODGKINS (United States of America): Thank you Mr. Chairman. I apologize for taking the floor once again but I do have some specific

questions concerning the finances and what the United Nations might be expected to contribute. But let me practice my question though with one observation, which is, I have the greatest respect of the Director of the Office for Outer Space Affairs and, as we all know, Sergio is very knowledgeable. But I hesitate to have to keep asking him questions and expecting the Director to guess what member States are thinking. Some of the questions that have been directed to the Director do relate to the process here within the United Nations. But I feel that there are some other questions that really need to be answered by the proponents of this project, that is the member States and by some members of the Ad Hoc Experts Group because I do not think it is fair for us to expect Mr. Camacho to be able to answer every single question. And there is only so much he can do. And as he has noted, he has said on several occasions, from the Office's perspective, this is what we think might work. That is nice to know but in the end, it is going to be what the member States think might work and those who are proponents of this proposal.

The questions that I have, if the Director has some answers to them, that is fine, but I do not consider that to be the final answer because some of these things he is only speculating and he is being put in, I think, a difficult position. So I am hoping that we could hear from some of the other countries that were involved in the study to explain a little bit more of what is happening.

Now, my specific question has to do with document L.285, which had been presented to the Scientific and Technical Subcommittee in February. And there was a section in there on mobilization of resources, paragraph 84. And in paragraph 84, the experts estimated that there would be an annual operational budget of approximately \$1.3 million which would cover personnel, a staff of 10, facilities, which would be operation and maintenance, and operational costs. So as of February, we were advised that it would probably cost \$1.3 million for this project on an annual basis.

And then in that study, or report, it went on to say that the United Nations contribution to DMISCO should be utilized to cover the cost of three staff members, two Professional and one General Service staff. So my question then is, do we envisage that the United Nations contribution to participation in DMISCO will be limited to three staff people? Which is considerably different than seeking a significant amount of funding as a new programme. So I think we have to reconcile these two ideas. That is, is the United Nations going to provide money or is the

United Nations going to provide staff or a combination thereof and how much of that \$1.3 million would we be expected to absorb? That is the United Nations.

Now my second question relates to Annex II of CRP.13. Now, Annex II is the proposed implementation framework, and here we have three offices and they are given specific tasks. But the Vienna office listed here is given the task of outreach activities and support capacity-building. And this is why I asked my earlier question. That is far different from what the recommendation has been which would be that the Committee agreed that the Office for Outer Space Affairs would be responsible for overall management and oversight of the proposed platform. And maybe I am reading this incorrectly. But in Annex II of CRP.13, we are asking Vienna, and I am assuming this is the Office for Outer Space Affairs, to perform outreach activities and support capacity-building. But in our recommendation, or in the proposed recommendation in the non-paper, we are asking the Office for Outer Space Affairs to perform overall management and oversight. I think that those are two different concepts.

Perhaps we can, during the course of today and tomorrow, reconcile exactly what it is we would be asking the Office for Outer Space Affairs to do and how this has changed from February where, I think, in the resources we have an estimate of how much it would cost per year and then what the United Nations contribution would be, which was, at least the initial proposal was going to be in the form of three staff members.

Thank you Mr. Chairman.

The CHAIRMAN (*interpretation from French*): I thank Mr. Hodgkins for his statement as well as the questions which you have put. They have been taken note of. We will answer all these questions somewhat later.

But before we do this, I will give the floor to the delegate of Colombia.

Mr. C. ARÉVALO YEPES (Colombia) (*interpretation from Spanish*): Thank you Mr. Chairman. I would like to start by conveying my gratitude to you for presenting the DMISCO non-paper, which we have before us. And I had a few questions which have been already voiced by the delegations and I will return to those which I consider to be the most important ones.

The first, if I have understood this correctly, this non-paper, would be reflected in the deliberations of the Committee. So what we would find are the general position or the general stand of the Commission. A number of elements here are still in brackets and there are elements which reflect the general ideas of the Commission and others of the Committee.

Concerning the strategy which we are to follow within the framework of the United Nations, there are two ways to look at the issue of financing. There is the issue of priorities within the Organizations. And there is also what can be received from the States, and this might be more important.

I am not familiar with the work which has been carried out by the Group of Experts, and I am sure the Group of Experts would be in a position to respond to many of the questions we have voiced here today. And if there is a possibility that we might not receive sufficient financing from the United Nations, how would we go about getting the contributions from the States? Would part of the contributions assist the Office for Outer Space Affairs for recruitment of personnel and would this be lasting contributions, sustainable ones? Would this be a general lasting financial commitment made by the States because we need to know we can do in the long term? And I would like to know whether these countries would be ready to cover any emergency needs the Secretariat might have for staff, equipment and so forth? That, in essence, is my first question.

Concerning now the budgetary aspects. If we believe that we will be successful here, we have to know what we are going to propose. We need a concrete proposal. Of course, we will run the risk of having this rejected by the Fourth Committee but it is important to show that there is political commitment here regarding the need to create what is an entity, and I hesitate to use this term, I think it is a programme. And I think that the Advisory Board is perhaps not the right thing we should use, perhaps an Advisory Group. There is a model in Vienna which is an interesting one. It is the Advisory Group on the Nuclear Test Ban Treaty. We could examine this model, the CTBO. It would not be an office, it is something which is related to the existence of an entity. This is also something we want to avoid. It seems to me that in this document we have nothing regarding the way in which we are going to present this to the General Assembly, something we should and perhaps present a resolution which would be independent from the omnibus resolution. There is something positive here.

In the next session of the Scientific and Technical Subcommittee, we want this to be examined again. What is reflected in this document is that we would not be dealing with this immediately but we would be awaiting until the Scientific and Technical Subcommittee would have time to study the results of the discussions.

In that event then, I do not think that it would be the appropriate time, given the paragraph, the backside of this proposal, to ask the Office for Outer Space Affairs to communicate with member States and specialized agencies of the United Nations, and non-governmental organizations, to allow for the appointment of experts. I think that that would be premature at this time. I think we should first have the results of the Scientific and Technical Subcommittee's deliberations on this. I do not if that would be in a document and I would ask Dr. Camacho, is that the meaning of this or would it be the Expert Group that would be preparing the document. But I think for the time being, appointing experts would be rather complicated. First, we have to know how to structure the proposal and then we need to think, have the experts think amongst themselves, what kind of geographical representation they would have and who would they be and so.

So those are some observations, Mr. Chairman, and once again I thank the Secretariat for the document.

The CHAIRMAN (*interpretation from French*): Thank you to the Ambassador of Colombia.

We have several other delegations that wish to take the floor.

Austria has the floor.

Ms. U. BUTSCHEK (Austria): Thank you Mr. Chairman. Since Austria was one of the countries that has put a concrete proposal on the table, I guess we are the ones that were meant by the distinguished delegate from the United States when asked about how this came about, what kind of text came about we have on the table, and I would be happy to help to shed some light on the genesis of the text, although I think Mr. Camacho has very competently already tried to explain what the thinking was. But nevertheless, let me try to share with the Committee of how we see how the process came about.

The study came up with the figure of \$1.3 million that would be needed to set DMISCO in activity, so to say. At that point, we were still talking

about 'O' (?) DMISCO as for Organization. Countries were then invited to make commitments and Austria was one of those countries who considered the activities such very important and also having certain competences here and also being one of the United Nations headquarters. We figures, OK, we would be happy to contribute and try to see mobilized various sources and funds and try to put the proposal together which we hoped would be helpful. We still hope actually it would be helpful.

Unfortunately, of course, none of us can look in the future to the extent that we would able to give guarantees for the next couple of decades in terms of how we could contribute but I do not think that is realistic. None of us could do that. I do not think there is any government in the world that could make commitments for a longer number of years than maybe a few. All I can say is if you look in the past, we have tried to support the United Nations activities to the extent possible. I think all together we have been fairly successful and we have considerably contributed to various activities we considered important so I would not be over-pessimistic that Austrian support would diminish considerably if we looked to the future without being able to give guarantees at this point obviously.

Similar offers have come from other countries and unfortunately none of these offers were big enough to say, OK, this is where we can host DMISCO, let us go and get it done. So the issue really was that kept us going for the last 10 days almost, I guess, was how to see how could we get the whole activity started without losing any dollars that were offered and making sure that as many as possible are on board, making sure that initiatives as broad as possible to capture all the needs that are on the table and, nevertheless, secure all the funds that are offered. That was really the essence of the challenge.

We are also aware of certain political realities in terms of United Nations reform and overall, say, directions we are going with regard to multiplying institutions, duplication efforts and so on and so forth. So creating bigger organizations outside new larger entities and so on would have been a problem for many delegations to support. Therefore, we said, OK, let us try to come up with a minimum structure possible that would maybe nevertheless be able to carry the functions that are outlined in the work plan. And that is how this whole idea about the programme within the office came about.

