
**Committee on the Peaceful
Uses of Outer Space
Legal Subcommittee**

Script

860th Meeting
Monday, 8 April 2013, 3 p.m.
Vienna

Chairman: Mr. T. Brisibe (Nigeria)

The meeting was called to order at 15.00 p.m.

The CHAIRMAN: Good afternoon distinguished delegates. I now declare open the 860th meeting of the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space.

This afternoon we have reconvened for the symposium on the theme “The UNIDROIT Space Protocol”, organized by the International Institute of Space Law and the European Centre for Space Law.

Immediately after the symposium this afternoon at 6.00 p.m., all delegates are invited to attend a reception hosted by the International Institute of Space Law and the European Centre for Space in the Mozart Room at the Vienna International Centre Restaurant which is located on the ground floor of the ‘F’ Building.

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

We will meet promptly at 10.00 a.m. At that time, we will continue our consideration of agenda item, General Exchange of Views.

We will begin our consideration of agenda items 4, Status and Application of the Five United Nations Treaties on Outer Space, and 9, Examination and Review of the Developments Concerning the Protocol to the Convention on International Interests in Mobile Equipment on Matters Specific to Space Assets.

The Working Group on the Status and Application of the Five United Nations Treaties on Outer Space will then hold its first meeting.

I would also like to remind delegations to provide the Secretariat with any additional requests for

technical presentations by tomorrow, Tuesday, 9 April, close of business.

I also remind delegations that speaking notes for technical presentations should be provided to facilitate simultaneous interpretation.

Are there any questions or comments on this proposed schedule?

I see none.

I now invite Madam Tanya Masson-Zwaan of IISL and Mr. Sergio Marchisio of ECSL to join me at the podium and chair the symposium on the UNIDROIT Space Protocol.

The meeting is adjourned until 10.00 a.m. tomorrow morning.

The meeting adjourned at 15.08 p.m.

Symposium on the UNIDROIT Space Protocol

Ms. T. MASSON-ZWAAN (Co-Chair): Good afternoon distinguished delegates. It is the pleasure of the International Institute of Space Law and the European Centre for Space Law to have organized once again a Symposium for the delegates of the United Nations COPUOS. We have decided to take as a topic for this year’s Symposium, the Space Protocol of the Cape Town Convention on the Protection of Mobile Assets, particularly Space Assets. And, as you know without a doubt, last year in Berlin, by a Diplomatic Conference, the Space Protocol was adopted and we think it would be interesting for the delegates to look back and see what are the future possibilities of this Protocol and to make a kind of status report for you to know the latest developments in this field. Of course, the financing of space projects is essential in any project because if you cannot get the financing right, it is difficult to carry out a space project in the first place. So we are very happy to have

several speakers here today. Unfortunately, two of the speakers could not be present. The presentation foreseen by Professor Larson had to be cancelled. On the other hand, the presentation by our traditional young scholar because every year on the Programme we have a presentation by a young scholar. Chris Johnson could unfortunately not be here. He is in the United States but I will present a short statement that he wrote and he has prepared a full paper as well.

Before going to the substantive part of the Symposium, I would like to also ask Professor Sergio Marchisio to say some words on behalf of ECSL.

Thank you.

Mr. S. MARCHISIO (Co-Chair): Thank you very much Tanja for your introduction. I am very pleased to co-chair this Symposium on the UNIDROIT Space Protocol. I think that the Legal Subcommittee is not new with the issue with the topic of the UNIDROIT Space Protocol because it was largely involved in the past. With the issue of the Supervisory Authority, you will remember that it was discussed here. It had established a Working Group and then the Legal Subcommittee had to decide upon this issue even though there were some reservations by some member States and we could not finish the work here and we had to think about another Supervisory Authority other than the United Nations and the Office for Space Affairs in particular.

And I made the reference to this because the Protocol, after the Berlin Conference in February 2012, is now going to the second phase which is the phase of the Preparatory Commission. I know that the Protocol is being signed by a few States but in any case, this phase is established by the Berlin Diplomatic Conference, would in any case begin at the start of this year, the phase of the Preparatory Commission, according to the resolutions of the Diplomatic Conference. And this is an important phase because it gives to States, as well as the industry and transactional experts, the input to discuss about the foreseen registry system of the Protocol and other points connected with the Supervisory Authority.

I think that our speakers today will deal with such issues, several issues, and I think that we will be very pleased to know the latest developments about this UNIDROIT Protocol.

Thank you very much and I give back the floor to Tanja.

Ms. T. MASSON-ZWAAN (Co-Chair): Thank you Sergio. Good teamwork. I would like to, without further ado, introduce the first speaker and in matters of procedure, I would like to propose that after each presentation, we provide you with the opportunity to ask questions and to have discussions since we have just four presentations, I think we have some more time to have discussion after each presentation instead of waiting until the last minute.

So the first speaker on our Programme is my neighbour, Dr. Martin Stanford, formerly with the UNIDROIT Deputy Secretary-General and the Space Protocol, is, so to say, his baby because he has been there from the cradle, I would not say from the cradle to the grave because he has been there from the cradle to the birth, let us say, or, I am not sure how to put that in words but you have certainly done an amazing job in leading this process for so many years and we can only learn from you more and we are eager to hear all about your views on the way to the successful completion of the negotiations. So it is really a view back at the whole process and setting the scene for this afternoon.

Martin, you have the floor.

Mr. M. STANFORD ((International Institute for the Unification of Private Law): Chairman, ladies and gentlemen, good afternoon. It is a very great honour to be here and I am going to try and work this machine.

The negotiations that led to the opening signature in Berlin on 9 March 2012 of the Protocol to the Convention on International Interests in Mobile Equipment on Matters Specific to Space Assets, go back quite a long way, in fact to the decision taken by the Governing Council of UNIDROIT way back in June 1988, almost 25 years ago, it is quite sobering to think of that, 25 years ago in June, to propose to the UNIDROIT General Assembly the inclusion of the UNIDROIT Work Programme of the subject of security interests in mobile equipment. It was this decision that led in the first place to the preparation of the Convention and the Protocol Thereto on Matters on Specific to Aircraft Equipment and to the opening to signature of these instruments in Cape Town on 16 November 2001.

From the very beginning, it was, however, intended that the future Convention shall not just apply to aircraft but to as wide a variety of assets likely to be moving across or beyond frontiers in the ordinary course of business as possible. Satellites and other space assets were seen as just one set class of asset.

In January 1997, however, the UNIDROIT Study Group responsible for the first stage of the preparation of the future Convention took the historic decision to split the future instrument into, on the one hand, a convention designed to carry the general rules applicable to all classes of such asset. And on the other hand, assets specific protocols designed to adapt these general rules, the specific pattern of secured financing in relation to each such class of asset.

It was, thus, that in August 1997 the President of UNIDROIT invited Mr. Peter Nesgoss, an eminent expert in commercial space financing practice to organize a Working Group essentially made up of representatives of the manufacturers, the financiers, the users and the insurers of what was then referred to as space property, but also of the interested international organizations to prepare a first draft of a future protocol on matters specific to space assets.

This task was entrusted to a special space industry working group so as to give representatives of the different sectors involved in that industry a first go but indicating the sort of regime needed to make asset-based financing the goal of the Cape Town Convention itself more accessible to commercial space financing before then handing the matter over to governments for finalization.

In line with what had been done for the Aircraft Protocol, a first draft of which was prepared by a similar industry working group, the thought was that the technical complexities of preparing a new international regime governing the taking of security in space assets required first and foremost participation of the parties familiar with the day-to-day nature, objectives and workings of such transactions if the regime was to respond to genuine market needs.

Moreover, UNIDROIT has always tended to work at the cutting edge of developments in international commercial law and practice and the UNIDROIT Governing Council has always considered it appropriate to ensure that any instrument prepared by UNIDROIT in the commercial law field respond in the first place to the needs of the relevant commercial sector.

Until completion of the Convention providing the basic framework of the new regime and the Aircraft Protocol, the primary focus of UNIDROIT's efforts was, however, to bring these two instruments to completion within, first, a UNIDROIT Study Group and then a Joint Committee of Governmental Experts in UNIDROIT and the International Civil Aviation Organization. Work on the future Space Protocol, as

indeed on the future Rail Protocol, opened to signature in Luxembourg on 23 February 2007, necessarily took second place to completion of the Convention and the Aircraft Protocol.

Experts from the space and the rail industry working groups nevertheless participated actively in the negotiation of the Convention, in particular with a view to ensuring that the basic interests of commercial space and rail industries were adequately reflected in the texts adopted in Cape Town and that these solutions would work for them too.

Meanwhile, though, between 1997 and 2001, the Space Working Group held four sessions, two in North America and two in Europe, at which it worked out the essential features of a first preliminary draft.

The fourth such meeting was held just a month before the Cape Town Diplomatic Conference. A broad cross-section representatives of all sectors in the commercial space industry was involved in these efforts, as also representatives of the international organizations and national space agencies. These efforts benefited also from the expertise of those representatives of the international aviation finance community, brought together by the Aviation Working Group which played such a key role in the development of the Convention and the Aircraft Protocol.

A special informal group of experts from both government and industry was also convened by UNIDROIT in Rome in October 2000 to look at the issues arising from the relationship between, on the one hand, what was then still the draft Convention and the Space Working Group's working draft, and on the other, the existing body of international space law. This meeting was co-chaired by Mr. Niklas Hedman, then of the Government of Sweden.

Conscious of the need to ensure full concordance between the future Space Protocol and the existing body of international space law, the UNIDROIT Secretariat also made contact with the United Nations Office for Outer Space Affairs and participated not only in UNISPACE III in Vienna in July 1999 but also from 2000 onwards, as an observer in the annual sessions of this Legal Subcommittee. This cooperation between UNIDROIT and COPUOS led to the decision by COPUOS in June 2000 to include consideration of the draft Convention and the working draft of the preliminary draft Protocol on the agenda of the Legal Subcommittee at its following session as a single issue discussion item and to invite the Secretariats of UNIDROIT and the Office for Outer

Space Affairs to prepare a joint background paper for that session.

Significantly each year, since that first occasion, COPUOS has renewed its initial decision to include consideration of the future Space Protocol on the agenda of the Legal Subcommittee which will thus be considering the Space Protocol once again at its current session.

In June 2001, COPUOS moreover decided to set up an ad hoc consultative mechanism to review the draft Convention and the preliminary draft Protocol and to report back to the Legal Subcommittee the following year.

