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THE PRELIMINARY DRAFT SPACE ASSETS PROTOCOL TO THE CAPE TOWN CONVENTION ON INTERNATIONAL INTERESTS IN MOBILE EQUIPMENT: AN OPPORTUNITY FOR GOVERNMENT AND INDUSTRY TO COMPARE NOTES IN THE RUN-UP TO THE INTERGOVERNMENTAL CONSULTATION PROCESS

(A colloquium organised by UNIDROIT, in co-operation with the European Centre for Space Law (E.C.S.L.), at the Head Office of the European Space Agency (E.S.A.), Paris, 5 September 2003):

SUMMARY REPORT

(prepared by the UNIDROIT Secretariat)

Rome, October 2003

I. INTRODUCTION

(a) Background to the colloquium

1. A colloquium on the preliminary draft Protocol to the Convention on International Interests in Mobile Equipment, opened to signature in Cape Town on 16 November 2001 (hereinafter referred to as the *Convention*), on Matters specific to Space Assets established by the Space Working Group and revised by a UNIDROIT Steering and Revisions Committee (Study LXXIIJ – Doc. 10 rev.) (hereinafter referred to as the *preliminary draft Protocol)* was held at the Head Office of the European Space Agency (E.S.A.) in Paris on 5 September 2003. This colloquium was organised by UNIDROIT in co-operation with the European Centre for Space Law (E.C.S.L.). It was intended to provide an opportunity for representatives of Government in the run-up to the intergovernmental consultation process on the preliminary draft Protocol, through a dialogue with representatives of industry, to form a clear idea of what was needed by way of legal framework to enhance the opportunities for the use of asset-based financing in respect of commercial space activities, and in particular to prepare the ground to be covered at the first session of the UNIDROIT Committee of governmental experts. The colloquium was directed at representatives of Government and industry from the Western Hemisphere. A similar colloquium for representatives of Government and industry from the Eastern Hemisphere was planned for April 2004 in Kuala Lumpur, at the invitation of the Malaysian National Space Agency.

(b) Opening of the colloquium

2. The colloquium was opened by *Mr J.-J. Dordain*, Director-General of the E.S.A., at 9.15 a.m. He expressed his appreciation that UNIDROIT had chosen to hold the colloquium for the Western Hemisphere at the Head Office of his Organisation. He recalled the support that both E.S.A. and E.C.S.L. had long given to UNIDROIT's efforts in this field. He indicated the great interest that E.S.A. and E.C.S.L. took in these efforts, which they saw as helping Governments, banks, insurers and the operators involved in space programmes to safeguard their essential interests. He also saw the preliminary draft Protocol having a beneficial effect in bringing about a rapprochement between international public law, and in particular the law of outer space, and international private law, not forgetting national laws and regulations on the subject, given that the activities contemplated under the preliminary draft Protocol transcended national and indeed terrestrial frontiers and would therefore need to make use of the law of outer space as appropriate.

3. The colloquium was attended by representatives of the Governments of 15 UNIDROIT member States, [1] seven intergovernmental Organisations, [2] three international non-governmental Organisations [3] and the world aerospace industry and financial community and

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[1] Argentina, Brazil, Canada, Czech Republic, France, Germany, Greece, Italy, Mexico, the Netherlands, Portugal, the Russian Federation, Switzerland, Turkey and the United States of America.

[2] European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), European Organisation for Safety of Air Navigation (EUROCONTROL), E.S.A., UNIDROIT, International Mobile Satellite Organization (I.M.S.O.), Organisation for Economic Co-operation and Development (O.E.C.D.) and United Nations Office for Outer Space Affairs (U.N./O.O.S.A.).

[3] E.C.S.L., International Institute for Space Law (I.I.S.L.) and Space Working Group (S.W.G.).

others.[4] It was chaired by *Mr S. Marchisio*, Vice-Chairman of the E.C.S.L., who, in his opening remarks, as Chairman of the Working Group of the Committee on the Peaceful Uses of Outer Space of the United Nations (U.N./COPUOS) on the preliminary draft Protocol, noted that considerable progress had been made at the 42nd session of the Legal Subcommittee of U.N./COPUOS, held in Vienna from 24 March to 4 April 2003, on the question as to whether the United Nations should act as Supervisory Authority of the future international registration system for space assets, with a tendency to recognise the appropriateness of the United Nations acting as Supervisory Authority. However, reservations had been expressed by some countries and it had been agreed that further information was therefore required before any decision could be reached on this subject, in particular regarding the financing of the future international registration system.

(c) Structure and business of the colloquium

4. The colloquium was structured in such a way as, following some words of introduction regarding the status of the Convention and the background to the preparation of the preliminary draft Protocol (by Mr M.J. Stanford, Principal Research Officer, UNIDROIT), regarding the role of the Space Working Group in organising the view of the space sector in relation to the Convention and the preliminary draft Protocol (by Mr P.D. Nesgos, Partner, Milbank, Tweed, Hadley & McCloy, New York / co-ordinator of the S.W.G.) and the fundamentals of asset-based financing from the perspective of a lender/lessor (by Mr R.W. Gordon, Vice-President, Space & Defense, Boeing Capital Corporation), first, to permit representatives of the manufacturers, operators, financiers and insurers of space assets (Mr F. Amicucci, General Counsel, Alenia Spazio, Mr R. Conti, General Counsel, Telespazio, Mr Z. Sekfali, Head of Legal Affairs, Structured Finance, BNPParibas, and Mr B. Pagnanelli, Managing Director, Pagnanelli Risk Solutions Ltd. respectively) to assess the practical interest of the preliminary draft Protocol from their different sectorial points of view and, then, to permit a panel of speakers, first, to present the issues of particular importance arising under the preliminary draft Protocol as dealt with thereunder and, secondly, to comment critically on the satisfactoriness of the relevant provisions of the preliminary draft Protocol.