To address the question of what the role of the Vienna office would be, maybe it was not entirely clear

how it was phrased. On the one hand, sorry if I may just recap, the various venues that were on the table for the DMISCO were also considered as having certain strengths and different expertises maybe. And so this part that had to do with inter-governmental processes and internal oversight and that type of activity was considered a strength of the Vienna office, or the Office for Outer Space Affairs rather, because there is the process that is already within the United Nations and that is done already for this Space Affairs here. So for that reason, that was something that was considered useful to have in Vienna. And all the other activities in the work plan, it was, I think, nine areas the experts actually had defined, were looked at with regard to which office would have the lead in the activities. This was not meant at all in the way that other locations could not do these kind of activities, talking about awareness-raising, capacity-building, I would not want to list them all now, but since those were the ones that were discussed with regard to Vienna, let us put it that way.

In Vienna, we have certain expertise with those two activities that were mentioned in, I believe it is Annex II now, capacity-building and outreach activities. On the one hand, the Office is already experienced in those things. We have a large expertise in outside institutions and universities and so on that would be able to cooperate closely and some of the funds that we had proposed would be used to get these actors together. So for that reason, we came to the conclusion that it would be a good proposal if, for instance, the Vienna Office would take the lead in those two functions. We also realized that other functions would be better placed in other places, concretely speaking of Beijing and Bonn, and, therefore, we had no problem whatsoever to see those located there. The idea really was to bring the best capacities together, to make most use of the funds and make actually the structure as small as possible.

I am not sure whether these explanations, I am sorry if they took some time but it at least helps to clarify how all these paragraphs came about, but nevertheless I tried to do my best at least.

Thank you Mr. Chairman.

The CHAIRMAN (*interpretation from French*): Thank you to the distinguished representative of Austria.

I now give the floor to the delegate of India. The distinguished delegate of India, Mr. Suresh.

Mr. B. N. SURESH (India): Thank you Mr. Chairman. First of all, we achieved the efforts of results of the DMISCO non-paper. I think two or three major issues we have been debating since the morning. One is the role and function. The second is the budgetary aspects.

I would like to add here that if you compare what we discussed in February and what has come out based on the commitments and proposals. The important thing is that it is basically an essentially open network of providers of support. You know that is how it has come. It is not just any one single agency and definitely it is not right to say entity, I agree with you, that it is a platform or a programme. And what is important is the commitment that you have received very clearly stipulates support in terms of space, the experts, personnel and finance. And is this possible to provide a network and, in fact, this _____(?) the overall budgetary requirement, what _____(?) in February, because, for the simple reason that you have different nodes of the network available. If you really look at the _____(?) the proposal has come from Austria, Bonn, China. I am sure they are going to take a big share of the burden that is required in establishing this particular platform.

So what is more important here is, I do not think it is important to _____(?) management. I think what is more important when you have an open network is the one on coordination, how effectively you do.

Let us take a scenario, let us say something happens somewhere. They must know immediately to whom to contact without losing much time, who in turn will say these are the agencies that we need to our help them to get it so that the information required flows in. So in the light of that, there are two things. One is the pressing need and secondly the commitments we have. And I do not think the budgetary aspects what we have been discussing which requires political commitment, we will go any further by spending any amount of time in this forum. This particularly has to be taken up by the appropriate agencies, appropriate forums. I think we need to set up go ahead and then present it to the General Assembly saying that there is a need, there is a commitment and we do not want to really leave it blank(?). We must utilize the standard you have come up with the platform and there is an agency, maybe it is worthwhile to say that the response and for _____(?) on coordination rather than the management _____ (not clear) right word. I think coordination could be the right word.

And then this is the network. We would like to get it started so that, and whatever other implications, I think we will have a dialogue with the concerned political, each of the nations, and they must come to the General Assembly and support it. And I am sure that on such an important issue, every country, I am sure at one time or another they are facing this problem. There is a certain political commitment. I do not see any reason why there cannot be any political commitment. It is important that this kind of plan(?), based on the enormous amount of efforts which have gone which I am repeating. We made a proposal. I think I agree with the distinguished representative of Austria that we have, when defining _____ (*not clear*) very sound but it clearly defines as an open network. There is support from various agencies in terms of space, in terms of whatever, and we have a structure and we said, let us get it started and coordination and define how it has to be done. This definitely requires some fine tuning as the time goes but let us go ahead and make the proposal and see how it proceeds.

So this is our contribution to this forum.

Thank you very much Mr. Chairman.

The CHAIRMAN (*interpretation from French*): Thank you Dr. Suresh, distinguished delegate of India.

And we will now continue with Canada.

Mr. T. OUATTARA (Canada): Thank you Mr. Chairman.

(*Continued in French*) Mr. Chairman, once again Canada wishes to take the floor on the subject of the platform or the proposal or reform, however you want to call it. We just would like to take a few minutes to say what we think about this since we have been involved in this since the very beginning.

It is clear for Canada that we are going around in circles. Some issues have been raised this afternoon that were already raised two years ago, and at this stage of the game, we cannot go into detail and the technicalities of the finances and to the technicalities of human resources. Asking questions about a country's involvement or asking countries to respond is a little bit of putting the cart before the horse because we are asking them. I do not think it is the right time to take that approach.

What is important for us is that for four years documents have been produced. Successively, we

have had a number of documents issued and I would like to refer my colleagues to all of these other documents, and if they look at them, they will see some of the responses to their questions.

Now, as far as we, Canada, is concerned, we think that the time is ripe for a political commitment, as the distinguished delegate of Austria said or Dr. Suresh of India, we have the political commitment, we have the political support. All of these issues that were raised this afternoon, if you look closely at them, in 10 years we will not even have answers to those questions, if we continue along these lines. Should we continue asking these questions? Initiatives arise after DMISCO and then they will mature and then they are being implemented after DMISCO and in the same field as DMISCO. And yet today, Canada does not want to take a stance on this side or the other.

We call for the understanding and tolerance of each and every one to say that disasters are not waiting for our unending discussions. People are suffering. In the very little experience we have in this area shows us that when African countries are hit by disasters or calamity, they do not even know who to go to. As a space agency, on a daily basis, we receive requests which we can only deal with two or three weeks afterwards and we are forced to play the role, or part of the role, that DMISCO should play to seek partners and to solve problems. We do not think we are the United Nations, we are the space agency of a given country and we have our limits.

Mr. Chairman, once again, we would like to highlight at this time that on the second page, paragraph 3 of this document, we are very comfortable with this and we would like to highlight how comfortable we are. We believe that if this proposal, the content or the substance is accepted, that we could then move on to the next stage. And that would provide for some movement, some evolution.

Let us come back in February and June and discuss DMISCO every time. I mean, after all, there is a process. Do we want to continue with DMISCO or not? If we do, then we need to take responsibility and stop hiding behind questions which are just technical issues.

So you see, the Canadian statement is a statement of pleading. We have spent three years in this Committee. We know what we have invested in this and we know what we are prepared to do in terms of making an effort is something here. If we are going to be serious, we cannot keep going around in circles. Now, we are at the end of the tunnel here and we just

have a few metres ahead of us to get to the exit. And, once again, we appeal to mutual understanding to find a way for this entity, and we can call it what we want, to be created so that we can make a contribution to the international community's efforts to deal with disasters.

The CHAIRMAN (*interpretation from French*): Thank you for your statement on behalf of the Canadian delegation.

And I now give the floor to Nigeria.

Mr. A. A. ABIODUN (Nigeria): Thank you very much Mr. Chairman. I just want to lend the voice of Nigeria to the views that have been conveyed to this house on DMISCO.

And basically my statement is one of appeal. The Office for Outer Space Affairs is experienced in managing the International Charter on Disaster. Therefore, it approaches the operation of DMISCO with some capability. The global community is familiar with the COSPAS-SARSAT programme and how many lives have been saved. All of us know the merits of DMISCO. The overwhelming concern of the global community today is that no week, no single week goes by without a major disaster taking place and in the past few years we have had the worst of them. Are these not convincing enough that DMISCO should take off?

And then I go to the non-paper before us and I look at paragraph 3 of that paper and I look at paragraph 4, excuse me Mr. Chairman and distinguished delegates, I look at paragraph 4, second sentence. It states, and I read, "the activities would be planned and carried out in a coordinated manner, initially building upon the commitments made by Austria, China and Germany." In my own early days in New York, there used to be a company on Wall Street called E. F. Hutton, and the statement used to be "when E. F. Hutton talks, everybody listens". I would like to believe that when Austria and Germany and China put their name and their flag and their country behind the programme, that should mean something to this Committee. That is my personal opinion and I think I speak for my country as well.