A new phase in the development of the future Space Protocol was ushered in with the adoption in Cape Town in November 2001 of the Convention and the Aircraft Protocol. Already in September 2001, just a couple of months before the Cape Town Conference, the UNIDROIT Governing Council had authorised the UNIDROIT Secretariat to transmit the preliminary draft Space Protocol prepared by the Space Working Group to governments and to convene a first session of the UNIDROIT Committee of Governmental Experts to review that text once the Steering Revisions Committee had had the opportunity to review its compatibility with the text of the Convention and the Aircraft Protocol to be adopted in Cape Town and in the light of the preliminary results reached by the ad hoc consultative mechanism within COPUOS.

Significantly, the Governing Council authorised the opening up of the intergovernmental process to all members of COPUOS to ensure not only the broadest representation of States in the finalization of the preliminary draft Protocol but also the necessary concordance with the existing body of international space law. One of the resolutions adopted in Cape Town was resolution number three where it specifically invited UNIDROIT to afford non-member States an opportunity of participating in the negotiation and adoption of subsequent protocols. As I have already mentioned, UNIDROIT has always attached the greatest importance to representation of the views of industry in the preparation of its instruments and it was thus that UNIDROIT organized two colloquia for governments and industry to compare notes on the preliminary draft Protocol in the run up to the first session of Governmental Experts and in the immediate aftermath of that session. The first colloquium was held in Paris in September 2003 in cooperation with the European Centre for Space Law. The second was held in Kuala Lumpur in April 2004 in cooperation

with the Malaysian National Space Agency and the Space Working Group.

In February 2002, following an additional meeting of the Space Working Group, the Steering Revisions Committee, manned by representatives of UNIDROIT, United Nations Office for Outer Space Affairs and the Space Working Group, went right through the texts of the preliminary draft Space Protocol to bring it into line with the instruments adopted in Cape Town and to take account of the preliminary inclusions reached by the ad hoc consultative mechanism.

In June 2002, when deciding to renew the status of consideration of the preliminary draft Protocol as a single issue item on the agenda of the Legal Subcommittee for its 2003 session, COPUOS specifically invited it to consider the possibility of the United Nations serving as Supervisory Authority under the Space Protocol, as well as the question of the relationship between the terms of the preliminary draft Protocol and the rights and obligations of States under the legal regime applicable to outer space.

In June 2003, this referral was renewed for a further year. Ultimately though, whilst there was strong support within the Legal Subcommittee for the idea of the United Nations serving as Supervisory Authority, consensus could not be reached, essentially because some members saw the functions of Supervisory Authority as being incompatible with the mandate of the United Nations.

For work of the Committee of Governmental Experts, especially the way in Rome in December 2003, ultimately five sessions of this Committee proved to be necessary before the text of the preliminary draft Protocol was adjudged by the Committee to be ripe for transmission to a Diplomatic Conference for adoption.

Fifty-seven States representing a cross-section of the industrialized, emerging and developing worlds and a considerable number of intergovernmental and international non-governmental organizations, as well as leading representatives of the commercial space, financial and insurance communities, participated in the work of the Committee. The Committee was chaired by Professor Sergio Marchisio of Italy and the three Deputy Chairmanships were held by Mexico, South Africa and the Czech Republic.

A few issues proved to be of particular difficulty and this is why there was a hiatus in the work of the Committee following its second session held in

October 2004. This hiatus was used, *inter alia*, to gather information on one of the particular difficulty issues, namely that of public service, but the time was also used to focus on issues specific to the future international registration system for space assets, notably the criteria necessary to identify such assets for registration purposes.

These outstanding issues, together with related issues, were the main focus of two special government industry meetings held in 2006 and 2007, one in London and one in New York. These meetings attract the representative participation from the governments of the leading space-faring nations and all sectors of the commercial space, financial and insurance communities.

Following the second of these meetings, as I say held in June 2007, the UNIDROIT General Assembly at its sixty-first session held in Rome in November 2007 decided upon the establishment of a Steering Committee to draw conclusions from all these consultations regarding the texts of the preliminary draft Protocol having come out of the first session of Governmental Experts, i.e., the idea how should this draft be revised in the light of all these consultations.

At the conclusion of the second such Steering Committee meeting, it was decided that the progress that it made in building on the consensus and the conclusions reached by the government industry meetings, notably in respect of the key outstanding issues was such as to justify the reconvening of the Committee of Governmental Experts. And this view was endorsed by the UNIDROIT Governing Council and so the third session of the Committee of Governmental Experts was held in December 2009.

An alternative version of the preliminary draft Protocol reflecting the intersessional work carried out since the second session of Governmental Experts, namely the work carried out by the Steering Committee, provided the basis for the deliberations of the reconvened Committee of Governmental Experts.

Progress in building consensus around this new version of the preliminary draft Protocol over the three remaining sessions of the Committee of Governmental Experts, aided by significant further intersession work carried out between the penultimate and the final sessions of that Committee involving, *inter alia*, representatives of the commercial space and financial communities enabled the Chairman at the final session of the Committee to recommend on behalf of the Committee of Governmental Experts as a whole to the UNIDROIT Governing Council that the

preliminary draft Protocol as improved during that final session be considered ripe for transmission to a Diplomatic Conference for adoption.

I hope you like the pictures.

At its ninetieth session held in Rome in May 2011, the UNIDROIT Governing Council endorsed the Committee of Governmental Experts' recommendation and it was thus that following the decision in June by the Government of Germany to host a Diplomatic Conference, a decision was taken to transmit the draft Protocol as established by the Committee of Governmental Experts to a Diplomatic Conference for Adoption. All member States of UNIDROIT were invited to the Diplomatic Conference as well as pursuant to resolution number three, adopted by the Cape Town Diplomatic Conference, all member States of the United Nations. Invitations were also extended as observers to the relevant international organizations and as technical advisors to those representatives of the commercial space, financial and insurance communities having participated in the development of the draft Protocol.

I was going to talk about the actual Conference but I have decided after consultation with my friend Dr. Schmidt-Tedd to leave that to him which allows me to move straight on to the conclusions.

The Cape Town regime is designed to make asset-based financing more widely available. The benefits of asset-based financing in respect of an asset are that they enable an entrepreneur and, therefore, *par excellence*, a start-up company to obtain financing secured against the value of the asset to be used by that entrepreneur in his or her business. A matter of great importance for the person advancing funds. These benefits are particular attractive in the context of an entrepreneur looking to finance its acquisition of such a high-value asset as a satellite where the satellite would normally be that entrepreneur's only asset capable of generating revenue.

To give just one example drawn from contemporary practice, it is significant to note that despite the current testing business climate, the figures for the twelve-month period, 1 January to 31 December 2012, released recently by the United Kingdom Asset-Based Finance Association, show that the number of companies in both the United Kingdom and Ireland using this method of financing continues to rise, comparing figures with the previous year, the ABFA noted that the total number of businesses using asset-based financing had risen by three per cent and that moreover both the turnover of these companies and the

amount of funding advanced through asset-based financing had risen by five per cent and six per cent respectively.

The unique success of such financing in the context of aircraft and aircraft engines is borne out by the fact that the Convention and the Aircraft Protocol completed only 11 years ago already have 56 and 49 Contracting Parties respectively, a very good score for international treaties, especially in the private law field. And that already one year ago, that is only five years after the entry into operation of International Registry for Aircraft Objects, approximately 313,000 registrations had been made in that Registry against 125,000 aircraft objects, air frames, aircraft engines and helicopters, effectively the world's fleet of aircraft. It is true that asset-based financing in the commercial space context does not yet have the track record of commercial aviation but then the commercial space market is vastly smaller than the commercial aviation market and asset-based financing is a particularly flexible tool, well-suited to meet the changing needs of commercial space markets. The Convention and the Space Protocol provide a well-prepared new international regime calculated to provide invaluable legal certainty and transparency, in particular through the Registry, to parties wishing to avail themselves of this new alternative, I insist, this new alternative method of financing.

It is also true that some of the leading players in the commercial space market do not at the moment have any funding problems of the sort that would make the Convention and the Protocol interesting or useful for them. However, we have to bear in mind that one of the key objectives of the Protocol is to broaden access to the commercial space market which is potentially far larger than just the afore-mentioned leading players. And this is why as enshrined in the preamble to the Protocol, its authors anticipated that the Convention and Protocol could yield significant benefits, in particular to emerging and developing markets in generating an expansion in space-based services and financing.

This account of the history of the Protocol shows, I would submit, the thoroughness of the preparation that went into the Protocol. Already the Convention and the Aircraft Protocol were the result of a unique decade-long collaboration between two intergovernmental organizations, UNIDROIT and ICAO, governments from all over the world and at all levels of development, and representatives of the international business community as well as the relevant international organizations. This collaboration, unique in the annals of treaty-making,

was also the hallmark of the preparation of the Space Protocol.

As with the Aircraft Protocol, a first draft of the Space Protocol was prepared by a representative cross-section of the commercial space, financial and insurance communities and representatives of these communities continue to be actively associated in the development of the Protocol throughout the intergovernmental consultation process too. Again, governments from all over the world and at all levels of development took an active part in working out the problems that needed to be overcome in adapting the asset-based financing objectives of the Convention to the daily patterns of commercial space financing practice.

Member States of COPUOS, as well as observers representing the United Nations Office for Outer Space Affairs, brought their own particular expertise to bear in resolving the special problems arising out of the relationship between the Protocol and the existing body of international space law.

A particular debt of gratitude is not only to the two international organizations sponsoring this Symposium but also to the Legal Subcommittee for the invaluable opportunities they have afforded for discussion of many of the issues involved in preparation of the Protocol.

The challenge now is to build on all this preparation with a view to achieving early implementation of the Protocol.

It's economic objectives, namely through asset-based financing, to widen access to the commercial space market and thus meet the future needs of commercial space financing are such, I would suggest that it is in the interest of all humankind to join in this endeavour.

Thank you ladies and gentlemen. Thank you Tanja. Thank you Mr. Chair.

Ms. T. MASSON-ZWAAN (Co-Chair): Thank you very much Martin for this excellent and very comprehensive overview of the whole process since the beginnings and I think it provides an excellent setting for our discussions today. I would like to ask if there are any questions to Mr. Stanford at this point before we go to the next presentation.

Yes, please Mr. Cassapoglou.