5. The specific issues arising under the preliminary draft Protocol dealt with concerned, first, the definition of space assets (under Article I(2)(f) of the preliminary draft Protocol) (presented by Mr A. Stevignon, Senior International Counsel, Alcatel Space Industries, and commented on by Mr M. Gerhard, Senior Research Assistant, and Mr B. Schmidt-Tedd, Head, Legal and Business Support, German Aerospace Centre), secondly, the definition of associated rights (under Article I(2)(a)) (presented by Mr R. Olofsson, Partner, White & Case, Stockholm, and, in its application to licences and authorisations, Mr A.A.E. Noll, Of Counsel, Baker & McKenzie, Geneva, and commented on by Mr A. de Fontmichel, Lawyer, Ministry of Justice of France), thirdly, the identification of space assets (under Article VII) (presented by Mr C. Dumais, Senior Legal Counsel, Arianespace, and commented on by Mr O.M. Ribbelink,

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[4] The following companies and firms registered for the colloquium: AGF Insurance, Airlines Worldwide Telecommunications and Information Services (S.I.T.A.), Alcatel, Aon Explorer, Arianespace, Baker & McKenzie, Beaumont & Son, Boeing Capital Corporation, Brit Space Consortium, Crédit Lyonnais, EADS Space Transportation G.m.b.H., European Telecommunications Satellite Organization (EUTELSAT), German Aerospace Centre (D.L.R.), Hellas Sat S.A., Inmarsat Ventures P.l.c., Kreditanstalt für Wiederaufbau (KfW), La Réunion Spatiale, Marsh S.A., Milbank, Tweed, Hadley & McCloy, Mizrack & Gantt, Munich Re, Nahuelsat, New Skies Satellites, Orrick and SES Astra. In addition, the colloquium was attended by the following individuals: Mr T. Bertrand, Mr H. Caplan, Mr I. Förster, Mr A. Kerrest (University of West Brittany), Ms C. Kessedjian (University of Paris II) and Mr P. Larsen (Georgetown University Law Center).

Research Director, T.M.C. Asser Instituut, The Hague) and, fourthly, remedies (under Articles XI, XVI(2) and XVII(4)) (presented by Mr J. Bertran de Balanda, Partner, Lovells, Paris, and commented on by Mr I.B. Porokhin, Partner, Inspace Consulting (Russia) L.L.C., Moscow, and Mr H.S. Burman, Executive Director, Office of the Legal Adviser, Department of State of the United States of America). These presentations and comments together with the discussion that they gave rise to among colloquium participants are reported on in Parts II, III and IV of this report, *infra*. The presentations made by Messrs Gordon, Olofsson, [5] Noll and Bertran de Balanda and the comments made by Messrs Sekfali, Pagnanelli, Gerhard, de Fontmichel and Porokhin are reproduced in Appendix I to this report. A written version of the comments made from the floor by Mr H. Caplan is reproduced in Appendix II.

II. BACKGROUND TO THE PRELIMINARY DRAFT PROTOCOL: ITS PREPARATION, THE ROLE OF THE SPACE WORKING GROUP AND ITS ECONOMIC SIGNIFICANCE

6. *Mr Stanford* expressed UNIDROIT's deep appreciation of E.S.A.'s hosting of the colloquium and of the invaluable co-operation that it had received from E.C.S.L. in the organisation thereof. He pointed out that the Convention and the Protocol thereto on Matters specific to Aircraft Equipment (hereinafter referred to as the *Aircraft Protocol*) already counted 26 signatory States and one Contracting State and that a number of other States, including the United States of America, were expected to become Contracting States in the near future. He explained that for each of the classes of high-value mobile equipment covered by the Convention the general rules applicable to all such classes of asset were carried in the Convention itself with the special rules needed to adapt these general rules to the special features and requirements of each such class being carried in equipment-specific Protocols. He added that the preliminary draft Protocol had been prepared by a special industry working group (the Space Working Group) organised and co-ordinated by Mr Nesgos. UNIDROIT's decision to entrust the preliminary work on this project to an industry working group reflected its recognition of the need for the new international regimen to respond to genuine market needs and thus to give those parties familiar with the day-to-day realities of commercial space financing transactions – through the participation in the Space Working Group of representatives of the different sectors involved in the space industry (manufacturers, operators, financiers and insurers) – a first go at indicating the sort of regimen needed to make asset-based financing more widely available for such transactions. The UNIDROIT Governing Council having decided that the preliminary draft Protocol was ripe for consideration by governmental experts, the first session of a UNIDROIT Committee of governmental experts had been convened from 15 to 19 December 2003 in Rome. Given the ongoing examination by U.N./COPUOS of the relationship between the Convention and the preliminary draft Protocol, on the one hand, and the existing body of international space law, on the other, the UNIDROIT Governing Council had decided that not only UNIDROIT member States but also those of U.N./COPUOS should be invited to participate in the Committee of governmental experts. Finally, he welcomed the good turn-out from the space industry and, stressing the crucial role that the Space Working Group would have to play in determining that the forthcoming intergovernmental consultation process resulted in a practically viable and useful tool for the worldwide space industry, urged those representatives of that industry and their legal advisers attending the colloquium not already involved in the Space Working Group to give serious consideration to becoming so involved as a matter of urgency.