Therefore, we have to think of the integrity of the countries that are making these offers. How much is the project we are asking the Office for Outer Space Affairs to manage DMISCO, \$1.3, even call it \$3 million. And really, what we all know that individual commitments of many of the governors in this room in support of a single disaster often exceed the expected

Office for Outer Space Affairs anticipated budget for DMISCO for 20 years. So why do we not allow Austria, Germany and China and others that are interested to work with the Office for Outer Space Affairs and put up a plan that will work for the international community? Disasters will continue to happen, whether you have approved DMISCO or not. But this should lie, you should always be thinking when you see those disasters on your television, if the United Nations had acted, maybe something better could have happened. Because in my own experience with this particular Committee, this is the first programme that is coming with the full support of members, almost an initiative of member States. Please let it take place. I appeal to you all.

Thank you.

The CHAIRMAN (*interpretation from French*): I would like to thank Mr. Abiodun, the distinguished delegate of Nigeria.

So we have collected comments and questions from several delegations now and some of them are even pleading for this project to move forward and for the text in that direction to be included in the report of the Committee that will be discussed tomorrow.

I think then at this time the best approach would be for the Secretariat to integrate the comments made as much as possible and that it clarify the text in terms of vocabulary and organization and so forth and that it reflect comments and questions made by delegations this afternoon. In that way, tomorrow we will have a draft report of the Committee and we will have a text that has been enhanced for those purposes.

Mr. Camacho, would you like to take the floor at this time to answer some of the specific questions that were posed by delegates?

Mr. S. CAMACHO-LARA (Director, Office for Outer Space Affairs): Thank you Mr. Chairman. Very briefly. We would, of course, update the text as you have proposed for tomorrow but I do not see too many new elements. There were some elements that I believe we can put because many of the comments were what should not be instead of what should be. So we will do the best that we can with that part of the text.

Let me just see if there is any information. I think as far as information, it would not be new. It would be expanding on some of the things that I have said before or it would be my views as to how this might work. I think at this moment, that I would not

add anything more if there are not any specific questions that the Committee would like me to address.

Thank you Mr. Chairman.

The CHAIRMAN (*interpretation from French*): Yes, Sir, Director of the Office for Outer Space Affairs. There was one issue that was noted by a number of delegates that is important and that is the role of the Office for Outer Space Affairs. And there, in updating the text for tomorrow, I think we might want to focus on the word, or the term used in the fourth paragraph, the term in the fourth paragraph and the beginning of the sixth “overall management and oversight”, those terms. These have specific implications and we have to look at whether we want to maintain or whether we want to improve the terminology choices to better reflect the role of the Office for Outer Space Affairs in this proposal.

I think there is a question from the observer of Switzerland. If no one objects, I would like to give him the floor.

Mr. P. PIFFARETTI (Switzerland) (*interpretation from French*): Thank you Mr. Chairman. We are coming to the end of this discussion and so I am taking the floor, if I may, to address an issue which is more detail rather than substance. I would ask, in paragraph 3, if it would be possible to give regional and international organizations the possibility of having access. And that was done, and I thank you for taking that into account.

However, my second issue is about the penultimate paragraph on the second page. The notion of member States, in the third line. Should we understand this to mean that this is for the purposes of designating experts for the Advisory Board or would this include member States and concerned observers? So could we add something after member States? That way, if we can include some reference to observers, we would include those that have already been involved quite concretely in the process, even if they are acting as observers.

Thank you Sir.

The CHAIRMAN (*interpretation from French*): Thank you the distinguished delegate of Switzerland. I think that it is fairly easy to take that suggestion into account in editing this text.

If we may then, I would like to propose that at this time we conclude the discussion on this subject. The Secretariat will prepare another draft of these

paragraphs, an enhanced version, and we will see that tomorrow in the report and, as much as possible, the Secretariat will endeavour to clarify it, especially with regard to the responsibility and the role of the Office for Outer Space Affairs, as far as the offices to be set up in Beijing and Bonn.

And further, there is the idea that I think was quite important to all member States in that this would be an open network, and in the open network, the regional poles should play an important role and that was also reflected in several delegations statements.

And, in passing, I just would like to say that we also want to address the issue of consistency in terminology choices so that it is clear or if there is a different terminology used that would be explained so that it is clear to the reader what is meant.

So we close the discussion on this item and I would like to thank the Office for Outer Space Affairs for their work in preparing this document. It was prepared in such a way that we were able to have a useful discussion about it today.

I would also like to thank delegations for taking the floor and for having asked questions, pointed questions, technical questions, or had they gone on further to eloquently plead for constructive action with regard to this item.

Other matters (agenda item 14)

We would now like to continue with item 14 of the agenda, Other Matters.

We will now move on to the issue of having a new item on the agenda of the Committee which was introduced by Brazil this morning. And on this item, we will look at what we have here and we have a request for the floor by Brazil on this item.

I give you the floor Sir. Brazil has the floor.

Mr. C. E. DA CUNHA OLIVEIRA (Brazil): Thank you Chairman. I believe that there might have been some misunderstanding. I do intend to take the floor again on this issue but not at the current juncture.

Thank you.

The CHAIRMAN (*interpretation from French*): Very well. Can I turn to the representative of Brazil and ask him whether he would like to make a statement later this afternoon or perhaps tomorrow morning?

Mr. C. E. DA CUNHA OLIVEIRA (Brazil): I would certainly speak under this agenda item again tomorrow morning and I might see how to work (*not clear*) this afternoon, depending on any possible interventions that could be made in that regard by other delegations.

Thank you.

The CHAIRMAN (*interpretation from French*): Very well. Thank you.

On this item, on these new agenda items, I had also noted a request from the floor by Nigeria.

Mr. J. O. AKINYEDE(?) (Nigeria): Thank you Mr. Chairman. The inability of many developing countries, including Nigeria, to plan well, as sustained their development is rooted in poor quality data collection, organization and management. About two decades ago, the International Labour Organization remarked during a conference that decision- and policy-making in many African countries, without quality geo-spatial data is like running through the forest in the dark without a torchlight.

Some years ago, the former Organization of African Unity, OAU, in its Lagos Plan of Action for the Economic Development of Africa, observed that the major problems facing Africa include the lack of reliable information and capacity to develop and manage their natural resources endowment and environment. Failure to recognize the indispensable roles and uses of accurate maps and geo-referenced data in their development process has always resulted in wrong decision-making, hunger, poverty, disease and even animals and human casualties.

It has become imperative, therefore, that reliable geo-spatial data, which is largely derived from space technology, should be recognized as part of a nation's strategic resource and infrastructure, just like a network of transportation, healthcare, education, telecommunications and water supply systems. In this connection, the Committee on Development Information, called the GEO, of the Economic Community of Africa, was established to promote the development of geo-information and the development of national geo-spatial infrastructure in Africa. Accordingly, it has become part of our collective efforts in Nigeria to advance and strengthen the mechanism for the efficient production, management, dissemination and use of geo-spatial information as part of our sustainable development efforts.

It is again the foregoing background that my delegation supports the new agenda item proposed by Brazil on international cooperation in building up national capacity to use the spatial data. The benefits of the development of national geo-spatial data infrastructures cannot be over-emphasized in terms of the availability of an access to standard, sufficient and reliable geo-spatial data for decision-making and rapid economic growth. If we first have collaboration among agencies or governments, would link it to regional and international activities. Access to reliable geo-spatial information would facilitate and promote greater transparency and accountability in government business and the enhancement of information communication and sustainable development.

Apart from these benefits, my delegation strongly believes that it will promote the use of space technology for geo-spatial data acquisition in Nigeria.

My delegation, therefore, believes that this agenda item will further enhance Nigeria's current activities in this field in terms of capacity-building and international cooperation. As Nigeria is a member of the Global Spatial Data Infrastructure, GSDI, yet we see this agenda item as a valued addition and a platform for more knowledge acquisition towards our sustainable development efforts.

Our delegation would also like to propose, for inclusion in the multi-year work plan, the holding of supporting workshops on geo-spatial data infrastructure development, best practices, focusing on the various components, including national geo-information policy, clearinghouse on meta-data issues, geo-spatial data standards, institutional legal framework, and in particular the valuable contribution of space technology to the acquisition of geo-spatial data sets.

Thank you Mr. Chairman.

The CHAIRMAN (*interpretation from French*): I thank the distinguished delegate of Nigeria for his statement.

And I give the floor to the distinguished delegate of Indonesia.