By the way, allow me just to repair an omission I made. There are two student observers from the University of Leiden, Miss Aurora Fierhaver(?) and Miss Iris Rectin(?) who will be writing a report of this Symposium which will be published on the website of IISL and ECSL and which will also be published in the various proceedings that we will issue. So they will be making a report of the presentations and of the discussions.

Vassilios, go ahead.

Mr. V. CASSAPOGLOU (Greece): Thank you very much Tanja. Also may I add that there are two Masters students of the Athens Law School Alonso(?) during this meeting exactly to prepare also their own report on, I speak for the future. And I would like to first of all thank all of you and this personally my friend Martin, a difficult question because of the very bad experience we had during the last phase of the negotiation and especially this unacceptable, unacceptable, absolutely unacceptable behaviour from the part of some companies in their effort to undermine the work we have done during almost 10 years. I would like to ask and also these very few signatures that we have until now, asking my friend, what will be the foreseen future of this Space Assets Protocol because I think that some governments more associated in this unacceptable behaviour and especially the last meeting we had in Rome before Berlin. Unfortunately I was not there in Berlin but nevertheless, how will be the effort to _____(?) people, I mean governments, to be part of this new Protocol? Because I am afraid that it should be something very slow-going.

Thank you.

Mr. M. STANFORD ((International Institute for the Unification of Private Law): I thank you Tanja. The question raised by our dear friend Vassilios is, obviously it is not possible for me to presume to look into a crystal ball. Even if I were still working for UNIDROIT, I think it will still be probably inappropriate because any intergovernmental organization, as Vassilios would be the first to recognize, is basically no more than the handmaiden of its member States. But I think that one can, first of all, conclude from the excellent collaboration which, notwithstanding occasional hiccups to which Vassilios has drawn our attention, which characterized the negotiations that I have tried to explain from the very beginning on the part of all governments, all sorts of governments, all sorts of representatives of industry, etc., holds forth a great deal of hope for the future of a Protocol which has benefited from a tremendous

amount of time, of course, and a tremendous amount of input expertise. I think this particular Symposium taking place today under the auspices of the ECSL and the IISL is a brilliant, if I may say so, example of the sort of forum which I think is extremely well-suited to advertising and bringing to the attention of people the usefulness of the Protocol in exactly the same way as the Aircraft Protocol and the Rail Protocol. Admittedly, the people who have been responsible for the overwhelming results in terms of the Aircraft Protocol are in somewhat more of a hurry of the need for new aircraft financing. Whole countries have been shown the advantages of renewing their fleets and, of course, renewing a fleet of aircraft is quite expensive and asset-based financing is the only real way of doing it in a timeless manner. Canada, of course, has just become the latest Party to both the Convention and the Aircraft Protocol so they know as well as everybody the advantages but equally they know how the aircraft industry has been particular behind getting it into force.

So it is true that there will be some dissenting voices. There always are dissenting voices. I remember, and do interrupt if I am getting indiscreet, but when we were doing the Aircraft Protocol, there was a certain company which you may have heard of called British Airways and British Airways was, I do not think indulging in a fit of splendid isolation, but they nevertheless thought, OK, this Aircraft Protocol, this Convention is fine for the others, you know, they may need it, but we do not need it, we have got oodles of money, we do not need asset-based financing to buy our aircraft, we have got all the aircraft we need. And they basically said to the British Government, go away and find something else to waste your time on. And, of course, when Britain came to the decision recently to ratify the Convention and the Aircraft Protocol, who was it bashing on the door of the, I think it is now called the Department of Business Innovation Skills, but British Airways.

It is, I think, interesting to recall that when had, I think Vassilios was there, it was the fourth session of Governmental Experts, the EUTELSAT observer made a very interesting remark about the fact that, this may not be something that the main players, the leading players need so very much now, but who is not to say that down the road, this might be something which will become much more necessary, and more to the point, if one is looking, as one is inevitably in the globalized world and the globalized economy, at ways of broadening access to the commercial space market, then it is important that those players who are actively involved at the present time in that market should be involved in the formulation of the new legal framework for that future development.

So I think all the basic requirements needs for a sound future for the Protocol are present. I think it requires first and foremost, as Vassilios indicated, work on the implementation of the Protocol through signatures and then ratifications. We have already, as you know, got the three States that signed in Berlin, that is to say, Burkina Faso, Zimbabwe, Saudi Arabia, and then, of course, more recently Germany and I am sure that other countries are also looking at the Protocol. It is, I think it is fair to say, early days at the present time.

The Aircraft Protocol, as you know as I mentioned, I think came into force in March 2006. That was already pretty quick, five years. But I think the important thing now is, I think this was one of the dictor(?) that one's mother always hands on, i.e., strike while the iron is hot, and I think it is similarly true in this sort of area, an area which is rather luxury, the area of private law. Private law is not one of those things where the world will disappear if we do not deal with it but it is an area where, in fact, an awful lot can be done which can be very much for the benefit of the people perhaps least favoured by economic conditions in different parts of the world. I will never forget when we were in Paris, one of the events I referred to and the representative of South Africa took the floor and said, she saw this Protocol as having the potential to change the living conditions of the people in the poorest parts of the world from like this to like this and I can still even now today feel the goose pimples going down my back when I think of what she said and being then the Director of Communications of South Africa, she knew better than most people what these conditions, what these requirements were. I think, that, I think it is fair to say was the point in my concluding remark that I hope that you will all join in this endeavour of implementing the Protocol. I think one way in which this could be done is through events like this Symposium and conferences which would bring the topic to the attention of the regions which are most potentially affected by it, that is to say particularly the emerging world, the developing world, and take the time to explain to the commercial parties the opportunities that the Convention and Protocol offer for that sort of enhancement of the economic infrastructure of those countries. I think this is something which the people represented in the Legal Subcommittee, the governments, could be particularly useful and we very much appreciate their assistance in organizing such conferences, such seminars. We already in communication with a number of governments actually represented here with a view to such events. I feel I must confess, I feel somewhat guilty because having had my nasty accident here last

year and having in the meantime retired, I point out voluntarily, having retired, things have perhaps not gone as fast as they might have done, as I would have liked things to do because I am not one to, I like things to move and, of course, it is difficult to move when your leg does not move, your hip is broken and you are laid up in bed and people are calling you for all sorts of daft things when you really would prefer to be actually getting things going.

But I do believe that these initiatives are just waiting to be realized and that with the goodwill of the people in this room, and as I say, I think, quoting, I hope I did not offend anybody, quoting from the very wise words of our friend from EUTELSAT, I think industry can be counted on to provide a very useful contribution to those efforts.

I hope I have answered your question Vassilios. I hope I have not been too evasive.

Thank you.

Ms. T. MASSON-ZWAAN (Co-Chair): Thank you Martin. Is there any other question to Mr. Stanford at this point. I think I will take one more before I hand to my co-Chair to introduce the next speakers and then any other questions can, if time permits, still be addressed at the end.

Ms. Ramirez, I would like to give you the floor.

Ms. R. M. RAMIREZ DE ARELLANO (Mexico) (*interpretation from Spanish*): Thank you. I am from the Mexican Space Agency and I would like to thank you for your words. I have studied the Convention and the Protocol and I have always had a lot of doubts because we talk about two means of transport such as trains or planes. When you have a guarantee then you need an alternative for the provision of public services. You mentioned that one of the good things about the Protocol is funding but, of course, that means you need assets as collateral. For space it is different. We are talking about transmission. We are talking about orbit, satellite positions and we are talking about control centres, public services which in a country which has four or five satellites in orbit today, with, I think, 90 per cent occupation, I would not, well actually I would venture to ask you what happens if you have to call on the asset, the satellite, then that satellite would no longer provide those public services and you, as a country or a government, if you have occupied your full capacity and I do not want to go to third party providers, what would happen? This has always been a big concern for

me regarding this Protocol. It has always been a doubt at the back of my mind because the assets are satellites and so if you call in that collateral and the creditor takes those assets, what are the real consequences of that? Do you have to go to other satellite providers? What is the real impact on public services?

Do you really call in the collateral so then that asset is not providing public services any longer so what happens? What are the consequences?

Thank you.

Mr. M. STANFORD ((International Institute for the Unification of Private Law): Thank you Ms. Ramirez. Correct me if I am wrong, I got the impression that there were two questions in your question. One of them was in relation to the collateral, the guarantee, the way in which you can create a guarantee, a security over an aircraft or over a piece of railway rolling stock, and the way in which this would work in the context of a satellite. As you know, it was recognized from the very beginning that it is not going to be quite so easy or so feasible to repossess a satellite as it would be to repossess an aircraft or even railway rolling stock. It is not that easy to repossess a piece of rolling stock, especially if the gauge is different in the country trying to repossess from the country in which it is actually held. There are always difficulties implicit in these solutions but with satellites, the idea was always that one should use the concept of debtors rights, it is not the actual satellite which is the main economic interest to the creditor, it is rather the debtors rights, the revenues generated by the satellite which are of interest and those are, in fact, covered by the instrument, by the Space Protocol so that will assure the necessary asset-based financing remedy in the event of default.

Your second question, I think, Ms. Ramirez, was more, if I understood correctly, directed to the issue of public service. Public service was quite a controversial issue. Unlike the Aircraft Protocol where no one raised the issue, all of a sudden, in the context of the Rail Protocol and the Space Protocol, the Government of Sweden, I think it was, by the Government of Germany raised this issue and attached tremendous importance and both Protocols have public service rules as a result. The public service rule in the Space Protocol, I think is a very reasonable compromise between the interests of the two parties, whether you call it the State, which is enjoying that public service, or the creditor which is concerned about the default of the person, the body operating that satellite. And I think in terms of both the time and the way in which that procedure will work, the Protocol, I

think, has struck the right sort of balance, also in terms of the time which the creditor will have to wait to exercise his remedies. I think everybody, it was a long process and we have to say how very grateful we were to the governments of both sides for putting their heads together and coming up with something which was satisfactory to everybody, to all governments.

I agree these are things which have not normally been dealt with in international instruments before. These are issues which are normally dealt with in the contract, i.e., the idea is that the satellites are so expensive, these are the sort of things which parties are going to deal with in their contractual documentation but some governments felt, and I think it was legitimate for them to feel this, that these masses needed to be spelled out in the even that they were not covered in the contractual documentation. I agree it is a difficult area but I think you will find that the balance struck in the Protocol between two parties, the creditor on the one hand and the body operating that satellite which has defaulted, I think are eminently workable and provide the right sort of balance in an instrument designed particular for to make access to commercial space financing more available in the developing and emerging markets.