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[5] It should be borne in mind that Mr Olofsson's presentation was prepared in power point and, as such, was intended to be viewed in electronic form. An electronic version of this presentation is available from the UNIDROIT Secretariat (unidroit.rome@unidroit.org).

7. *Mr Nesgos* emphasised the need for the Space Working Group to be able to function independently of UNIDROIT now that the intergovernmental consultation process on the preliminary draft Protocol had been launched. He called for broader participation by representatives of the different sectors involved in the space industry in the important work that lay ahead for the Space Working Group. It would be essential for the latter to be in a position to engage in a constructive dialogue with the representatives of Governments during the intergovernmental consultation process.

8. *Mr Gordon* noted that 40 years after the first satellite telephone call there were currently approximately 220 commercial geosynchronous satellites in orbit, with each satellite costing on average U.S.$ 250 million and the value of the entire fleet standing at U.S.$ 55 billion, but that the benefits of the remarkable communications revolution that had been made possible by that investment had not to date been spread evenly around the world. He pointed out that the current worldwide disparity in the access to space and the associated technology and services (telecommunications, global positioning, Earth observation, weather forecasting, disaster prevention, safeguarding of natural and cultural world heritage sites, telemedecine) was due to the inability of some States and/or operators to attract sufficient capital investment for these purposes. However, the new class of satellite operator – the sole purpose of which was to build, own and operate satellites and, for a fee, to supply satellite services to others – that had emerged over the previous decade had seen that, even if they lacked the financial strength to attract investment by themselves, they could convert their satellite systems into cash in order to repay loans in the event of default. It was thus that the capital markets had learned how to assess the value of space assets as the collateral which would guarantee the flow of private funds into the space industry. The availability of asset-based financing was, however, dependent upon trust in the legal system applicable to the loan agreement concerned. The importance of the preliminary draft Protocol thus resided in the opportunity that it gave, via the creation of a predictable set of legal rules, to bring the benefits of satellite communications to the whole world.

III. PRACTICAL INTEREST OF THE PRELIMINARY DRAFT PROTOCOL FOR MANUFACTURERS, OPERATORS, FINANCIERS AND INSURERS OF SPACE ASSETS

9. *Mr Amicucci* pointed out that there could be no doubt as to the importance of the preliminary draft Protocol for *manufacturers*, given the fillip that it could be expected to give to the market, in the sense of the increase in orders that could be expected to flow from the adoption of an international instrument that, by promoting the availability of asset-based financing opportunities for commercial space activities, would enable the weaker operators to access loans for the purpose of developing their activities.

10. *Mr Conti*, whilst indicating that the term "*operators*" in the context of commercial space activities covered not only the person operating the satellite system itself but also the ground authorities controlling the satellite system via the relevant tracking, telemetry and command facility, pointed out that both types of operator shared manufacturers' interest in the preliminary draft Protocol, as an initiative designed to improve access to sources of financing for commercial space activities. However, he also voiced the concern of space operators to know what would be the precise consequences of their defaulting on the repayment of loans under the preliminary draft Protocol. In particular, he indicated that some of the remedies appropriate to asset-based financing provided for under the preliminary draft Protocol, and in particular the transferring of control over the space asset and the rights related thereto, might prove to be

inconsistent with the nature of the authorisations granted to operate space facilities, which were typically granted on an *intuitu personae* basis.

11. *Mr Sekfali*, while noting the various alternative sources that had in part satisfied the financing needs of the space sector over the previous decade (secured and corporate banking facilities - including export credit agreements - tax-driven cross-border leveraged leases, project financing, customer financing programmes offered by space manufacturers, private placements of equity and convertible debt and public-private partnerships), pointed out that lack of access to the high-yield and public equity markets had resulted in the need for space-segment service providers and lenders to engage more actively in the financing of transactions through the granting of security over satellites – including the pledging of the revenues generated thereby – and procured launch services. He remarked in this connection that the proposed new international regimen would be a great step forward in making this source of financing more widely available. It was currently difficult to register and perfect security interests in space assets under many legal systems. The Convention and the preliminary draft Protocol, by permitting the giving of public notice of such interests through the establishment of an International Registry for space assets, would mean that, in the event of the debtor's default, the holder of such an interest would be entitled to enforce his rights in the asset regardless of where the asset was located.

12. *Mr Pagnanelli* stressed the advantages of keeping the preliminary draft Protocol as simple as possible. A prime concern for insurers was to determine the transferability of the benefit of an insurance policy in the event of a transfer in the control of a space asset. This involved determining the compatibility of any such transfer with States' obligations under the international liability regimen applicable to space objects and whether the resulting change in the insured party's name was a material change, which would normally entitle the insurer to renegotiate the terms of the policy. Special concern had been expressed whether there would be any scope left for insurers to enforce their salvage rights in space assets in the light of the security rights that would be enforceable in the same assets under the Convention and preliminary draft Protocol once they had been registered in the future International Registry: insurers wished to see such rights maintained, especially where partial loss was conventionally indemnified as a constructive total loss and insurers expected revenue from the salvage operation. The real concern for insurers, though, was similar to that of the space community in general, that is the importance for the future success of space commercialisation of the availability of reliable technology, greater access to which in turn required an improved level of protection for investors' interests. He saw insurers as having a role to play in providing advice to those drafting the preliminary draft Protocol as to areas where problems might arise. At the end of the day, though, the main task of insurers would be to develop an understanding of the new international regimen and to adapt their risk assessment and the terms of their policies in such a way as to satisfy both their customers and themselves.