Mr. S. DAMANIK (Indonesia): Thank you Mr. Chairman. The Indonesian delegation, first of all, by the proposal submitted by the Brazilian delegation, be a very constructive proposal as it promotes the linkage between space technology and sustainable development. While thanking the Brazilian delegation for proposing this new agenda item, the Indonesian

delegation would like to express our concurrence with you, of the Chairman, of the term “geo-spatial” and the support of the Canadian view in this matter.

The term “geo-spatial data” means much more than what is defined by the delegation of Brazil. The ambiguity by _____ (*not clear*), as had been mentioned by the Canadian delegation, may create duplication to the work being carried out in other United Nations or forums.

For your information, Mr. Chairman, in Indonesia, the spatial data is not under the supervision of the space agency but _____ (?) by our Mapping Agency in the form of the National Spatial Data Infrastructure.

The space-based-derived data and information is part of the input into the above-mentioned infrastructure. Therefore, while commending the effort of the Brazilian delegation in developing the proposal, our delegation finds it necessary that further consideration be taken in this matter and that no decisions be taken in this meeting.

Thank you Mr. Chairman.

The CHAIRMAN (*interpretation from French*): I thank the distinguished representative of Indonesia for his comment.

Do we have any other requests for the floor?

Colombia.

Mr. C. ARÉVALO YEPES (Colombia) (*interpretation from Spanish*): Yes, thank you Mr. Chairman. I would like to convey my gratitude to the delegation of Brazil for having had the idea of presenting a new agenda item. Also I would like to congratulate them for the way in which they had presented it. I have been a witness to all the initiatives undertaken by the Brazilian delegations, whether they be consultations or others. All this is something I say because one of the concerns regarding the future activities of the Committee concerns the flexibility we show, as far as accepting new agenda items is concerned. And accepting new agenda items, of course, reflects the interest of States. Some States are more interested, others somewhat less. And in this case, we are a country which is especially interested in the use of such data. For other countries, it is not as important. And it is in this respect that this august assembly must find grounds of understanding and agreement between the points of the order of various delegations.

We believe that the development of national capacity can lead to significant, very positive spin-offs and the very variety of sources of space data is something which poses a great problem to developing States. We must identify a method which would enable us to use this data in the best possible way to ensure that we do not waste any resources, any funds on this. This is very important work. And this is why, Sir, I believe that establishing a link between international cooperation and national capacity-building is one of the fundamental decisions which the Committee should take.

This proposal is a programme of work, a plan of work, to which Nigeria's proposal should be added. And if we do provide practical courses, training, and if we look at the successes achieved over the years throughout the world, this is something which could complement this proposal and lead us to formulating an even more precise plan for 2007. This is why we back it and we believe that this proposal in no way runs counter to any of the activities we have here. No, this will facilitate access to space data and facilitate anything that can happen and take place in the economic field and the social fields.

The CHAIRMAN (*interpretation from French*): I thank Colombia for its statement.

I believe we had a request for the floor by Spain.

Mr. A. CRAGNOLINI (Spain) (*interpretation from Spanish*): Thank you Chairman. Concerning the Brazilian proposal regarding the addition of a new agenda item, the Spanish delegation believes that it would be good to use synergies and within the context of international cooperation, and to do this, to provide added momentum to international cooperation, the use of space data and to do this in line with ways to promote sustainable development.

A number of programmes developed to this end, in exclusively national terms, do not always provide for short- or medium-term results and very often, when abandon programmes, this is something which is fraught with a great many negative consequences. We could overcome this problem if we added an international dimension, an international aspect to these programmes, because in this way, these programmes will enjoy additional support which will guarantee their sustainability and ensure that they are successful.

The Spanish delegation believes that there are no incongruities between the national nature of programmes which have exclusively national objectives and international cooperation, on the other hand. This is a broader context and it places things in an international perspective. And we believe that by proposing this addition to our agenda, we are reflecting genuine needs of many States regarding their capacity on a technical level, socio-economic aspects, facilitating the improvement of quality of life and sustainable development as a whole.

And finally Sir, what we recommend is that we should take the very first steps to provide genuine meaning to this proposal, to have the experts determine what the favourable conditions present within the international environment are and determine what the main obstacles are and how we can overcome these obstacles.

The Spanish delegation spares no effort in participating in the work which will have to take place to ensure that concrete content is given to this initiative. And again, I would like to thank Brazil for this most interesting proposal.

The CHAIRMAN (*interpretation from French*): I thank the distinguished representative of Spain for his statement.

And I give the floor to Peru.

Ms. M.E.V. RIVAS PLATA (Peru) (*interpretation from Spanish*): Thank you Mr. Chairman. Peru would like to thank the Brazilian delegation for its proposal. For us, this is the right forum to examine this issue of the use of geo-spatial data and to facilitate their application. This information has very broad applications and we could promote their use in an integrated way, in a holistic way. This would enable us to carry out an exchange of experiences which would be very useful. This would build up our national capacities. And within our States, promote our integrated consideration of these issues.

Thank you.

The CHAIRMAN (*interpretation from French*): Thank you.

I see no other requests for the floor. Unless it be Canada and Brazil?

So Canada first.

Mr. T. OUATTARA (Canada) (*interpretation from French*): Thank you Sir. Again, we wish to reiterate our gratitude to Brazil for having had the courage and provide us with the opportunity to discuss such issues. This morning, the Canadian delegation expressed its point of view and worked in a very detailed way on it, as you noted this morning, Sir, at the semantic level.

The term "geo-spatial" gives rise to problems as far as its content is concerned and the Canadian statement was a three-pronged one. We should remove any ambiguity as far as definitions of terms is concerned, whether it be in English, French or Spanish. It is the same definition which is to refer to everything related to space, taking into account geographical location. In this respect, it is clear that this document is somewhat ambiguous. It gives rise to confusion.

Second point. This is a field which has already been addressed and dealt with in other fora. It is clear to us that, taking into account the experience we had in our debate on DMISCO over the last few years, especially last year, which was to ensure that there would be no overlap between what is planned here and what actually takes place elsewhere. We have always suggested that we reflect on things carefully before we include it in our agenda, for this item is one which might have already been debated in other spheres.

And thirdly, content. Geo-spatial, or SDI. This term, in itself, and we have said this quite clearly this morning, 10 per cent of this concerns space. And I would be pleased if other scientists which are familiar with this field, could make a statement regarding the content of this term. Imagery is only 10 per cent of what is required to provide information within the framework of mapping. The main axis of geo-spatial data infrastructure is the sharing of knowledge, the sharing of data and, therefore, it is based on databases.

Canada believes it must point this out as early as possible and we are proud to say that our contribution today is to contribute scientific matter to the diplomats present here today, diplomats who will decide on the ways and means to ensure that the international community be able to work in harmony for the needs of all mankind. So for us, until we are proven wrong, the document, as presented, at a semantic level, as well as at the level of accountant(?), is one which gives rise to a number of problems. We feel very uncomfortable and we have to be candid on this.

Thank you Sir.

The CHAIRMAN (*interpretation from French*): I thank the delegate of Canada for having reminded us of the Canadian position on this proposal.

And I now give the floor to Brazil.

Mr. C. E. DA CUNHA OLIVEIRA (Brazil) (*interpretation from Spanish*): Thank you Mr. Chairman. At the outset, I would like to, on behalf of my delegation, convey my gratitude for the support voiced by Nigeria, Colombia, Spain and Peru. I would also like to thank the Indonesian delegation. The questions voiced by these delegations enable my delegation to better understand what the elements of this proposal which can still be clarified and improved are.

And regarding the comments made by Indonesia on the statement made by Canada, I would like to clarify, again, that my delegation has no objection to improving, clarifying the thrust, the nature of the proposal. We are ready to modify it as necessary, amend it to reduce any ambiguities, as pointed out, ambiguities on the meaning "geo-spatial data".

And regarding Colombia's statement regarding a convergence of interest, I should like to underscore the following.

My delegation believes that is an issue on which both highly developed space powers and States which have an insufficient level of development in this field, all stand to benefit.

Something here was highlighted by Canada and my delegation agrees with this, to wit, both within the draft proposal and in the statement, this is not a new issue at an international level. This is an issue which already was the object of a proposal which has been studied at regional, bilateral levels, international levels and which are also considered within the framework of specific mechanisms devoted to the study of this field. However, the fact that a number of initiatives in this field already exist, and many of these initiatives are perhaps not well-known. It means that it might be more important, all the more important, to provide additional information regarding these initiatives and submit them to the Committee for consideration. In that way, we could share experiences and we could better coordinate efforts underway for these different institutions. And in that manner, we could, as I said, exchange and share information, disseminate information, and delegates would then be

able to take advantage of it, delegates on this Committee, it would be for their benefit.