Have I answered your question?

Thank you.

Mr. S. MARCHISO (Co-Chair): Thank you very much. Thank you Martin. I would like to take this opportunity to express my gratefulness for your engagement with this UNIDROIT project. It was really added value for our work.

Now we have two speakers which will address the issue of the negotiations at Berlin, what promise for the future, and they belong to a country, Germany, which was the host of the Diplomatic Conference which adopted the Protocol and also a long-standing supporter of the project.

The first one is Bernard Schmidt-Tedd from Germany to whom I give the floor.

Mr. B. SCHMIDT-TEDD (Germany): Thank you very much. We will have a presentation of the subject of the negotiation history and what promise for the future. It is divided into two parts. I will start with a brief overview of the negotiations, the Final Act and the _____(?) and the Preparatory Commission, then Professor Hobe will continue with the comparison with the other Protocols specific

perspective aspects and some words about the mixed competence in this context.

The Diplomatic Conference took place in Berlin between 27 February and 9 March of last year. Forty States were present. Thirty-four presented credentials. In addition four intergovernmental organizations, NCUS(?) which is a regional integration organization, five non-governmental organizations and a number of technical advisors.

The Final Act was signed by 25 States and the EU and the same last day of the Conference, the Protocol was opened for signature.

The first three countries signed the Protocol during the Conference, Burkina Faso, Saudi Arabia and Zimbabwe and Germany last year in November.

The basic approach of the Berlin Protocol how it is called now is the asset-based approach as the whole Cape Town regime which was developed in order to give a new easier financing option with this asset-based instrument.

In the case of the Aircraft Protocol, the success is obvious. More than 300,000 registrations have been made during the first five years of operation of this International Registry. Asset-based is a new option which sites actual practice of project-based financing and it gives the opportunity to come to financing with an asset as such outside of quite complex contractor structures and it should give an opportunity for entrepreneurs and especially start-up companies to find a new way of financing. It is an optional instrument and it is not implemented against actual project-based financing systems but like an additional option.

At the beginning of the Berlin Conference, there was this basic discussion about the need of this optional instrument but it says at the end of this first discussion about the Protocol, it was accepted that the Conference will continue to come to a conclusion and it was then a discussion about three major outstanding issues which were the centre of the focus of the discussion during the Conference. One aspect was a sphere of application of the Protocol and the question of there should be an enumerative approach or an open one, the criteria of identification in this sphere of application prior to the launch.

A second complex of questions was related to the physically-linked assets and the priority of competing rights. And, as already mentioned, the third big subject was the public service extension.

The question where a creditor may exercise the default remedies if these remedies may impair or interfere with the operation of the physically-linked asset, for instance, transponders or hosted payloads, was resolved during the Conference and also the panel-ended question about public service extensions.

As a result, this sphere of application was defined in an open manner so there are some examples how the space asset is defined but it is a closed definition.

The criteria of identification of the space asset will be in detail specified during the regulations and it was finally decided that the Protocol will apply also prior to launch so that there will be one single regime of financing from the beginning and that the launch is not an interruption of the financing system.

Competing rights in physically-linked assets in principle there is a priority for the inter-creditor agreement but in the absence of such an agreement, there is a rule that this should not impair or interfere with the operation of another asset.

Concerning the third subject, public service, there was a very complex solution which results to a timeframe of three up to six months where a declaration can be made so that the enforcement of rights will be blocked for this time period between three and six months but it is necessary to make such a declaration in advance.

The Final Act of the Conference includes the Protocol as such and five resolutions for the implementation of the Protocol and the Final Act was signed by 25 States and the EU.

The first resolution deals with the establishment of the Preparatory Commission. This is the instrument for the intermediate phase. The Preparatory Commission will act with the full authority as the Provisional Supervisory Authority before such Supervisory Authority will be established and it will be composed by one third of the participating States, the international organizations and representatives of the commercial space, financial and insurance communities.

A first meeting of this Preparatory Commission will take place in May at UNIDROIT in Rome and the States addressed for participation are Brazil, China, Czech Republic, France, India, Italy, Germany, Russian Federation, Saudi Arabia, Spain, South Africa and the United States.

The Preparatory Commission, the PrepCom, has three specific functions as contained in the resolution, the set up of the international registration system under an objective selection process. The target is to realize this in between three years from the adoption of the Protocol, at least by the time of the entry into force of the Protocol.

It shall ensure the necessary liaison and coordination with the commercial space and financial and insurance communities and any other methods relating to the registry as may be required.

Resolution two deals with the Supervisory Authority. For the moment, according to the interest expression, the International Telecommunication Union, ITU, is addressed without prejudice to the definite decision. They are invited to consider to become the Supervisory Authority after the entry into force of the Protocol and they are invited to inform the Secretary-General of UNIDROIT about their internal decision which has to be executed under the formulation of ITU.

This Supervisory Authority will then appoint a Registrar for the Space Asset Registry and there will be a Commission of Experts established to discharge the Supervisory Authority of its functions, according to Article 27 of the Berlin Protocol.

There have been a long-lasting discussion process at the beginning when COPUOS was addressed. Also ICAO was addressed but at the moment it is ITU who has primarily expressed its interest to take over this function but nevertheless as a fall-back solution if ITU should not become Supervisory Authority.

There has to be formulated the regulations for the International Registry and there are two main subjects, the identification of the space asset for purpose of registration, and then a solution for the identification of competing rights in relation to physically-linked assets. So this difficult subject is left to a certain extent to the Preparatory Commission and it has to be mentioned that there was a joint US-German proposal to find during the Conference a general solution for this difficult question which related also but to different concepts of civil law and it was in detail quite complex to find this compromise solution which you see here on this slide.

The space asset is defined as any manmade uniquely asset in space or designed to be launched into space and then there are other examples like spacecraft,

satellites, Space Station and so on. And then the payloads are mentioned separately.

Article 30 refers to the identification of the space asset for registration purposes. There is another Article 7 where the definition relates to the constitution of the interest.

There might be a relation to the criteria we now form as space law for registration under the Registration Convention but the final identification criteria will be determined in the context of the Preparatory Commission and a certain flexibility is left to the Preparatory Commission to formulate the details.

Then there are still two resolutions. One relates to reduction potential benefit for those who use these financing instruments with reference to the experience we have on the Aircraft Protocol, the sectors invited to give a special benefit for space asset financing under the Protocol.

And resolution five, the _____(?) official commentary so all of you will know him from the last decade of negotiations of the Protocol. He prepared the commentary. We had the pleasure to see already the draft last year. It is foreseen in the resolution that there is a great reiteration(?) process with the delegations and it was finalized until the end of the year and now it is under the process of publication. This will be a quite comprehensive commentary which gives all the detailed answers of any questions you might have under this Protocol.

That is the forthcoming work of the Preparatory Commission and now Professor Hobe will continue.

Mr. S. MARCHISIO (Co-Chair): Professor Hobe will continue. Professor Stephan Hobe from the Cologne University.

Mr. S. HOBE (Germany): Ladies and gentlemen. Thank you very much, Mr. Chairman, for giving me the floor. I want to, after this very thorough description of the contents of the Space Assets Protocol, I want to just briefly make some remarks and give you some of the flavour of what the future could bring and I also want to raise some questions with a certain comparison of the working methods of the UNIDROIT Conference compared to the work of this Committee. And I say this is a more scientific perspective as an observer, to say that at the very beginning.

This first overview gives you an idea of the various instruments that I will call the Cape Town instruments. It starts with this Convention on International Interests in Mobile Equipment that, so to speak, the Mother Convention, to which all these three Protocols refer and negotiated as they start the negotiations in 1998, then opened for signature in 2001, so that is basically three years, required three ratifications, has currently 56 ratifications so it is quite solid and, of course, it has entered into force. At the same time as entered into force, the Aircraft Equipment Protocol which required eight instruments of ratification after three years of negotiations, and has currently 49 instruments of ratification.

Not so successful as so far the second optional Protocol on Railway Rolling Stock that took six years to be negotiated and was opened for signature in 2007 and needs four instruments of ratification and has not yet entered into force and, of course, for the Space Assets Protocol, that is the same that needed quite some time, a little over eight years to be negotiated and has no full signatures, not yet, the required number of 10 ratifications which is slightly higher and there was a discussion about this number of ratifications. It is slightly higher than the ones required for railway rolling stock and aircraft.

So our first observation is there is a certain number of ratifications. There was a certain, of course, duration of the negotiations and the basic conventions are in force so far and we hope that the Space Assets Protocol might enter into force.

The second set of problems for the future, so to speak, are European in-house problems and the rest of the Committee here may not listen now. It is just certain problems that we Europeans have to sort out. It has to do with the very fact that the European Union, which may not be confused with the European Space Agency, is a regional integration organization that was founded in 1957, originally three organizations that are all merged into the European Union, designed to become an internal market and some say to evolve into something which is similar to a State but one is not allowed to say that loudly because this is very divergent. It is not really clear and if I have, for example, a British friend sitting on that table, he would certainly not subscribe to that vision of a European State. So there is a big problem, our special problem in Europe that we have this kind of beautiful debate on the future of Europe. It is, however, a matter of fact that there is a split of competences and the European Union so far, due to the treaties, the founding treaties, has acquired some certain fields of competences where it is competent to do something and you see on this

chart that arguably there are matters that could easily be subsumed as being competences of the European Union, jurisdiction and the recognition of judgements and civil and commercial matters, insolvency proceedings and the law applicable to contractual obligations.

For us, the basic question which again would not involve, and this is very important to say, the external effect of how Europe would act in the external side but there is an in-house problem of the European Union as an international organization, is the European Union to sign, accept, approve or accede to the Cape Town Convention and its Protocols and are member States entitled to make declarations on matters within the competence of the European Union.

Here we have Article 48 of the Cape Town Convention and the corresponding provisions in the Protocols that say that the regional economic integration organization, basically the European Union, established by sovereign States and having competence over matters governed by the Berlin Protocol may similarly sign, accept, approve or accede the Cape Town Convention and its Protocols respectively.

As well as the regional economic integration organization shall in that case have the rights and obligations of the Contracting State to the extent that this organization has competence over matters governed by the Convention and its Protocols.