IV. SPECIFIC ISSUES OF PARTICULAR IMPORTANCE UNDER THE PRELIMINARY SPACE PROTOCOL

(a) Definition of the term "space assets" (Article I(2)(f))

13. *Mr Stevignon* took as an example a case concerning a satellite under construction in which his company had been involved. He had no doubt that it would be beneficial to the financing of a space project if the case of a satellite under construction also fell under the sphere of application of the preliminary draft Protocol.

14. *Messrs Gerhard and Schmidt-Tedd* agreed as to the desirability of the preliminary draft Protocol encompassing those interests taken in components of a satellite under construction. They noted that, beyond the indications provided in the preamble to the Convention – requiring that equipment falling under the new international regimen should be "mobile" in nature and either of "high value" or of "particular economic significance" – neither the Convention nor the preliminary draft Protocol gave any guidance as to what was intended to be encompassed by the term "asset". They nevertheless read this term as encompassing all collateral that could reasonably be imagined as being capable of being given by way of security in a commercial context, even collateral that might not exist at the present time but might at some future time be capable of existing as a result of the development of space activities. The fact that the Convention and the preliminary draft Protocol employed a term ("space asset") that was different from the term "space object" enshrined in the United Nations Treaties and Principles on Outer Space did not mean that it was necessary for the definitions of the two terms to match exactly. It was clear that the term "space assets" should include assets not yet in space but intended to be launched and placed in space. The term should also encompass space assets or components that might be assembled or manufactured in space.

15. They suggested that two aspects of the definition of "space assets" merited further consideration. The first of these concerned the situation where a satellite and different component parts thereof might be subject to different financing agreements - and therefore different security interests - and raised the question as to the relationship between the competing rights of debtors in these different parts, and in particular how to safeguard the real rights of the creditor under a security agreement that was being duly performed by his debtor vis-à-vis a creditor seeking to enforce his Convention remedies following default by his debtor. The second concerned whether it was appropriate for reusable launch vehicles to be subject to the preliminary draft Protocol at all. They noted that the question as to whether, in a given case, launch vehicles that were expendable or could be used to transport persons or goods to and from space would be caught by the definition of "space assets" provided in the preliminary draft Protocol was subject to interpretation. They submitted that in certain cases such vehicles might be argued to be airframes subject to the Aircraft Protocol and suggested that it would therefore be useful for the relationship between that Protocol and the preliminary draft Protocol in respect of such assets to be clarified.. They suggested that, where the launch vehicle was used to place a satellite in a given location in space, there could be little doubt as to its qualification as a "space asset" but that the same was not necessarily true of a vehicle used to transport persons or goods that were not space assets from one location on Earth to another on a journey that involved a brief sub-orbital flight.

16. In the question-and-answer session that followed the presentations of Messrs Stevignon, Gerhard and Schmidt-Tedd, *Mr Nesgos*, speaking as the co-ordinator of the Space Working Group, observed that the overriding concern of the Space Working Group in the delimitation of the substantive sphere of application of the preliminary draft Protocol was to make it as broad as possible with a view to encompassing any asset that might be involved in a space project and thus to making the benefits of asset-based financing as widely available as possible for commercial space activities.

17. Mr *H. Caplan* called for the new international regimen to be rendered as simple as possible in its application to space assets, if necessary through amendment of the complex declarations system provided for in both the Convention and the preliminary draft Protocol. He deplored the lack of uniformity that would result from the declarations system. He drew attention to Article 6(2) of the Convention, providing for the primacy of the preliminary draft Protocol over the Convention, as providing a basis for the mounting of such a simplifying exercise.

18. Responding to Mr Caplan, *Mr Marchisio* explained that, whatever the controlling power of a Protocol over the Convention, it was essential to bear in mind that each Protocol was expressly designed to "implement" the Convention and therefore not to undo it. Furthermore, he noted that many of the declarations provided under the Convention and the preliminary draft Protocol were in respect of standard final provisions and that in other cases they offered solutions on matters relating to jurisdiction and choice of law where flexibility was preferable to rigidity.

19. *Mr Burman* moreover drew Mr Caplan's attention to the Convention and the preliminary draft Protocol's specifically economic goals. He stressed that they were designed above all to provide the sort of legal framework that was needed by financiers in order to play their part in the development of commercial space activities, and therefore in particular to meet the specific requirements of the capital markets. At the same time, the goals that they had set themselves depended for their realisation on recognition of the great diversities in the interests of negotiating States. Whilst it was true that uniformity and reciprocity were traditional features of uniform law, it was important to remember that the Convention and the preliminary draft Protocol aimed first and foremost at providing legal certainty for investors by means of the introduction of a modern and transparent process designed to enhance their preparedness to finance commercial space transactions. It was true that the Convention and the preliminary draft Protocol, in substituting the law of the State where the debtor was located (to be construed as the rules applicable under the law of that State, including the principles and rules chosen by that State under the Convention and the future Protocol at the time of its ratification of those instruments) for the law of the State where the asset was located as the governing law, envisaged the possibility of Contracting States choosing from amongst a whole menu of rules. However, they would do so within a transparent, well-organised framework designed to enhance the legal certainty so essential to any assessment of risk. The declarations system thus allowed Contracting States to tailor their ratification to fit their own economic needs and legal cultures. It was of particular importance that incompatibilities between a State's domestic law and the principles of asset-based financing promoted by the new international regimen should not prevent that State from ratifying the Convention and any of its Protocols. The complexity inherent in the new international regimen was necessary to accommodate the range of different levels of acceptance for the principles of asset-based financing found from State to State and thus to permit them all the same opportunity of adopting these principles or at least becoming more familiar with them.