With your permission, Mr. Chairman, I would like to once again refer to paragraph 32 of the working document, A/AC.105/265. I am in the English version so I will read in English. But I would like to call your attention to the first part of paragraph 32 where it says "one central element ...

(*Continued in English*) ... of the work of the Committee is to further increase coherence and synergy".

(*Continued in Spanish*) I just would like to highlight the words "coherence" and "synergy" here.

(*Continued in English*) ... "the entities of the United Nations system and international space-related entities in using space science and technology in their applications as to enhance(?) human development and increase overall capacity development."

(*Continued in Spanish*) This delegations think that that would exactly reflect the purpose that I just explained in terms of Brazil's proposal. But I was also speaking of a convergence of interests. And another item that I would like to highlight at this time, and this is one where we would see convergence well reflected. It has to do with the conditions of creating a true international market for the use of space data and for the promotion of application development for space.

Brazil's experience, and I just would like to point to it at this time, Brazil's experience is that in developing nations there is a significant market for space data and space applications. But the market is, in most developing countries, largely unexplored due to the lack of capacity to be able to use these technologies.

I think, Mr. Chairman, that in that event, it is a subject that would be of interest, both to developed and developing nations. Developing nations would, no doubt, would benefit from this capacity-building in order to meet the goals at a national level that they have set for themselves for sustainable development and for integrated development. Developed countries who have space capacity would, of course, find an opportunity to develop, truly develop, and truly foster international demand for services and data which have already been of benefit and proven useful.

Mr. Chairman, my delegation continues to be prepared to address this issue and discuss it with other

delegations and we would welcome any contributions other delegations might wish to make to this proposal.

Thank you very much Sir.

The CHAIRMAN (*interpretation from French*): Thank you to the distinguished delegate of Brazil for that statement.

We are spending a great deal of time on this item of the agenda and I am a little bit worried about our schedule for this afternoon and keeping to schedule. We still have two requests for the floor, that is Colombia, the United States and I also think South Africa has also requested the floor. And I would like to ask all three of you if you could be brief please. I will give you each two minutes and then we will stop the discussion on this item because otherwise we will never get to the end of our schedule. I just would like to remind you that we have two more technical presentations to hear this afternoon.

Mr. Hodgkins, you have the floor for the United States.

Mr. K. HODGKINS (United States of America): Thank you Mr. Chairman. I fully appreciate the need to be brief and I will. I would like to take a different approach concerning this proposal put forward by Brazil. My delegation fully supports the proposal. We think it is a sensible one and we are quite anxious to begin work on the proposal. And I say this because I am very fortunate in that I have a person on my staff who is an expert in geographic information systems and he, in fact, has helped me review this proposal and believes that it would quite useful.

In addition to that, I would like to point out that we have two documents in front of us, A/AC.105/872 and Conference Room Paper 16. And Conference Room Paper 16 deals with a note by the Secretariat on the inclusion of the issue of space technology and the report submitted by the Secretary-General, and document A/72 concerns the contribution of COPUOS to the work of the Commission on Sustainable Development.

Now, in regards to the Conference Room Paper 16, on Page 5, paragraphs 132 to 133, deals specifically with the question of supporting countries, particularly developing countries in their efforts to, and among other things, use satellite for mapping and geographic information systems.

I note these two papers because we have been making an effort in the Committee to look at how we

can make a contribution to the other global conferences, such as the World Summit on Sustainable Development, and the World Summit on the Information System. How can we contribute to those objectives coming from those conferences? And I think one of the major areas that we could make a contribution is in this whole area of geo-spatial information systems or geographic information systems, whatever the terminology is.

So we look at this proposal from Brazil as contributing directly to our efforts to make the work of the Committee more, or of interest to other efforts within the United Nations system, particularly if they relate to sustainable development.

Thank you Mr. Chairman.

The CHAIRMAN (*interpretation from French*): Thank you to the distinguished delegate of the United States for his statement and for the connection that he established between the documents and session 16. It is true, we have not talked about that very much.

I now give the floor to the distinguished representative of Colombia.

Mr. C. ARÉVALO YEPES (Colombia) (*interpretation from Spanish*): Thank you Sir. I apologize. I did not intend to take the floor for a second time, first of all, because I have already expressed my delegation's support for Brazil for this. But what Canada said did cause me to want to say a few things, observe some things.

When he said that he has terminology and semantic issues with this, I would just like to point out that nobody here is an expert in terminology. I just would like to ask you to look at ____16 (CRP.16?), which looks at the use of terminology with regard to space applications in the Secretary-General's report and the Summits, the Summit of 2005, Page 4, you will see the WISS, World Conference on Disaster Reduction, World Summit on Sustainable Development and so on. So there can be no ambiguity in a proposal which is clear in its _____ (*not clear*) and we can see where we are going. You could say the same things about terms such as "friends of the Chair". It is a fairly ambiguous expression and you may wonder why I am relating that and you might realize afterwards. But in this circumstance, Mr. Chairman, I do not think we can make observations that go against a proposal which is well-founded.

And so I would like to join with the United States and Spain said it has a very clear *raison d'être* and it is certainly very well worthwhile for developing countries. Perhaps Canada does not need it so much but other member States do.

Thank you.

The CHAIRMAN (*interpretation from French*): Thank you to the representative of Colombia.

I now give the floor to South Africa who would like to take the floor on this item and that will be the last statement on this item for today. Thank you.

Mr. P. MARTINEZ (South Africa): Thank you Mr. Chairman. I shall be brief. Mr. Chairman, the delegation of South Africa wishes to thank the delegation of Brazil for their very interesting proposal to introduce this new agenda item. We support the introduction of this agenda item and believe that consideration of the issue by the Committee will be a valuable contribution for its improved use of space derived geo-spatial information for sustainable development, particularly for developing nations.

We believe that the observations made by the delegation of Canada are helpful and could help to sharpen the proposal and to improve its focus.

Mr. Chairman, the use of space-derived geo-spatial data for sustainable development is of great interest to my country. Our delegation is thus prepared to work with the delegation of Brazil and other interested delegations to further develop this proposal.

Thank you.

The CHAIRMAN (*interpretation from French*): Thank you to the distinguished delegate of South Africa for his statement.

I propose that we conclude on this item as follows and, of course, I seek your agreement in this manner of concluding our discussion at this time.

I retain from most of the statements on this that, first, many countries support the Brazilian proposal. Secondly, those that had some reservations about the proposal basically indicated that there was a little bit of ambiguity in the term, which I think is fairly easy to resolve. Indeed, our colleague from South Africa did it in his statement because he introduced the expression "space-derived geo-information". So the ambiguity would disappear if we adopt that term.

And the second reservation that was expressed by some, seems to have to do with the fact that in many organizations, especially non-governmental organizations and their role.

And I retain from the statement of the distinguished representative of Brazil that in the spirit of this proposal, at least, put forth to the Committee, there would be a complement here to what is being done in other international bodies. And that what would be done in the plan of action, the work plan that he, himself, introduced, was to indicate and specify the activities proposed. So I would suggest the following.

The Brazilian proposal is accepted with specifics to be made more precise, as indicated, the term with regard to space-based information, and I would like to call the interpreters' attention to the fact that the word "space" is used in the same expression with two different meanings, space and outer space and three-dimensional space, which, of course, complicates matters for interpretation.

And secondly, I would like to indicate that the work plan proposed is quite well-founded, based on becoming specifically and concretely aware with what is already being done internationally on this subject by various countries and by various international organizations.

And then, once the Committee has that information, it can introduce this to the agenda, or approve the introduction of it to the agenda.

So I am asking if the group can approve my conclusion.

I give the floor to Canada.

Mr. T. OUATTARA (Canada) (*interpretation from French*): Thank you Mr. Chairman. Once again, we are very pleased with the Chair's proposal and, once again, we would be even happier to see a revision of this document so that we can be honest with ourselves and sincere with ourselves and go along in the direction that you are proposing.

The CHAIRMAN (*interpretation from French*): Thank you to the distinguished delegate of Canada for that statement, a very positive statement indeed. It is about improving, enhancing the Brazilian proposal so that all ambiguities might disappear and the purpose should be clearly understood by all.

And with that additional information, I believe that we can now close the discussion on this topic and consider that the agreement of the Committee has been obtained in order to consider introducing this item to the agenda.

I now move on to the next item of our agenda.

And now, if you would be so kind as to go along with this, I would like to propose that we discuss the composition of the Bureaux for 2007-2009 and I would now invite the distinguished representative of India that is presiding over the Asian Group to give the Committee some information with regard to his region's candidature for the First Vice-Chair of the Bureaux for that period.

You have the floor Sir.

Mr. B. N. SURESH (India): Thank you Mr. Chairman. I held discussions with the Ambassador, who is the Chairman of the Asian Group, and he informed me to state here that they are yet to meet of this proposed meeting and they would like you to have it as soon as possible and once it happens, they will inform this Committee about the selection.