Finally, where the number of the Contracting States is relevant, the regional economic integration organization shall not count as a Contracting State and the regional economic integration organization shall make a declaration specifying the matters governed by the Convention and its Protocols respectively.

Member States shall not make declarations on matters which are in the jurisdiction, in the competence of the European Union. The European Union makes any such declaration on behalf of itself.

So UNIDROIT, that is the bottom line here, as the depositary is obliged to accept instruments of ratification which accord to the Cape Town Convention and any relevant protocol even if they are not in conformity with European Union law because it is an old rule of international law that only international law overrides these internal problems on competences of the European Union with its member States. There are clever people that take Article 8 as a possible solution that offers Contracting States an opt-out solution. This Article, it says, applies unless a Contracting State has made a declaration pursuant to

that relevant Article of this Protocol and there is a possible way that by using the opt-out declaration, the Protocol can be signed and ratified in a version that might avoid an effect on European Union rules on applicable law. But again this is our internal problem and, therefore, I just want to know come to some overriding things that I think are of greater relevance to all of you here as members of the Legal Subcommittee.

Having participated in the Berlin Conference, having made some experience with the working methods there, I just want to make some observations.

The Berlin Space Protocol, if I remember correctly, is the first space-related international agreement that might enter into force, not yet, after this famous Moon Agreement of 1979, and one may ask the question, there are two different matters. The Moon Agreement was worked out at the United Nations with the pre-work of the United Nations Committee on the Peaceful Uses of Outer Space Legal Subcommittee and Main Committee.

After that, it never worked with bringing into force international agreements and even the Moon Agreement has, as you know, so far only 13 or 14 instruments of ratification.

This, of course, after a relatively short period of time, we got a international private law convention with the Space Protocol of maybe some commercial relevance and one may ask the question, is this maybe the trigger for State Parties to be more inclined to enter into agreements there because apparently there is a rebel spirit or observed this a scientist, that there is a great reluctance in the Legal Subcommittee and the Main Committee to come to any binding legal agreement and says we had better go to something which, for me, is a horror vision as a public international lawyer to something like soft law, which in my opinion is a contradiction in itself. So one does not want to be bound.

Is this, for example, the Berlin Space Protocol a new and innovative method to come to other parts of agreement, is, I think, a rather legitimate question one can ask, if one observes these two things.

Moreover, the Space Protocol is a challenging example for the interaction between a public law framework on the one hand and, of course, several private law instruments on these commercial questions of securing space assets and the financing, of course, for financing purposes. And it is an example that is co-existent of different registration systems in the field of space.

As to future perspectives, some remarks. The Berlin Protocol is an optional instrument that offers a new tool for the financing of commercial space activities. It might not be of concern but there are companies which can provide for financing in any way that has rather the ability to grant start-up companies access the investment capital and finance needed to launch new space-based projects. Therefore, I think there was a _____(?). The Berlin Protocol is to be considered as an instrument that is not required by all but needed by some and as such a rather positive development.

What promise for the future? In my opinion, the Protocol offers an extend flexibility, for example, as underlined by the fact that it is left up to the first regulations to define the criteria to identify a space asset for the purpose of registration. This rather flexible approach offers the opportunity to meet the needs of the commercial space, financial and insurance communities. The work that is coming now, the work of the Preparatory Commission to be done by representatives of governments, international organizations and industry in relation to the establishment and operation of the International Registry is, therefore, of particular importance.

What is the promise for the future? It is up to the participants of the Preparatory Commission to formulate the necessary implementing instruments and up to the negotiating States to come up with the necessary quorum of ratifications and I am quite hopeful that this Space Assets Protocol will, at the end of the day, enter into force.

Thank you very much for your attention.

Mr. S. MARCHISIO (Co-Chair): Thank you very much Professor Hobe and Dr. Schmidt-Tedd for your presentations which have really given us food for thought and I will allow, if this is allowed, two questions as in the previous session.

Mr. C. SCHMEICHEL (Canada): Thank you Professor Marchisio. I have one question and then one commentary observation which can be taken in a more whimsical way. The question is perhaps for Professor Schmidt-Tedd. You talked about resolution number four regarding financing and I am just wondering if there is any consultations with the commercial financing industry or representations from that industry regarding the criteria that might exist for any discounts that are offered. And the reason I ask is after going through the gauntlet of ratifying the Aircraft Protocol, you found that under the aircraft

sector understanding there is a number of qualifying declarations you had to make as a State and a number of declarations you could not make as a State in order to have your operators qualify for the discount. Not to scare delegations, but there may be some further caveats on even the ability to get the discount but we would only know that if the financing industry gave us an indication of that or States gave us some indication, the aircraft sector understanding, of course, being under the OECD mechanism.

The comment or observation was to the slide that said that the Berlin Protocol was the first or only agreement in the last 30 years. I believe it may be up to this group to consider whether maybe the ISS Intergovernmental Agreement is an international agreement that is relevant to space law or if there are other such agreements that exist. It is not of great consequence but just when we are talking about space law and the progressive development of space law and agreements, there are other agreements out there that have occurred over the last 30 years that, I think, deserve attention and they probably will under a new agenda item in total review of international mechanisms for cooperation on the peaceful exploration and use of outer space.

Thank you.

Mr. B. SCHMIDT-TEDD (Germany): As you mentioned it, it is still an open development. The Preparatory Commission will show what the concrete solution will convince the financing sector as this instrument is practical enough. I think clear identification of payloads of combined assets is an important point so that it is practical importance for, let us say, limited investments. We have the special intention to support this financing matter for payloads and related assets and to have very clear identification criteria might be helpful to make it work in practice.

Mr. S. HOBE (Germany): Just a brief remark. Your observation that, in fact, there IGA entered into force but this Committee, if I am not mistaken, had nothing to do with the IGA. That is exactly my point. Yes, so far, if I observe the situation, after the Moon Agreement of 1979, we had only non-binding resolutions that were the product generated within the United Nations. I am just asking the question why and, for example, why other agreements are concluded by a smaller group of countries advancing some work, getting out of the UN scope. That is precisely my observation and my part of concern that we might discuss this on a bilateral level later on.

Thank you.

Mr. S. MARCHISIO (Co-Chair): Thank you very much. Any other comments.

Yes, Greece. You have the floor Vassilios.

Mr. V. CASSAPOGLOU (Greece): Thank you. One clarification from Bernard and two comments from the other, Stephan. First of all, may I ask you, you mentioned that concerning the Aircraft Protocol, we have 300,000 registrations. It is all the aircraft fleet of the world because it is maybe not only the hulls but also the engines. This number is fantastic. That is the clarification I would like.

And the comments, one for you. You mentioned that if we do not succeed to decide within the Plenipotentiary(?) Conference to invite the ITU to be the Supervisory Authority, you put in the slide, UNCOPUOS. I am afraid there is a lapse because there is not at all UNCOPUOS but this is impossible. We have this legal opinion from New York so it is impossible to come back again to speak about the United Nations in general.

And also the comment concerning my friend Stephan. He is absolutely right with his concluding remark. It is quite big for a very small bill, let us say. Thank you.

Mr. S. HOBE (Germany): Concerning the number of registrations, there is the total number of 300,000 and concerning the aircraft, there is a number round about 120-130, these numbers are as usual in the publication of Martin Stanford so you can read the very precise number but roughly speaking, we are talking about 300,000 registrations for 120-130 objects in total. Nevertheless, I think this a success for an instrument which is only five years old.

Concerning COPUOS, this slide was a slide about the history of the discussions, a subject of when COPUOS or any related body as Supervisory Authority is closed. The point I wanted to mention is that it is not a firm fixed decision with ITU. ITU has been invited because they are the most interested one after this long-lasting discussion process but if the relevant body of ITU would decide not to accept this role, then there will be alternative solutions but not the solution when COPUOS.

Mr. S. MARCHISIO (Co-Chair): Thank you very much.

Now we move to the other speaker and I give the floor once again to the President of the IISL, Tanja Masson.

Ms. T. MASSON-ZWAAN (Co-Chair): Thank you Professor Marchisio. We are eager to hear now from the perspective from emerging space-faring nations with Patrick Petrola Sekhula who will speak from South Africa, of course, the host country of the Cape Town Convention and, as we have heard several times, the Space Protocol might be of particular interest for emerging and developing markets and, therefore, I think we all look very much forward hearing from you also as a member of the South African delegation in COPUOS. I have here the machine for you.

Mr. P. P. SEKHULA (South Africa): Thank you very much Professor Tanja for giving us this opportunity of sharing some ideas in regard to designing an exciting process, as defined and alluded to by the creators and Mr. Stanford, here sitting next to me. We have had an opportunity of engaging to a great extent in regard to first the substantive provisions of the Protocol and its intended aims and objectives and the probability and possibilities that arises out of the implementation of the Protocol for the development of the space commercial businesses industry in the context of the developing world.

Let me at the onset clarify that our perspective here is confined to the discussions that are unfolding in the agency that I represent, the South African Council for Space Affairs, which is charged with the duties of firstly advising the South African Government in terms of the obligations arising out of international agreements such as the Space Assets Protocol, as well as providing a regulatory framework for space activities in South Africa.

As of this moment, there is no national government position in regard to the adoption or rejection of the Space Assets Protocol. Therefore, the perspective does not reflect in any way whatsoever the official government position. But ongoing discussions we are required by our Constitution as well as our legal framework to engage the affected parties who recommend the processes of promulgation of any legal instrument and under our Constitution, the South African Constitution Arrangement and International Agreement must be implemented into domestic law through a parliamentary process. That would be the last step after the consultations that we have undertaken in regard to the Space Assets Protocol.

The perspective, as developed jointly with my colleague advocate, _____(?) Makapela(?), who is heading our Earth Observation Secretariat in the country. She unfortunately not able to be with us so where my shortcomings that arises out of this presentation are just mine alone.

We intend to proceed along the following trajectory. Our outline contains a little bit of a context in which the African space industry is unfolding so, in fact, our developing world perspective would be confined to the African continent, albeit that there may be commonalities in respect to those features in the development of the space industry in the developing world but the problems and the benefits as well as the overall assessment will even then be confined to what we deal with on a daily basis which is mainly African countries and South Africa as specifically.

Along those lines then we will try to out the benefits of the use of space technologies. We are going to now given the time and we cannot preach to the converted. The mere fact that we are here exactly that space technology is particularly crucial in countries where there is lack of terrestrial infrastructure in a lot of applications that space technologies could offer great advantages such as communications, disaster management responses, planning, land use as well as environmental and resource management.