(b) Definition of the term "associated rights" (Article I(2)(a))

20. *Mr Olofsson* explained the importance of the extension in the preliminary draft Protocol of the concept of "associated rights" as defined in the Convention: for a financier a satellite held little economic interest if he could not also gain the right to use of the orbital position and frequencies assigned thereto and the possibility of assigning the revenue arising thereunder. However, the concept of "associated rights" employed under the preliminary draft Protocol referred to a quite different set of circumstances from those contemplated under the Convention. Thus the assignment rules of the Convention (Chapter IX) no longer worked with the definition of associated rights employed under the preliminary draft Protocol, since these were not rights "related to an object" as specified in Article 36(2) of the Convention. He suggested that a possible solution might be, as a first step, to change the terminology used in the preliminary draft Protocol - from "associated rights" to "debtors' rights" - and secondly, to ensure due protection of, and a suitable regimen for such rights under both the Convention and the preliminary draft Protocol.

21. *Mr Noll* supported the idea of a change of terminology. he suggested that the rights covered in Article I(2)(a)(i) should be termed "related rights" and those covered in Article I(2)(a)(ii) and (iii) "debtor's rights". He however also pointed to difficulties arising out of the way in which this definition had been extended in the preliminary draft Protocol. He indicated that Article XVI(2) of the preliminary draft Protocol, dealing with limitations on remedies, was of paramount importance, not only where a space asset had a dual use but also from the point of view of international telecommunications law, that is with regard to rights, granted by public or independent authorities, at the national or international level, to the use or to assign the use of frequencies and/or orbital slots. He suggested that consideration be given to improving the wording of this provision, which was currently subject to the making of a declaration, in view of the fact that it would seem difficult for a Contracting State both to be able not to attach conditions to the exercising of remedies and to have complete discretion as to how to implement Article XVI(2) without undermining the objective of predictability that was intended to underlie the application of the Convention.

22. *Mr de Fontmichel* noted that there were many reasons that might lead a State to wish to impose limitations on remedies, such as public service needs, national security concerns and competition policy, in much the same way as they might affect a State's attribution of orbital slots or radio frequencies. Licences, authorisations and permits were granted on an *intuitu personae* basis, that is they were granted to a specific operator and were not tied to the particular space asset that that operator was operating. He suspected that there would therefore be only limited scope for the preliminary draft Protocol to effect changes in the rigid national systems that governed such matters but he underlined that it might nevertheless provide a starting-point for States willing to make their domestic laws and procedures more in tune with the needs of commercial financing, and in particular the principles of asset-based financing as applied to space assets. He suggested that States might, for example, agree to the setting up of a secondary market in such licences, authorisations and permits, through the creation of a list of potential, pre-designated assignees able to substitute the original grantee in the event of his default.

23. *Mr Nesgos*, again taking the floor as co-ordinator of the Space Working Group, observed, first, that it was important not to deny the value of tangible rights in a satellite. Whilst intangible rights played a key role in the efficient redeployment of a satellite, it was important to bear in mind that a satellite had a value as such. Secondly, further discussion was essential to identify which intangible rights were really delivered on an *intuitu personae* basis or rather attached to the space asset. He felt that those intangible rights determining access to the satellite might be classified in the latter category. Thirdly, he agreed that there was a need clearly to separate the concept and regimen of "associated rights" related to space assets from the definition of that term enshrined in the Convention.

(c) Identification of space assets (Article VII)

24. *Mr Dumais* highlighted the reason for the need to identify space assets that were to be the subject of international interests in the context of the new international regimen, that is to provide the necessary criteria for registration of those assets in the future International Registry. Given the general complexity of space assets and in particular the fact that they were invariably assembled from a mass of component parts, it would be essential that the future international registration system identified precisely which assets were the subject of the specific international interest, even where such assets were in fact only parts of a larger whole. He noted in this connection the need to avoid confusion as between the assets charged. He finally called for the taking of an imaginative approach in identifying such assets, as envisaged by Article VII(vi).

25. *Mr Nesgos*, as co-ordinator of the Space Working Group, observed in this connection that the nature of certain categories of space asset was such that it would probably not be possible to deal with this problem solely by reference to an asset-based registration system but that some elements of a debtor-based registration system would also probably need to be built into the international registration system for space assets.

26. *Mr Ribbelink* gave particular attention to the question of the relationship between pre-existing registration systems, whether under the United Nations Convention on Registration of Objects Launched into Outer Space (hereinafter referred to as the *Registration Convention*) or national space laws, and the international registration system under the future Space Protocol and compatibility between the two. He underlined that the function of the Registration Convention was to enable launching States, through their notification of data concerning the location of a space object in outer space, to know where such objects were at any given time and thus to prevent potential collisions and to indicate which State was liable under public international law in the event of damage caused by the space object. The international registration system under the future Space Protocol would have a quite different function, that is to provide public notice of, and to perfect the taking of security in a space asset at the private law level. Nevertheless, despite their quite different functions, he suggested that the relationship between the two systems merited further consideration, in particular in view of the possible role for the United Nations in the international registration system, as Supervisory Authority, that was under consideration within U.N./COPUOS.

(d) Remedies (Articles XI, XVI(2) and XVII(4))

27. *Mr Bertran de Balanda* highlighted the difficulties that the special regimen for the exercising of remedies in respect of controlled goods, technology or data would represent for the timeous exercise of the remedies provided under Chapter III of the Convention. He suggested that one way of dealing with these difficulties might be to follow those procedures already employed in regulated areas, such as those covering oil, electricity and terrestrial telecommunications, for example the conclusion of direct agreements between the financiers and the regulatory authorities concerned aimed at speeding up the procedure for the exercise of remedies in the event of default by the debtor and the advance approval of back-up services for the operation of assets pending the finding of a definitive solution.