Thank you Mr. Chairman.

The CHAIRMAN (*interpretation from French*): Thank you Dr. Suresh for that information. If I might, I just would like to insist that the meeting needs to take place as soon as possible so that the Group of Asian States can communicate who their candidate would be to the Secretariat as soon as possible please.

And distinguished delegates, I would now like to turn to the issue of the Secretary-General's report on including space techniques and applications in the report that he is submitting to the United Nations Conference looking at social, economic and cultural issues and related issues, as well as other commitments undertaken in this regard.

I want to make sure that everyone understands that the document in question is document 16, distributed this morning. If you wish to make a comment, and I would also like to indicate that the distinguished United States representative referred to that document as well earlier.

If there are no comments, then that means that the Committee can convey these information to the Secretary-General for his report.

I see no objections.

It so decided.

Now, distinguished delegates, I would like to resume the discussion on the future activities of the Committee. And anyone who wishes to make an observation on document A/AC.105/L.265, which is the Secretariat's Working Paper on this issue and on the means of developing a long-term plan for international cooperation.

Now this is a subject that we started discussing this morning and I would like to ask delegations if they have other statements to make on the subject of the future role and activities of the Committee.

I see a request for the floor from the United States.

Mr. K. HODGKINS (United States of America): Thank you Mr. Chairman. Mr. Chairman, my delegation would just like to make a couple of points for the Committee to bear in mind and we would like to see this reflected in the report under this agenda item.

It seems to my delegation that in any discussion of the future activities of the Committee, we have to bear in mind several documents. And the first one, of course, is the results of UNISPACE III, in that report. And the second document would be our report to the General Assembly of, I think, 2004 on the progress made in implementing the recommendations of UNISPACE III.

My delegation points this out because, before we start moving on to new issues, we should take a full accounting of have we fulfilled the mandates given to us by UNISPACE III? And I think that any stock-taking, if you will, of our work needs to begin from that basic premise.

And the second document that I would like to refer delegations to is CRP.16, because I think the second general area that we should be looking to for guidance or ideas for future work would be the results of the major summits and conferences undertaken by the United Nations where space technology is specifically addressed.

I think that those two points are very important to bear in mind because if we do not take those into account, then we really are doing a disservice to the United Nations system because the

United Nations has already spoken, quite clearly, at UNISPACE III and then in the subsequent summits. They have spoken quite clearly on how space can play a role in the work of the United Nations.

So I think as we go through this and we do not have to make decisions this year but as we consider this in the future, those should be the points of departure, if you will, concerning our future work.

Thank you Mr. Chairman.

The CHAIRMAN (*interpretation from French*): Thank you Mr. Hodgkins for that statement on behalf of the United States and thank you, too, for reminding us that indeed we have some reference documents available to us that we should bear in mind, particularly the document sent to the General Assembly in 2004 on the headway made with regard to UNISPACE III recommendations.

Do we have any other requests for the floor?

On this item, I would propose that we take the following approach.

We have had a number of statements on this subject, most of them yesterday and today, and I would say that, for myself, as a new Chair of the Committee, I have a general concern and that is that during the work of our Committee in a year's time, how we have these items appear, those items where we need to make some progress. And, of course, the first thing to do, and here I entirely agree with what the United States delegate just said, what we need to do is, after the UNISPACE III Conference, we need to look at those areas where the Committee has made satisfactory progress. And we have seen a good example today with UNESCO's presentation which, indeed, is the result of a UNISPACE III recommendation and Action Team recommendation, and which areas have we seen less progress in. And in those areas, what can we do to move further along?

So that is the first thing. And I would have a tendency to prioritize that as well.

The second issue which, of course, is not directly related to UNISPACE III recommendations, is the broader topic of proper taking into account of space technology in everything to do with the future development of the planet, especially developing nations. This is a fairly broad subject which is fairly well covered by UNISPACE III recommendations but we might go even further than the UNISPACE III recommendations and this to include what was said in

the report sent to the Secretary-General, or the General Assembly in 2004.

Number three, another issue I think we should take into account is quite simply the fact that space activity is constantly evolving, and as one delegate reminded us this morning, the private sector's role is much greater than it was some time ago and, of course, when the Committee was founded. So that is the landscape, if you will, of space activity that we need to look at.

And then, of course, the other issue has to do with new initiatives undertaken in the area of space exploration. These are very interesting initiatives but, at the same time, as a Committee, which is very oriented towards international cooperation, these new initiatives lead us to wonder whether we can put forth new initiatives in order to promote international cooperation in this area, the area of space exploration.

So there is a whole spectrum of new ideas on the table, new subjects, and I would propose that, with a view to the Committee's work next year, I draw up a list or have the Secretariat to help me draw up a list of the issues that we will be looking at and then, of course, set forth a plan for future years as well.

And this might provide us with a means to put new issues on the table without having to go through working groups and subcommittees and other complex mechanisms which make it rather hard to take a decision. And then once we do take the decision, then we have to look at the definition of the terms of reference and the mandate and so on and it is a lengthy process.

So the methodology I am proposing is to simply have the Chair just draw up a list and propose some subjects. And then, of course, you are perfectly within your rights to toss some into the circular file. As we all know, the wastepaper basket is the most interesting part of, or piece of furniture in the modern office.

Would you be generally in agreement with that approach? It is a fairly pragmatic approach, I have to admit, but it would help us to make some progress without running into institutional obstacles in trying to make some headway here. I say that knowing, of course, that I would be working very closely with the Director of the Office for Outer Space Affairs.

Distinguished delegate of Colombia, you have the floor.

Mr. C. ARÉVALO YEPES (Colombia) (*interpretation from Spanish*): Mr. Chairman, I just wanted to say that the delegation of Colombia finds the Chair's proposal entirely in keeping with how we had put forth an initiative at some point. The "friends of the Chair" or whatever those ambiguous terms are difficult to help us define the mandate but the fact that you do it does not mean that it should be a burden for you either. So any system you would like to set up in order to request help from delegations would be most welcome Sir.

The CHAIRMAN (*interpretation from French*): I would like to thank the distinguished delegate of Colombia for his statement and for his suggestion. It is quite clear that in carrying out this exercise, I will base myself on suggestions brought to me by the delegations and I call on all of you here to feed me ideas. This will facilitate my process. I am in favour of an interactive process between the Committee and the delegations, as well, of course, as between the delegations. And this should enable us to address new issues without forgetting that we also have to deal in a fundamental way with issues which have been identified as priority issues within the framework of UNISPACE III. They remain on the table before us. They certainly should not be forgotten in this process.

I propose that we should leave this here and move on to the two technical presentations.

Mr. Hedman(?) reminds me that the Russian Federation had requested the floor on another item under item 14.

The Russian Federation, you do have the floor.

Mr. D. V. GONCHAR (Russian Federation) (*interpretation from Russian*): Thank you Chairman. I will be very brief. Two or three minutes, I assure you.

As we have already previously stated, in 2007 we will mark a number of memorable dates in the history of space exploration, the fiftieth anniversary of the launch of the first artificial satellite. In this respect, the Russian Federation intends to organize a set of events dedicated to celebrating these jubilees. It includes holding official events, with the participation of the Government of the Russian Federation, of eminent Russian cosmonauts, space sector veterans and so forth. It will also organize exhibitions, scientific and practical conferences, symposia, the release of documentaries, TV and radio programmes.

The main objective of all these events is to promote space knowledge, enhance the interest in space studies amongst the broader population, first and foremost, of course, amongst students and youth.

The Russian Federation intends to organize a special exhibition in the foyer of the VIC, dedicated to commemorating these dates.

We also intend to organize a Roundtable at the International Astronautical Congress in India in 2007.

Russia intends to organize a set of scientific symposia and conferences, to which we would like to invite all interested experts from other countries.

The theme of these events is quite a broad one. It will include such issues as space medicine, space materials, satellite systems and so forth. The Russian plan of events has been forwarded to the Secretariat and a copy, in both Russian and English, with contact information on each of these events, can be found in the room on the table at the back where all the documents are usually found.

I thank you Sir.

The CHAIRMAN (*interpretation from French*): I thank the distinguished representative of the Russian Federation for the information he has shared with us, as well as for the document which takes the form of a table and summarizes the topics of the events to be organized in 2007 in the Russian Federation with contact information for each of these events. I thank you again.

I will now give the floor to Austria and we will conclude this item.