So we will, therefore, look into the space infrastructure in the selected African countries that are actually using to a great extent or invested in space assets as of this moment. We will look at the Space Assets Protocol briefly, what the benefits arise there. Mr. Stanford has already alluded to that to a great extent so we will be short in that respect. But then of practical relevance is the way in which we have experienced in the South African context the implementation of the Convention itself in respect to the Aircraft Equipment Protocol and see how will that actually impact on the unfolding process where we seek to recommend for the adoption or not of the Space Assets Protocol and just a word in regard to our domestic legislative requirements for incorporating international agreements such as the Space Assets Protocol.

If you will allow me to look into the background and the context in which we make our assessments. We look into exactly what the Cape Town Convention is and what it requires and that has already been taken off by the experts in the field. I will not go into that now. I will look into the essential features of the Space Assets Protocol as it has already

been alluded as well, our understanding of it and that is where we think it provides a good positive framework to illustrate the importance of the Space Assets Protocol is indeed in the creation of this international legal framework that assures the enforcement of security interests in space assets.

Secondly, the establishment of an International Registry where the security interest in space assets will be contained and the most important aspect of all the two main objectives is the _____(?) in which the asset-based financing in space assets will then be outlined to the respective parties that are intending to utilize the Protocol or wanting to finance their space assets.

What we have outlined here basically are the sort of benefit in respect to the developing world in respect to the African context where the space technologies will be able to leapfrog many of the under-developed infrastructures and provide essential basic services that the countries require in regard to addressing the socio-economic imperatives of the countries as such. What we know is a major challenge is that finance for esoteric technologies like satellites in countries where there is competing needs of basic infrastructure, clinics, roads, health services, all that when you start speaking about space and then the need for investing huge sums of money into satellites, there needs to be a real rationalization of the need for such an investment.

So what we then see is there is really no financing mechanism in the developing world for space technologies at the moment. We will see that in a moment.

As we go along, we find that in the African context there are only a few countries that have got space capabilities and there we can quickly name this. We have South Africa, which started a space programme around 1999 and thus far has launched two satellites, namely Earth observation and experimental satellites so to speak, but the health programme led to a great extent some really good images in respect to Earth observation. Nigeria has launched a number of satellites. We have got Algeria that has also got space capabilities in regard to the number of satellites that it has launched. Egypt, it is a space capable nation. Tunisia, we know they have got quite a few programmes and a number of satellites. Kenya and Ghana and Uganda have now recently pronounced their intentions to enter the space environment through numerous means, not necessarily financing satellites as such but starting on a small scale like in the case of Ghana, there is a CANSAT Programme at one of their

universities there. In Kenya, there is a testing facility that is being refurbished in respect to that and some very ambitious programmes in respect of engaging in space capabilities.

Obviously this we will discuss in the context of our desktop study. We know there are representatives of these countries in here which is subject to correction of course, but as we do know, at the moment this is the extent to which we have got the space assets-based on the African continent to start speaking as to whether or not their capabilities that could spare the continental efforts for socio-economic development through the use of space technologies.

We have observed some keys trends in this respect on the African continent in regard to the deployment of space assets. We find that most of the space projects on the continent are government-funded or guided and implemented by government-owned agencies with specific public use, for instance, Earth observation. This is main space applications in most of the satellites that we have just mentioned by these countries. There is a great reliance on international partnerships. We find that a satellite is manufactured with one of the technical partners in one of the developed countries so there is a very liberal satellite development capability on the ground in these countries. That is what we are talking about very limited local capability for space assets manufacturing.

Presently, the dominant feature is Earth observation use for satellites, communications, there is no African country except for Nigeria that has launched a satellite specifically for communications services as we speak but there are plans South Africa intends as actually putting in a national space programme that is now being adopted and among the big features of that programme is the manufacture of small satellites and communication satellites is part and parcel of that.

The issue that arises in respect to government-owned and government-funded satellites or space programmes is _____(?) because this would be an enabler for private entrepreneurial companies to get involved in the space business. They show the wide range of the other, some programmes of public-private partnerships that the countries need to be involved in in order to, one, secure whatever benefits that arises out of this international legal regime that presents opportunity for creditors in space assets.

I will repeat essentially what we just mentioned that the Space Assets Protocol as is being outlined provides for debt certainty(?) for creditors and

that should in the main be an incentive for creditors to supply the required financing in an environment in which there is certainty or there is not much knowledge. What we do know is that at the level of the legal enforcement of international legal instruments in Africa specifically is something that is not very knowledgeable to many of the creditors and financiers for many applications on the continent. So if there these mechanisms that are out there that I know will probably will spare that kind of commercial incentives for satellite and space technology deployment on the continent.

The main feature of the Space Assets Protocol from our understanding and our vantage point is it really provides many benefits for the creditors. The creditors are assured access to debtors rights, for instance, as has been outlined that the revenue stream from the space assets will accrue to such a creditor in case of a default. The creditors will have the right to take possession, the control of the space assets where the debtor is unable to continue because of financial difficulties. The Space Assets Protocol provides a number of concrete provisions for assistance by the courts in the various jurisdictions who are on the jurisdiction where the parties themselves determine that they will seek recourse in cases of disputes, that the courts in those jurisdictions are empowered to intervene and provide such remedies as are available under the Convention.

Another important factor for the international code(?) for a developing world such as South Africa is that the Space Assets Protocol leave in place the rights and obligations of States in regard to their ability to monitor exactly who operates on their territory in regard to launches, in regard to transfers of licences, for instances, the right of the country to liaise with the ITU for the use of orbital slots or radio frequencies, are still preserved to this date. And obviously the need for national security regulations, the Space Assets Protocol does not tamper with that, it is quite a good aspect of the Protocol.

Now there are procedural comments arising out of the framework of the Protocol as such and one is that is the direct result of the lack of consideration of the right of debtors in respect to what kind of benefits that they will get in respect concretely provided in the Protocol itself, not pronounced in a policy framework but there is no provision, for a *quid pro quo* in respect to providing such a wide range of powers to the creditors contained in the Protocol. Hence, the idea of resolution four that was adopted at the Berlin Conference which really mirrors what is contained in the Aircraft Equipment Protocol and that the aircraft

sector understanding what is called the Cape Town List that the number of certain declarations have to be made for a country to be able to benefit from being a party to the Convention and the Aircraft Equipment Protocol.

So the suggestion under resolution 4 will be a similar framework to be instituted where developing countries could be able to be guaranteed certain discounts on the exposure rates or on the financing that will be available made to such in the same line as the Cape Town List, maybe a Berlin List so to speak, and that would go a long way and our opinion to reassure most of the developing world that it is worthwhile to be part and parcel of the Convention as well as the Space Assets Protocol. That is our humble submission and suggestion.

In the South African context, this is the requirement or rather the plea for this resolution four. It is really what we have experienced in South Africa in the implementation of the Convention and the Aircraft Protocol because of the declaration that the South African Government made in that respect and those declarations when they were evaluated at some later stage, vis-à-vis, the Cape Town List, it was found that there is some uncertainty as to whether or not that South Africa has fairly and conclusively complied with the requirements of the Cape Town List. So that legal uncertainty at the moment has deprived the airline industry from benefiting from the 30 per cent discount that has been alluded to earlier on in acquiring financing for their aircraft. What that translates to in respect of the Space Assets Protocol is that the nature of the Convention system is that the declarations made under one Protocol will be deemed to have been made under the subsequent Protocol. So if we have got problems with the declarations and the lack of adherence to the requirements of the Cape Town List in order to be able to benefit from the convention system under the Aircraft Equipment Protocol, we have made them to look into redoing our declarations to be able to bring in continent with stand forth with the aircraft sector understanding and hopefully the new declarations that we made can be applicable in the case of the Space Assets Protocol. Hopefully we will be able to gain some more benefits out of it.

Those suggested experiences that we have encountered, what exactly are these problems? The one problem is the self-help remedies as contained in the Cape Town Convention as well as the Aircraft Equipment Protocol. Self-help under the South African constitutional paradigm is an anomaly because Section 23 of the Constitution provides for the right of access to court in order to get a redress in cases of difficulties. Under the Convention and the Protocol, an

agreed creditor can proceed upon addressing minimal evidence to help themselves to the asset that is subject to the security interest without resorting to the court. But that is where if the country adopted an alternative. There are two alternatives under the Protocol provision, Alternative A and Alternative B, we decided to adopt Alternative A under the Convention, that is a problem, but if we go now and redo our declarations and opt for Alternative B, that will then require a legal process that a creditor should, in fact, get a court order before they can go and take possession of an aircraft or if the same is applicable under the Space Assets Protocol, take control of the debtors right or take possession of the command(?) province(?) whichever case it may be.

That is the process that we are addressing through the Space Council, the agency that I have just outlined to you, in conjunction or together with the Airline Association of South Africa to look into how we can redo the declarations that were made under the Aircraft Protocol in order to be in adherence with the present legal regime as contained in the Cape Town List and hopefully those will smooth the way in regard to recommending a positive outcome for the Space Assets Protocol.

Along those lines, we would just like to take Mr. Stanford's offer to open more discussions, more involvement, with more practice, with more countries and to that to explain or rather making more information available about the Protocol. Our personal view is that if it does, in fact, lower the transaction cost for start-ups and entrepreneurial companies to be able to access better financing rates, it may spur the development of commercial space activities on the continent because there is a need, there is a will, there is an intention to actually do that. The problem is as we see it at the moment, it is really the prohibited costs of space assets as looked at against the other national imperatives of such a communicative allotment.

And I thank you for your attention.

Ms. T. MASSON-ZWAAN (Co-Chair): Thank you very much. Is there any question from the room at this point?

Yes, Ms. Ramirez.

Ms. R. M. RAMIREZ DE ARELLANO (Mexico) (*interpretation from Spanish*): Thank you for an excellent presentation. Strangely enough, I arrived in Vienna this morning and I had to prepare something on Mexican space exploration and I went to South Africa's website and I found all the information on

space development and all the positive aspects of it and so I think it is excellent to have space infrastructure. I think this is something that we need in Mexico. We need to talk about satellites. We need to talk about space infrastructure.