28. *Mr Porokhin* foresaw some Governments having difficulty in certain cases with the idea of the codes needed to access, command, control and operate space assets being placed into escrow with the future International Registry or another agreed escrow agent and suggested that consideration should therefore be given to making the operation of the relevant provision optional.

29. *Mr Burman*, in addition to what he had already stated in response to the remarks made from the floor by Mr Caplan (cf. § 19, supra), stressed the vital importance of the remedies provisions of the preliminary draft Protocol, and in particular those available in the case of the insolvency of the debtor, if commercial space activities were to attract the benefit of asset-based financing and to enjoy greater access to the international capital markets.

V. CONCLUSIONS

30. *Mr Marchisio*, speaking as Chairman, expressed his satisfaction at the fruitful results yielded by the colloquium, which would be extremely useful in assisting Governments with the preparation of their positions for the intergovernmental consultation process. He noted

that a number of issues meriting further consideration had been clearly identified by the representatives of Government and the worldwide aerospace industry and financial community attending the colloquium. The colloquium had thus admirably performed the principal task for which it had been organised.

31. It had in the process highlighted the specifically economic objectives of the Convention and the preliminary draft Protocol. These must necessarily provide the starting-point for any State's assessment of the preliminary draft Protocol. The prime objective of the Convention and the preliminary draft Protocol was to ensure a fair standard of protection for those investing in the acquisition of space assets. This was seen as an essential prerequisite for the development of commercial space activities and all the services that this was capable of rendering more widely available.

32. The Convention sought to promote the greater use of asset-based financing for these ends. Whilst one of the fundamental features of asset-based financing was the prompt transfer of possession of, or, in the context of space assets, control over the asset that was the subject of the financing to another operator in the event of default by the debtor, the colloquium had demonstrated the special issues that would have to be overcome in order to make such a remedy fully enforceable in the context of space financing. These issues arose in particular under existing space law, especially the law governing the transfer of that category of associated right that one speaker had proposed renaming "related rights" or the law under which national or international public authorities granted rights to control and operate a space asset. He saw this as an issue meriting further consideration by Governments. He suggested that Governments might also care to look further at the implications of the dual use of certain space assets for certain provisions of the preliminary draft Protocol.

33. However, as hinted at by some speakers, the finding of solutions to these issues was to a large extent dependent on the ability of States properly to identify their needs and on their willingness to consider amending, where necessary, their domestic laws and international obligations. He suggested that Governments should be prepared not only to reconsider their domestic law but also even their current international obligations where this might turn out to be necessary in order to permit the realisation of the vital economic goals being pursued. He encouraged participants to attend the first session of the UNIDROIT Committee of governmental experts.

APPENDIX I

Texts of the presentations made by Messrs Gordon, Sekfali, Pagnanelli, Olofsson, Noll and Bertran de Balanda and of the comments made in relation to the presentation of Mr Stevignon by Messrs Gerhard and Schmidt-Tedd, of the comments made in relation to the presentations of Messrs Olofsson and Noll by Mr de Fontmichel and of the comments made in relation to the presentation of Mr Bertran de Balanda by Mr Porokhin

The Fundamentals of Asset-based Financing from the Perspective of the Lender

Presentation to the UNIDROIT Colloquium
September 5, 2003
European Space Agency – Paris

Robert W. Gordon
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UNIDROIT Colloquium
European Space Agency
Paris, France
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The Fundamentals of Asset-based Financing from the Perspective of the Lender

(SLIDE #1 – Title)

On July 26, 1963 Syncom 2 became the first satellite to be successfully placed in geosynchronous orbit, and later that year relayed the first live telephone call between President John F. Kennedy in Washington, D.C. and Nigerian Prime Minister Abubaker Balewa in Africa. That one telephone call symbolized the beginning of a revolution in global communications. Voices that were once distant would now be closer. The flow of information around the globe would increase exponentially and be unimpeded by national boundaries. The planet was about to become a much smaller place.

(SLIDE #2 – Orbiting Geosynchronous Satellites)

Today, 40 years after that first satellite phone call, there are approximately 220 commercial geosynchronous satellites in orbit. The average cost of each satellite is $250 million and the value of the entire fleet is $55 billon.

While that first telephone call in 1963 was between The United States and Nigeria, the African continent and many other regions of the world have not fully benefited from the remarkable communications revolution that has taken place over the past forty years. The inability to attract investment capital is one of the causes for this disparity.

So where did that $55 billon investment come from, and why haven't the benefits of that investment been more equally spread throughout the world?

In the 1960's and 70's satellite investments came from governments of industrialized countries to benefit their own telecommunications infrastructure. By the 1980's government budgets could not keep pace with the rapidly growing demand for commercial satellites. Large multinational corporations stepped into the marketplace using their own financial resources to build satellite fleets. The role of government changed to establishing regulations, maintaining an orderly communications marketplace and to ensuring an environment of fairness.

In the 1990's the sources of investment capital changed again. Multinational corporations that funded the growth of satellites in the 1980's gradually recognized that they could obtain the

benefits of satellite communications without taking the associated risks and without incurring the enormous upfront investment required to build satellites. This was made possible by the growth of a whole new class of satellite operators whose sole purpose was to build, own and operate satellites, and, for a fee, to supply satellite services to others. But these new entrepreneurs, of which PanAmSat was the first, did not have the financial strength of governments or multinational corporations. These new companies recognized that if they could find a source of investment capital, the financial rewards of the business would be very attractive.