Ms. U. BUTSCHEK (Austria): Thank you Mr. Chairman. Very, very briefly. But what I think what I give you recently(?). I come up with this now. Also to the organization of things next year of this COPUOS meeting. We believe that the symposia we have had over the recent years on the space and archaeology and this year space and forestry have enjoyed very positive feedback and stimulated obviously good exchange. We would like to pick up on that and, therefore, my delegation would like to propose that space and water might be the topic of a symposium to be held next year because then we will build on the exchange we had in this Committee on this topic. A lot of delegations have mentioned that it was a very important and crucial issue for mankind and, therefore, we would propose that maybe in the margins

of COPUOS this could be discussed in the form of a symposium. We could overview the global situation. We could summarize the technical possibilities, provide advice space technology for water management. We could discuss the legal aspects of what international water resources. We could present international water projects and the objectives and results. And we could also review international activities and awards which foster the application of space technology.

If it so desired, we could also envisage another image gallery to the COPUOS event, just like the one that is currently presented on space and forestry.

Thank you Mr. Chairman.

The CHAIRMAN (*interpretation from French*): I thank the distinguished delegate of Austria for her suggestion which is in line with the events which take place on the margin of the Committee of the Whole each year. I would like to see with the Secretariat how we could organize this, included in the schedule of the Committee, for I would like to introduce into the Committee's programme of work, a panel session on space exploration and international collaboration which means that we will have to reserve four hours to accommodate the Symposium on Space and Water, as you have suggested. And then a panel session on international collaboration.

We will see with the Secretariat how we can organize this.

More specifically, on the Austrian proposal, would any other delegations have comments to make?

If this is not the case, we can consider it to be approved.

I thank you all for this.

Technical presentations

I would now like to turn to the technical presentations.

I will give the floor to Mr. Tamotsu Igarashi, who will present to us "The Japanese Programme on Space and Water Applications".

You have the floor.

Mr. T. IGARASHI (Japan): So thank you Mr. Chairman and distinguished delegates. I would

like to present the Japanese Programmes on Space and Water Applications.

Water-related hazards/disasters may occur anywhere in the world. This shows the major meteorological disasters, heavy rain, flood, typhoon, hurricane, drought, heat wave, etc., observed within the coverage of TRMM, from 35 North to 35 South, during 1998 to 2005.

As the recent disasters, you may recall flash floods in North Thailand in May 2006 and the landslide in Leyte Island, Philippines, in February 2006. Observation from space plays a significant role for disaster management.

The upper left image is the flood disaster in Thailand and the upper right image is the landslide disaster in the Philippines, observed by ALOS/PALSAR. And the lower image is an example of flood monitoring of the Jau River Basin, Amazon, Brazil, observed by JERS-1/SAR.

ALOS, Advanced Land Observing Satellite, was launched on 24 January 2006 and the objectives of this satellite is cartography, regional observation, disaster monitoring and resource surveying. The operational phase will begin in October of this year.

Water cycle on the Earth is essential for the water-relevant issues such as local meteorological disasters, water resources and weather and global climate change. This shows the global water vapour transportation observed jointly by AMSR, GLI and Sea Winds. The satellites can describe the actual status and the process of the water cycle happening on a global scale.

TRMM is working for APRS to provide rainfall data measured by the first space-borne precipitation radar and other sensors, such as Hurricane Katrina in August 2005.

Near real-time, in three to six hours, browse images of tropical cyclones for the north-western Pacific region is available on the JAXA website. Additionally, a database of past tropical cyclones observed by TRMM and AMSR and AMSR-E are also available.

AMSR-E on AQUA(?) is providing essential valuables to describe water for four years since May 2002. The images shows the annual change of sea ice in the polar regions, which is a sensitive indicator of climate change.

As a future mission, GPM, Global Precipitation Mission, is led by space agencies involved in the world. JAXA is contributing to the mission providing dual-frequency precipitation radar on the core satellite. And one of the constellation satellites, which will be GCOM-W, to realize global observation in every three hours.

GCOM, Global Change Observation Mission, is another future mission of a long-term mission over 13 years following ADIOS(?) and others too. This system will be made of two satellite systems of GCOM-W and GCOM-C, where W and C stand for Water and Climate.

Applications from GCOM are expected to be improved to the level of operational observation systems based on application reserves explored and demonstrated by ongoing programmes. Actually the Japan Meteorological Agency started to use AMSR-E data for the meso-scale numerical weather prediction from November 2004 and for the global model from May 2006.

The oil moisture content has been explored as one of the leading products expected to contribute to water-relevant resources and disaster management.

Water-related satellite data as significant to contribute to scientific and social issues such as climate change assessment, improvement in weather forecasts, flood prediction, water resources management, etc. For example, CEOP, Coordinated Enhanced Observing Period, was initiated by GEWEX as an element of WCRP in the programme Convergence of Observations and Prediction Models and Interoperability of Data Management: Major Topics to be Explored.

GFAS, Global Flood Alert System, including IFNET, International Flood Network, to provide data to registered users, is explored by the leader of the Ministry of Land Infrastructure and Transport towards the GPM and GCOM era in 2010.

GFAS try(?) around on IFNET's website is already available (*not clear*). By this system, global and regional, daily and three-day precipitation maps with precipitation probability estimate are provided.

In March 2006, the International Centre for Water Hazard and Risk Management, called ICHARM, was founded by the Public Works Research Institute, PWRI, under the auspices of UNESCO. Research, training and the information network are the key to

support system development and flood risk management analysis of various regions and countries.

This is the concept of PWRI, ICHARM's Cooperative Research on the application to worldwide flood disaster mitigation.

This is an announcement. A Capacity-Building Workshop in Asia, organized by IGWCO, one of the IGOS themes of water, and JAXA, with the support of AIT, will be held from 26 to 28 September 2006, in Bangkok, Thailand. Cooperation of WCRP-GEWEX, WMO, UNESCO, United Nations ESCAP, ICHARM and PWRI are to be requested. The Workshop is endorsed in the GEO Work Plan in 2006 and it will follow the Workshop in 2005 held in Buenos Aires.

Conclusions. Satellite observation is extremely effective to water and disaster information. They are also significant for science to contribute to weather and climate issues. End-to-end systems linking providers and users are the most rated and explored towards the future systems.

Thank you Mr. Chairman.

The CHAIRMAN (*interpretation from French*): I thank Mr. Igarashi of Japan for his presentation. It was a very exhaustive one on the Japanese Programme on Space and Water Applications. It was quite impressive. It is bold.

I will now give the floor to Mr. Radhakrishnan of India on "The Use of Space Based Systems for Water Resources Management in India".

You have the floor.

Mr. K. RADHAKRISHNAN (India): Thank you Mr. Chairman, distinguished delegates and observers, the Director and officers of the Office for Outer Space Affairs, let me express my profound gratitude for this opportunity to give a presentation on the use of space-based systems for water resources management in India, which essentially is update of what has been presented by my delegation in the previous years.

Mr. Chairman, let me re-state here what has been told by my delegation every year that the Indian Space Programme from the inception had a vision that we must be second to none in the applications of advanced technologies to the real problems of man and society, stated by our founding father, Dr. Vikram Sarabhi(?) in 1963. This vision has been shared and

sustained by and realized and this has further been enhanced.

The drivers for space-based remote sensing applications in India I shall now get into on the communications programme we had the presentation in fore noon(?) by my colleague, Dr. Suresh.

On remote sensing applications, the first and foremost _____(?) disaster management support, in-probe weather prediction, competition(?) to water security, several facets of it, food security, energy security, environment security, smart governance and sustainable development.

I shall dwell on the issues related to water resources management and the national imperatives. Essentially, there is two per cent of the world's geographical area, four per cent of water resources and 17 per cent of the world's population. And we have poor predictability of our monsoons. And the rainfall, of course, it is 4,000 billion cubic metres but only 12 per cent is presently being utilized. And the per capital availability has gone down to the level of 1,700 cubic metres now and it is a water stress condition. Predominantly rain-fed agriculture. However, 57 per cent of the land is degraded, the irrigation efficiency is 35 per cent, we would like to bring it to 50 per cent, at least. And there is over-exploitation of ground water in several areas.

These are the problems which guide us on the agenda on water resources management.

We have a constellation of state-of-the-art Earth observation satellites, both from the geo-synchronous(?) orbit INSAT(?) series, as well as the IRS series from polar orbit. The capability for imaging from one kilometre to one metre, we are providing repetitivity for 22 days to every 30 minutes. They are receiving data not only in India but several Ground Stations above and this enables us to map on 1:1 million scale to even Cadastral level.

And this space infrastructure is supported by airborne infrastructure, the Airborne _____ (not clear), the low-sat(?) terrain mapping system and digital camera system.