You mentioned something very interesting, national legislation. Mexico has detailed legislation for guarantees. We have a very strong civil code based on the Napoleonic Code and we also have good trade law and I think creditors can feel satisfied when they have to call in a guarantee. Recently the Mexican Government acquired the MEXSAT from a US company in excellent conditions and in the Protocol we see that this contract is something that we have had really since Roman times. What I am getting at here is that the provisions contained in the Protocol and the Convention on Mobile Equipment and it sort of comes up against national legislation. We talk about the rights of individuals through a licence or a concession and, if I have understood correctly, you are saying, yes, you have a right to the guarantee because I have not paid what I owe you but I do have some domestic procedure that has to be complied with. And this concerns me. I know that we have a long way to go.

Dr. Hobe referred to something which really grabbed my attention. The Moon Agreement has 15 signatures. We know what the problems are regarding nuclear power sources and then, of course, international cooperation which is the basis for developing the space industry today, especially in this forum, and we are not advancing enough in strengthening space law and I believe that is a real necessity. For over 30 years now, we have been concerned about this. It would seem that treaties are bewitched and it is better not to touch them or revisit them. So we do have a long way to go regarding UNIDROIT and the three Protocols.

I believe that Mr. Stanford and the other speakers, I am sorry, I cannot see your names properly, I think that the work that has been done is very interesting. I have been following it since 1997 or 1998. I think basically when it all started but there is still a lot to be done and we need to persuade the powers that be, we need to persuade governments about the importance of funding and that if I execute a guarantee, if I am going to guarantee something to the creditor that public services need to be guaranteed. I am sorry I keep using the word guarantee. And, as I said, we have a long way to go within our national legislations for this.

This is a comment. It is not really a question. There is a great deal of work to be done on this.

Thank you.

Ms. T. MASSON-ZWAAN (Co-Chair): Thank you for your comment. Would you nonetheless like to react and perhaps Professor to remark regarding this.

Mr. P. P. SEKHULA (South Africa): Thank you Professor. We totally agree with the sentiments outlined that there is work to be done in respect of disseminating the information firstly, and secondly, addressing those kinds of interrelations between the domestic as well as the international legal regime in regard to the Space Assets Protocol. And, yes, that Mr. Stanford as I alluded to and I hope that some action will emanate there from. Thank you for your input.

Ms. T. MASSON-ZWAAN (Co-Chair): I guess it shows the usefulness of a meeting like this if we can talk to each other and exchange experiences, that is already very beneficial.

Professor Hobe, would you like to speak?

Mr. S. HOBE (Germany): Of course, I would take that opportunity because I could not agree more with your concerns and I am speaking out on that problem. I think that the real flaw concerning human activities in outer space is in great danger. I think it is not a positive development that too many countries, if I observe this from a purely scientific point, are too easily satisfied with something which is less stringent than really firm law because the law is protecting those who cannot afford anything else. It protects those who need the protection and, therefore, I am concerned if more and more countries are reluctant to enter into binding, and I underline that, binding agreements because they want to get out, have the easy way out.

This is just an observation. Might we question observing the legislation process that UNIDROIT is? Does this have also to do with the method of law-making. That is my hypothesis. That may have to do with the method, maybe also, of course, with the will, maybe if there is more commercial interest concerned than there is in greater likelihood of achieving an agreement on something if there is a main bottom line to agree at. But, yes, I wanted to make that point and to bring it to your attention to maybe stimulate a discussion on that point which I am writing about for quite some time about the problem of the observation of the rule of law concerning human activities in outer space.

Thank you.

Ms. T. MASSON-ZWAAN (Co-Chair): Thank you Professor Hobe. Are there any other questions for Mr. Sekhula. Mr. Vassilios Cassapoglou.

Mr. V. CASSAPOGLOU (Greece): Thank you. Just to continue the idea of my colleague from Mexico but also my colleague from the Cologne Institute, the fear is to avoid because it is in my view a mathematical problem. In 192 United Nations member States, how many of them are economically able to have a national satellite system?

Second, the actual market price to acquire a satellite, a medium satellite, communications satellite, is of the order of 200 millions Euros/Dollars, and you have to add, that is the price for the satellite plus the price for the launching and you have to add the enormous price you have to pay the insurance company and if you are able to pay cash. So I do not know how many States, I repeat, are able to do that. And if it is very many States to business because we do not speak for the establishment of a public service, and you are right maybe our colleague from Mexico, is to make business. I think it is a great risk or a fear also to have a repetition of what happened during the end, or the beginning, let us say, the colonization of especially African States and in the early 50s and early 60s, that for national prestige reasons, the new States established their own aviation companies with the exploitation of these lines and these companies, they became what we say in France, *compagnie(?) d'etre(?)*. And finally, they are _____(?). I do not know if it is only for national prestige to establish this very expensive. So we have to have a new approach. Maybe in regional systems. I do not speak for military satellites and so on but maybe for the satellites either communication or remote sensing. We have to reconsider the whole thing.

Ms. T. MASSON-ZWAAN (Co-Chair): I have Professor Marchisio who would like to make a reaction on that. Thank you very much for your comment.

Mr. S. MARCHISIO (Co-Chair): If you allow me just to add one word to the concerns brought up by our friend, Ms. Ramirez from Mexico, concerning the implementation in internal law and domestic legislation of the Protocol.

I would take the move from the fact that we had two phases into the negotiation of the Protocol. The first one was from 2002-2009 and during this phase we had States raising concerns in the sense that the Protocol or the draft Protocol was too much

commercially oriented and did not take into account sufficiently the concerns that you raised such as the public service concerns and domestic implementation or inconsistency with national legislation of public order.

In the second phase from 2009 to the end of the negotiations in Berlin, there were other kinds of concerns raised by big operators such as INTELSAT and the Associate _____(?). Just for the opposite reason because the drafting was concealing too much to these kind of concerns. The Protocol was in between these two different kinds of concerns. And as far as you are concerned, I would like to remind that not only the public service clause has been introduced in the Protocol and I do not make any judgement or value on that because I know there are other actors or stakeholder are against the introduction of the public service clause, but also there one other clause on limitations on remedies and this Article 26 of the Space Protocol. That takes into account a lot of concerns. It is said that the Protocol does not affect the size by a Contracting State of its authority to issue licences, approvals, permits or authorizations for the launch and operation of its assets or the provision of any service to the use or with the support of space assets, and so on, until the end of the provision of paragraph 3 which even takes into account the national security interests of the State together with the support of control of goods, technology, legislation, data and services.

It is probably the inclusion of this kind of provisions into the Protocol that raised the concerns of the big operators of the space sector that have preferred a more soft instrument, a more simple instrument without such kind of provisions.

Ms. T. MASSON-ZWAAN (Co-Chair):
Thank you Professor Marchisio.

Is there any direct question to the point of view from South Africa?

If not, then I would like to proceed and present a statement by the author of the next paper which is by Mr. Chris Johnson, who is an LL.M. from the University of Leiden and also from ISU and who could unfortunately not be with us today but he has sent us this statement and I will be happy to read that for you.

Could I have the thing for the slides?

So whenever I say "T", I mean Chris.

I regret that I could not attend the Symposium in person but I look forward to reading the various papers submitted on this interesting topic and seeing many of you again at some future event.

Since the fall of 2009, I have had the privilege of attending two meetings of Governmental Experts in Rome, engaged in the drafting of the Space Assets Protocol under your consideration today. Meetings where I was able to get first-hand insight as an impartial observer to the preparatory work and dialogues taken towards finalizing this international legal instrument. I subsequently read and learned from the scholarly academic literature concerning the Cape Town Convention and Space Assets Protocol under the tutelage of Professors and Faculty at Leiden University.

In the summer of 2010, I completed my Masters Endomol(?) Thesis on the Space Assets Protocol which was, at the time, still in a draft form. Having spent time trying to understand the complexities of the Cape Town Convention, its various Protocols, the international commercial law framework in which it exists and the global space industry it will affect, it is my pleasure to relate some of my impressions and analysis of the now adopted Space Assets Protocol and I offer what I hope is both a covenant, non-partisan and sufficiently academic viewpoint with my paper submitted to this Symposium with the title "The Space Assets Protocol: A look Ahead".

The March 2012 Diplomatic Conference in Bremen, Germany, for the adoption of the Protocol to the Cape Town Convention on International Interests in Mobile Equipment in Matters Specific to Space Assets, is the closing of one chapter in the life of this unique instrument of private international law and the beginning of another.

The Space Assets Protocol has developed over a course of its drafting and negotiation history and its potential are as yet untested. In my paper, I briefly summarized the impetus behind the Cape Town Convention and subsequent protocols on aircraft, rolling stock and space assets and the problem of applying the rule *Lex Rave Site*(?) to assets that move across and beyond jurisdictions where financial interests in them were created.

As this unknowable or unpredictable nature of what jurisdiction and movable assets may enter leads to the risk that financial interests in them held by creditors and other lenders might be at the mercy of foreign insolvency or default provisions, a conflict of

law issues arises which can be expeditiously solved by the creation of an international interest under a transparent and publicly accessible international registry and to which international interests are under uniform default provisions.

Economically speaking, legal uncertainty regarding creditors rights correlates to financial risk as two variables which move together. Reducing legal uncertainty reduces financial risk. In turn, reducing financial risks leads to lower transaction costs. Creditors can now demand less collateral in secured transactions. With a safer financial base, creditors loan at lower rates which foster lending as more lenders and potential debtors enter the market.

In the context of securing financial for costly space projects, new market entrants including start-up firms, smaller operators and firms and actors from developing countries and emerging economies can enlarge the market and drive innovation, enhance transparency and cheaper financing offers to foster development of commercial space actors across the world.

However, established firms with routine financing methods will solve the *Lex Rae Site* problem on a contractual basis between parties rather than relying on a uniform international regime, began to harbour tentative feelings towards the draft Protocol and to certain of its provisions, a hesitancy which later hardened into uncertainty and even resistance. While some of their reservations related to substantive drafting language on the treatment of, amongst other issues, salvage rights or the treatment of public services and their possible suspension in case of insolvency, it must also be considered that there established and routine business models faced an uncertain future under an expanded commercial market with new entrants, lower collateral requirements and transparent international registers of interests under international and uniform regimes.

My belief is that the Space Assets Protocol will foster new entrants and expanding opportunities in emerging markets and developing space capable countries more than that it will damage the robust and highly profitable existing satellite industry. UNIDROIT has repeatedly raised these potentially beneficial consequences but perhaps not widely or loudly enough. In their own words, uniform, predictable and commercially-oriented regime governing the taking of security in space assets has the potential to make a considerable difference to the quality of life of countless human beings in the emerging and developing worlds through the enhanced

access to satellite services for such life and death matters as disaster forecasting and broader diversity of satellite operators that it will foster. This is the promise of the Space Assets Protocol.