It is at this point in the development of the satellite industry when asset-based financing had its birth. Because new satellite operators did not have the financial strength to attract investment, lenders would now be required to rely more on the actual value of the satellite systems rather than the borrower itself. This is the underlying tenet of asset-based satellite financing: a weak borrower but a strong set of assets that could be converted to cash to repay the loan if the borrower were to fail in its debt repayment obligations.

The financial markets in New York, London and Hong Kong recognized this changing environment and learned how to assess the value of space assets as the collateral which would support the flow of private money into the satellite industry.

- Lenders recognize that space assets are placed into the physically hostile environment of space and are irretrievable once there;
- They understand that these assets operate in an environment with no national borders;
- And they absolutely understand the paramount need for a set of legal standards which are consistently applied to ensure fair protection of their investment.

Lenders who evaluate asset-based space projects always consider three fundamental elements:

(SLIDE #3 – Critical Lending Factors)

1) Borrower's Ability to Repay: An assessment by the lender of the borrower's expected ability to repay.
2) Market Value of Assets: A determination by the lender that the value of the assets exceeds the amount of the loan. If the borrower fails to repay the loan, the lender recovers his investment by taking possession of the assets and reselling them.
3) Transparent and Consistent Legal Process: An expectation that the legal system governing the loan and the assets will treat the interests of the lender and the borrower fairly.

I return to the question of why the benefits of the satellite communications industry have not been uniformly enjoyed by all parts of the world. More specifically, why has the majority of the $55 billon of capital invested in the space industry been primarily directed to the industrialized world?

There are several answers to the question, one of which is that many legal systems neither provide for the registration and perfection of a security interest in space assets nor for the due-process of law to protect those rights. The foundation of asset-based lending is built upon trust in the legal system. Why would a lender inject his money into a space project where the legal system overseeing the lending agreement with a borrower may not uphold the basic tenets of that contract? Money will flow from the capital markets to those space investments which can predictably balance risk and reward. Where there is doubt that legal rights will be respected, no amount of reward will overcome the risk of an unpredictable legal system.

Those of us involved in the UNIDROIT process have been given an opportunity, an opportunity to bring the benefits of satellite communications to the entire world. Our efforts can help bring the internet to all people. Our efforts can help build a global telemedicine system that reaches all of those people in need of modern research and technology. Our efforts can bring distant voices and cultures closer together.

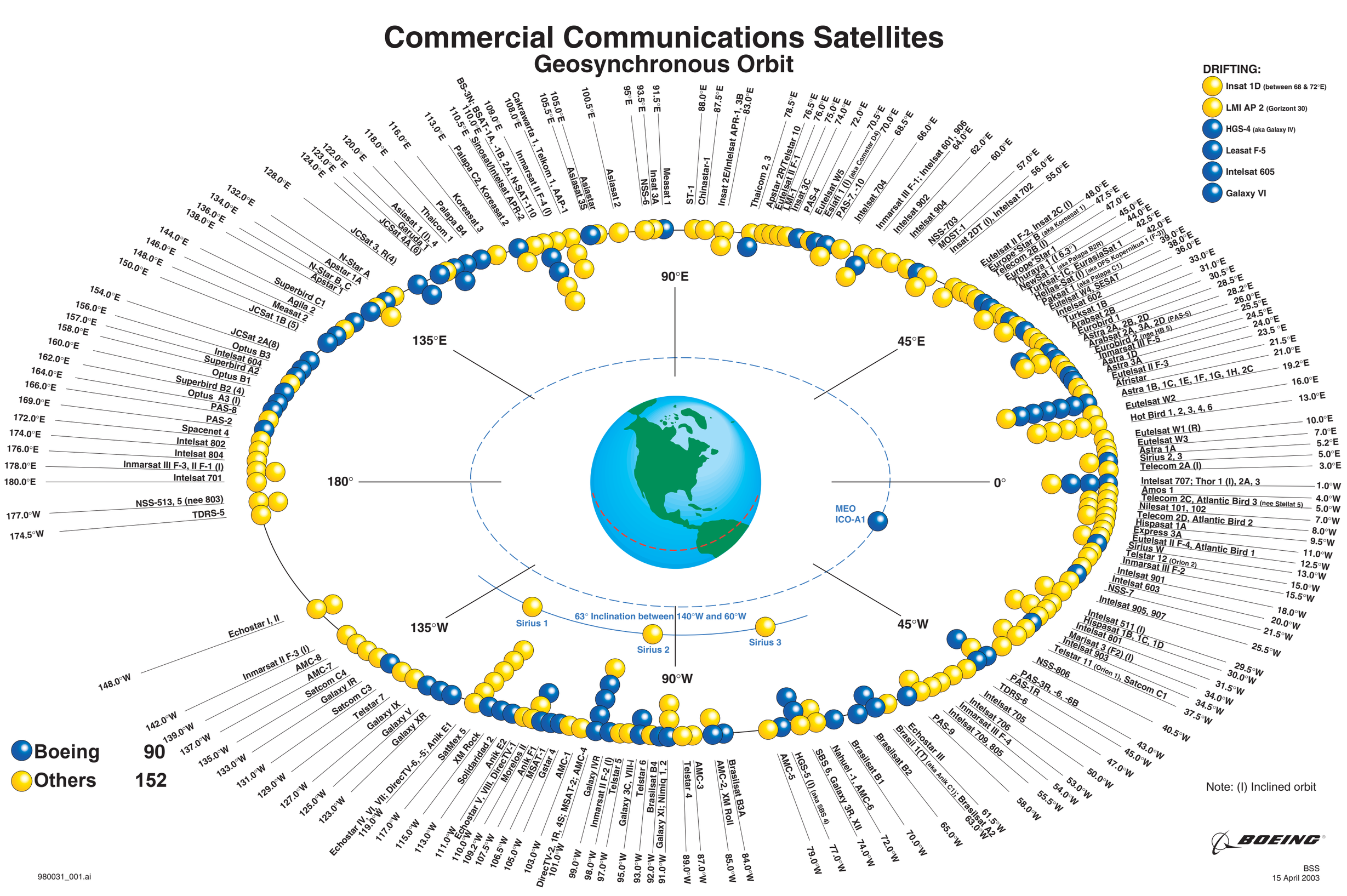
But this opportunity will remain an unrealized opportunity unless we are able to build an international legal system within which investors and borrowers believe that their contractual rights will be respected.