Soon we are going to have the launch of CARTOSAT-2 by the end of August or the beginning of September which provides us panchromatic data with one metre spatial resolution. We are going to have RISAT satellite soon in 2007. We are going to have an OCEANSAT-2 which has a scatterometer as an ocean colour mapper, and we are also will have the

SEKTENCH-1(?) in the series of the RESOURCESAT with 5.8 metre multi-spectral resolution and also we have an international project MEGHATROPIQUES, we are working along with France on this project.

In the country, 20 years back, we set up an institutional mechanism where the decision-making, at the national level, at the State level, by all concerned source management has been focused through a committee called the Planning Committee on National Natural Resource Management Systems. This is working well.

Coming to the agenda on water resources, the Standing Committee on Water Resources is chaired by the Secretary of the Ministry of Water Resources. We also have sufficient infrastructure both in the States as the National Institutions through address, the operations, the R&D and also the policy making.

Essentially, the effect of it is today, space-based remote sensing is utilized country-wide on several facets of water resources management. Let me start with surface water inventory, reservoir sedimentation, command area monitoring, inter-basin transfer, we also call it inter-linking of well basins, monitoring of irrigation infrastructure developments, and national water resources information system, ground water targeting, watershed development planning, looking at the snow and glacier inventory, as well as R&D on rainfall estimation. We also look at the water-borne disasters like flood, drought and cyclones and there is also a research on how best we can make use of the satellite data on improving the weather forecast.

Quickly, I shall go through each one of them.

On surface water inventory, we have a national project today. It is called Repair, Renovation and Restoration of Water Bodies, which is launched where space-based remote sensing provides significant inputs that _____(?), we have almost 500,000 water bodies or tanks used for irrigation, the storage capacity is coming down through silting and lack of attention, and the area which is getting into tank irrigation is coming down drastically, and this is a very major national programme.

On reservoir sedimentation, the sedimentation rates are 1.5 to three times more than what it should be. And we have a national action plan for sedimentation assessment of 124 reservoirs in the country and this is being implemented under the guidance of the NNRMS Standing Committee on Water Resources.

On command area monitoring, our essential problem is the water use efficiency, which is about 35 per cent. And there is a centrally-sponsored command area development project and a national water management project, which are ongoing. They are also setting up the Water Resources Information System under the umbrella of the National Natural Resource Management System Standing Committee on Water Resources. In fact, what is coming out is periodic performance evaluations of the command areas based on specific factors and the position(?) support system is provided then to the managers of the CAD programme.

This is a new initiative. It has come up a couple of years back because we have 12 major river basins and 46 medium river basins with ultimate irrigation potential of 140 million hectares. But we have episodic deficits and excesses: floods and droughts in several parts, essentially because of the nature of the monsoon. And the feasibility studies are underway today. And space-based remote sensing inputs have been a major boon for the feasibility studies. There are several ways in which it can be used and it is being used today.

The ground water targeting is an area where we have reached the benefits directly to society. I shall show you a couple of slides. The ground water constitutes almost 55 per cent of the irrigation water requirement, 50 per cent of urban water supplies and 75 per cent of domestic use in rural areas. And this still has problems in urban areas, about 15 per cent we have to reach, in rural areas about 21 per cent. And also in the areas which are shown in red, exploitation of ground water is more than 50 per cent. And today, we have a national mission called Rajiv Gandhi Drinking Water Mission where ground water prospects maps are prepared so that every village, hamlet within 1.??? per kilometre you can have a drinking water source and we can also provide information on the likely discharge and that _____(?) you can get ground water.

Essentially _____(?) a satellite image. We generated a hydrology map, geomorphology map, lithology map, structural map and the base map is also added and we get a ground water prospects map and integrating them. Several information are provided to the decision-makers, the people who are working in the field.

And the implementation status today, on the left side you are seeing coloured areas. These are the States where such maps are already being provided with and so far, about 220,000(?) (2,20,000?) (*see copy*

of presentation) wells have been drilled and the success rate is 90 to 95 per cent, as compared to about 45 to 50 per cent without the use of remote sensing. And one well we had to make, it cost about \$1,000. So with this improved success rate, one can calculate the economic benefits _____(?) to the agencies. And there were about 7,500 recharge structures are also being planned.

From _____ (*not clear*) what you see is the feedback that we continuously get from the State Governments are implementing and this shows in each arm of the areas how many wells have been drilled and how many have been successful, how many recharge structure are being implemented, run by the Chief Engineer of the Rajiv Gandhi Drinking Water Mission budget.

And this is a picture to show what has been the impact. Earlier, people used to walk long kilometres by wells and in the last mile that we have gone through with the space science and the ground water sciences to the people. Today, they are able to go with the maps and get the new water resources.

Watershed development is another area and _____(?) to go for watershed basis for the planning of the land and water resources. Essentially we use space-based information. The various thematic plays for characterization and prioritization of watershed so that the decision makers can decide where they have to put the money in priority. The action plans can be generated through the participatory process by the local community for which you needed _____(?) database. And we also wanted to monitor the change and the impacts and we have been using this in the country. I should say that under a mission called Integrated Mission for Sustainable Development, which has been presented here in the previous decades. We have covered almost 84 million hectares from 25 States in the country on 1:50,000 scale use satellite data. Further, these are the kind of structures that are integrated with the use of space-based remote sensing and collateral(?) information. Further, we have also developed land treatment plans for several areas at about a scale of 1:10,000 for rainfed rice, oilseeds, pulses, cotton, etc. and for the desertic areas in seven States also, such integrated resource information system is generated.

This is another area where we are working on snow. We have one area in the Sutlej(?) Basin, where we have sufficient confidence with an error of less than 10 per cent. We can give a forecast on the snow melt run-off by the first week of April and we are taking this up in several other basins.

The Himalayan Glacier Inventory is another major project, mass balance and retreat by remote sensing data, essentially using the NOAA data.

The irrigation infrastructure monitoring is a new activity taken up with the availability of the CARTOSAT data and the RESOURCESAT data with a 5.8 metre resolution. Today there is a monitoring scheme for all ongoing projects, for a major scheme called Accelerated Irrigation Benefits Programme by the Government of India.

We had long discussions on disaster management aspects so I thought I should give a picture on what is going on in India today. We have an institutional infrastructure and a mechanism in the country where the space-based inputs, as disaster management support using both remote sensing and communication, are getting into the actual management which is run by the Ministry of the Home Office and there is a continuous video-conferencing between the Decision Support Centre at Hyderabad in the National Remote Sensing Centre and the Disaster Management Control Room of the Ministry of the Home Office. Some pictures of it you are seeing. And _____(?) addressing the damage assessment in the event of an earthquake, flood inundation mapping, cyclone inundation mapping, landslide hazard zonation, forest fire monitoring, there was a presentation a couple of days back, and also we addressed the recent tsunami. Within a few hours of the occurrence of the tsunami, we were able to programme our satellite and take the picture and use it for the operations. And today, it is a Disaster Watch System on a 16 x 7 basis at _____(?).

And in line with what was discussed today by on DMISCO, we have started already developing a national database for emergency management for looking at all major disasters of its National Remote Sensing Agency, Eastern(?) Rural Department, working along with all relevant scientific institutions as part of a national programme, monitored at the highest level.

And we also have the _____ (not clear) infrastructure for the communication with the INSAT satellite system.

And this is the picture on the major floods in the _____ (not clear) region which we are addressing every year. Capacity-building is a major activity. The Institute in Dehradun, which is also hosting the Asia-Pacific Centre for CSD(?), has already trained almost 5,860 scientists who are actually working on various facets of remote sensing applications, from geology to agriculture, and several

other are in the area of water resources. And today, have even the post-graduate courses running in this Institute.

In addition to this, the land departments, people are being trained on specific programmes in different parts of the country.

And thank you for your kind attention today. Remote sensing data is part and parcel of the management of water resources in development(?).

Thank you Mr. Chairman.

The CHAIRMAN (*interpretation from French*): I thank Dr. Radhakrishnan for his presentation. It is very impressive, especially all the activities which you use in your country to ensure better resource management, a problem which is especially pressing in your country and I believe that this is of great interest to all the members of the Committee.

Are there any questions on the two presentations which have just taken place?

I see none.

I thus again convey my gratitude to Mr. Igarashi and Dr. Radhakrishnan from India for the technical presentations.

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

We will reconvene promptly at 10.00 a.m. At that time, we will begin the adoption of the Report of the Committee to the General Assembly, which I believe will be distributed tomorrow morning. This will be agenda item 15.

And as this is our last day, we will attempt to be very diligent as far as the approval and adoption process of this report is concerned. The faster we work, the sooner you will all be free to return to your capitals, the exception being made here, of course, for our Austrian colleagues.

Any questions on this programme for tomorrow?

I see none.

This meeting is adjourned.

The meeting closed at 6.10 p.m.