The nations which would ratify this Protocol, as I explained in my paper, are the countries which stand to gain most from the benefits of the international regime it creates. Countries in South-East Asia, Africa and Latin America, all of which were well represented in the various Committees of Government Experts and at the subsequent Diplomatic Conference should ratify this Protocol and the Cape Town Convention which it complements.

Additionally, various others, stakeholders and observers alike, should seek the wider recognition, appreciation and implementation of the Protocol, those interested in space law, private international law, international commercial law, industrial policy and development and new space and commercial space advocates should be made aware of the Space Assets Protocol and the better commercial environment it can help create.

This means raising awareness and capacity-building by members of the international civil society such as the IISL, ECSL and related organizations, will help. In understanding and addressing the criticism levelled against the Protocol, advocates can dispel misunderstandings surrounding the Protocol and clarify what the Protocol can do and who it can benefit.

It will be a signal of the Protocol's success if ratification, adoption and accession comes from those countries which can benefit from it rather more than its reception by the western rich and already space-capable countries. This, then, is to look ahead. It is a look abroad and far afield to those hopeful market entrants in previously inconvenient jurisdictions or where legal and regulatory constraints on collated secured financing previously hampered innovation and investment in space technology now can begin to enter the new more globalized commercial space era.

I invite all those interested in realizing these possibilities to read my paper and I thank you for your time and attention.

I am not in a position to answer questions to this paper so I am not going to invite any but, of course, the paper will be published on the website of the Office for Outer Space Affairs, along with the other presentations.

Since we do have some time left, I wonder if there are any other general questions to any of the speakers and I would like to extend that invitation also to the speakers themselves who might still have questions for the other speakers or to themselves maybe before we go to the concluding part of this Symposium.

Yes, Jean-François Mayence.

Mr. J.-F. MAYENCE (Belgium): Thank you very much Tanja. Just a question to Mr. Stanford and to UNIDROIT. Sorry, it is not directly related to the very topic of this session of this workshop but I wanted to know what is the current status of the other project of UNIDROIT related to space activities which is, if my understanding is correct, a project on the liability for _____(?) services and I was wondering if you were aware of the current status of this project to be processed by UNIDROIT.

Mr. M. STANFORD (International Institute for the Unification of Private Law): I think I did mention I did retire last June so I am not perhaps *au courant*(?) as I would like to be in answering the question raised by Jean-François but I think what basically we have been for the last few years is that the Governing Council has been considering the desirability of this project and there has been a difference of opinion, in particular between two delegations, two members of the Governing Council, and I think the situation is simply that the consultations are continuing but that you are right in referring to it as a project but it is a project as it were without any authority to actually conduct drafting. It is more a subject which the subject of ongoing consultations with a view to committing the Governing Council to take a decision as to the appropriateness of UNIDROIT as a forum for drafting the _____(?) Rules on the Liability for Damage Caused by Satellites and that is the current situation. The Governing Council is meeting again in a month's time and they will be looking at this again. But as I say, at the moment, as far as I know, but I speak there with a certain hesitation, given my position from the centre of events, I think it is probably, i.e., consultations are continuing but the Governing Council will have to take a decision on the basis of these consultations before any work in the sense of drafting of an instrument can commence.

Thank you.

Ms. T. MASSON-ZWAAN (Co-Chair): Thank you Martin.

Are there any other general questions?

I actually have a question. Assets in the Protocol are explained as assets and describing assets and then the words "in space" are added. Were there any discussions about the fact that there is no definition and delimitation of outer space and is this perhaps a topic where the discussions in this body could be helpful to the debate. I am not quite sure whom I am asking the question to actually but if anyone feels like answering me, go ahead.

Mr. B. SCHMIDT-TEDD (Germany): The definition space assets refers to uniquely identifiable assets that is primarily focused and then designed to be launched into space. Even if there would be the other option of making a cut at the launching end, it would not be different so it is an object with the intention to be launched in space but there is no meaning to the delimitation of outer space.

I just think that in the context of space asset and the definition, the registration question is perhaps more related to this body here because it is, or course, always by motivation to have a look on this interrelation between the private register and the registration system and to avoid any conflicts in this relation so as a result I would say as a space asset does not, the definition of space asset does not offer a new approach for the delimitation of outer space but there could be a lock on the interrelation between to end registration system and this new private one. And especially the question if upon complete registration would be relevant in view of the acceptance of the private registration.

Mr. S. MARCHISIO (Co-Chair): Just to add one point concerning your question. There is another provision in the Protocol among the first provisions, I do not remember now the number, probably it is four or five, which deals with the scope of application of the Protocol on the Space Assets and it is said in this provision that the Protocol does not apply to mobile equipment which is covered by the Aircraft Protocol but there is no criteria for knowing which are space of the aircraft. It was discussed also with regard to tools used for sub-orbital flight in future will the Protocol apply to such kind of objects.

Ms. T. MASSON-ZWAAN (Co-Chair): That was, of course, the background of my question because I think there is something that says that the Space Protocol would not apply to aircraft objects which are designed to be temporarily in outer space. I saw another remark by Dr. Ramirez.

Ms. R. M. RAMIREZ DE ARELLANO (Mexico) (*interpretation from Spanish*): I would not

like to be as bold as you Tanja because the Convention and the three Protocols really establish the guidelines for space borders and limits. Of course, we should take into account what Dr. Marchisio said because if that was not the case there would just be one single protocol for space assets considering that aircraft go through the air and we have 100 kilometres from the Earth but I have been thinking right from the beginning, I said to myself we have gone on so much about the delimitation of outer space and then we have the Convention and we could actually focus on one single protocol, aircraft, satellite, we are talking about space and we end up talking about delimitation but these are different things so it is a good starting point and I think that Tanja's question was excellent./

Ms. T. MASSON-ZWAAN (Co-Chair): Thank you. I think I would like to move if my co-Chair, Professor Marchisio agrees to give the floor to the Chairman of the Legal Subcommittee to give us some of his views on the topic and on the Symposium as concluding remarks.

The CHAIRMAN: Thank you very much Tanja and I certainly should begin by expressing my appreciation to the organizers of the Symposium, the International Institute for Space Law and the European Centre for Space Law, as well as the speakers in the event and all of whom I have known in a personal and professional capacity for many years now and to bear the analogy, Tanja you made earlier when the Symposium began about witnessing the initiation of the idea and the birth. In some ways, that also rings true for me because I participated at the fortieth session of the Legal Subcommittee in 2001 when this subject formed its way on to the agenda at the Legal Subcommittee and was elected yourselves, distinguished delegates, to chair the Subcommittee at its fifty-first session after the Diplomatic Conference in Berlin. So in some ways, I see an analogy there and participated in the activities that took place in between.

I have a few remarks to make with respect. What to the utility(?) *per se* of the instrument which, without a doubt is absolutely necessary when you consider the relevance of space technology and how the applications and benefits of the use of this technology has come to permeate every aspect of our daily existence. What more remarks that derive from the interaction that I will say have been fortunate to be witness to from all of the speakers whom have clearly given excellent presentations including the student speaker who has been unable to make it here, which for the record, I think, is an extremely commendable practice of having young scholars to be able to speak before an audience of this nature. And in that respect,

will note that there seems to be an emphasis on the commercial aspect in the terminology and in the consequences on the one hand and the reference to public services and interestingly, at least from the perspective of the applicability of mandatory laws in the sense that you would have these laws that have to be applied for the domestic level because they are laws that apply as a consequence of contrast and they have been concluded by specific public entities. It is just an example, I think, of how we should underscore the relevance of the debtors in these sort of transactions, not necessarily being non-governmental entities as we understand it but actually public entities because there will always be certain applications from satellites that will be delivered by public entities and not by non-governmental entities. This is the first remark I have.

The second is a lot more related, and for the lack of a better word, with respect to the relationship in the methods of the Subcommittee, the duration between when the most recent binding instrument was adopted some 30 years ago and the work that has come out of the Committee and the Subcommittee in the intervening period up until now. I say this in addition to all of the comments which were made both from the floor and from the panel, in the sense that one of the principle items, I think, for consideration in both international space law and municipal legal systems, in implementing international obligations, would be how obligations become recognized at the municipal level to ensure that rights and obligations are created, not only for the State and its institutions but also for non-governmental entities. And in that respect, of the resolutions which have been adopted, principles of the General Assembly, under the auspices of the Committee and the Subcommittee, it would be accurate to contained that some of the principles which in the context of a resolution when they were adopted were considered as non-binding have found their way into very detailed national legislation.

The same could be said for guidelines, technical guidelines like the Space Debris Mitigation Guidelines. And so in that context, whilst it is appropriate, of course, for us to think of the public international legal context in which activities in outer space continue to be conducted, it is also, especially as we now continue to see the diversification of actors, to seriously take into how all these obligations that have arisen at the level of relationships between States have actually been implemented by these States in one form or another, understandably via established constitutional procedures.

On that note, I would very much again express my appreciation to the organizers for the opportunity to

have me here as a member of the panel and can, at least in my personal capacity, state that this has been a most thought-provoking and rich learning experience.

Thank you.

Ms. T. MASSON-ZWAAN (Co-Chair):
Thank you very much.

I would like to, on behalf of ECSL and IISL, thank all the speakers here today for having travelled to Vienna in as far as they were not already on their national delegations and for giving us these presentations. I would like to equally thank the Coordinating Committee of this Symposium and specifically Professor Schrogl and P. J. Blount who have worked hard to compose this interesting programme. I would like to apologize again for the absent speakers but I believe that we have, looking at the time, more than filled the time available to us with questions and comments and it is also good to have some time and not be under the stress of the clock every time.

I would also like to thank the Office for Outer Space Affairs, and particularly Mr. Hedman, who has been very helpful in arranging this Symposium in the practical manner. And last, but not least, I would like to invite all delegations to the reception that will be hosted by ECSL and IISL, as announced by the Chairman of the Legal Subcommittee, in the Mozart Room downstairs and we hope to see you there.

Thank you all for your kind attention. Thank you Mr. Brisibe for hosting us and we look forward to another good Symposium next year.

Thank you.

The Symposium ended at 17.55 p.m.