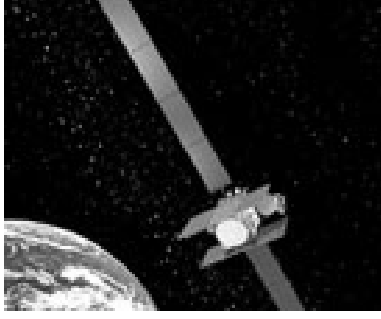
Today, in this UNIDROIT meeting, we are moving the process forward.

Thank you.

Commercial Communications Satellites

Geosynchronous Orbit





Critical Asset-Based Lending Factors

Borrower's Ability to Repay:

An assessment by the lender of the borrower's expected ability to repay.

Market Value of Assets:

A determination by the lender that the value of the assets exceeds the amount of the loan. If the borrower fails to repay the loan, the lender recovers his investment by taking possession of the assets and reselling them.

Transparent Legal Process:

An expectation that the legal system governing the loan and the assets will treat the interests of the lender and borrower fairly.

Contribution

by

Zine Sekfali

BNP Paribas
Head of Structured Finance
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to

UNIDROIT's Paris 2003 Colloquium
On its
"Preliminary Draft Space Assets Protocol",

held at the Head Office of the European Space Agency (E.S.A.), Paris, on 5 September 2003

Paris, August 2003

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I. Introduction

Mr. Chairman, Ladies and Gentlemen, good morning. I have been pleased to accept the invitation of the International Institute for the Unification of Private Law (UNIDROIT) to deliver a speech with respect to the practical interest of the future Protocol from the point of view of financiers. I should however mention that the views that I will be expressing today are solely those of a lawyer specializing in structured finance or high value added transactions which comprise the financing of space assets.

Today I shall be talking about certain aspects of the background of the space assets protocol and will then concentrate on the expected contribution of the future protocol to the credit risk assessment process of space assets related transactions.

II. The Background of the Space Assets Protocol

Over the last decade, the financing needs of the space sector have been partly met through multiple sources:

1 - secured and corporate banking facilities, including export credit agreements,
2 - tax-motivated cross-border leveraged leases,
3 - project financing,
4 - customer financing programs offered by space manufacturers,
5 - private placements of equity and convertible debt and, last but not the least,
6 - public-private partnership.

Among these various sources of funding, it is worth noticing that the lack of access to the high yield and public equity markets (at least since the ill-fated Iridium, ICO and GlobalStar projects) has resulted in the need for the space-segment service providers and lenders to more actively engage in the financing of transactions secured by the satellite assets (including the pledge of revenues generated by the satellites) and procured launched services.

No one shall contest that the development of the space sector requires important sources of financing. Indeed, it is expected that, despite the current slowdown in the market compared to previous years, more than 300 commercial satellites will be launched through 2012 with an average of 23.5 geostationary and 8 non geostationary satellites per year.[1] It has also recently been publicly[2] announced that the European Space Agency and the European Union will each invest substantial amounts in the Galileo European strategic project during the first phase, additional funds being expected to be raised via a public-private partnership. Galileo will be THE next major multilateral project for this industry. It has also been stressed that one could anticipate a new demand for high-bandwidth satellite services, including high-definition television, increased demand for internet-via-satellite in rural areas and continued global take-up of direct-to-home services shall, in all likelihood, grow industry revenues over the coming years. One can also mention, the use of space assets such as observation satellites with a view to helping the safeguard of natural and cultural World Heritage sites[3].

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1 Dara A. Panahy, "The preliminary draft protocol on matters specific to space assets: an overview of its objectives and key provisions", UNIDROIT 2003.

2 Space Business Review, May 2003 – Milbank.

3 In June 2003, ESA and Unesco signed an agreement for that purpose at the Paris Air Show .

From a European Union perspective, there is a growing will to develop an ambitious space policy. To achieve such a purpose, the sums of money devoted to the space sector are expected to double from now on until the end of the next decade.

As you all know, the Cape Convention and the future space Protocol are designed essentially to improve the conditions for access to high-value mobile equipment of a type regularly moving across or beyond national frontiers in the ordinary course of business.

In particular, it sets out to improve the conditions for the granting of financing facilities, including but not limited to secured financing facilities, in the event of the debtor's default, and especially upon his insolvency.

III. Space assets are specific by nature and require…. a specific legal regimen

The issue of the credit risk assessment process arises in particularly acute form when a high-value mobile equipment moves regularly from one jurisdiction to another such as aircraft and vessels, or, this is what we are talking about today, beyond any jurisdiction such as satellites.

As a matter of legal principle, which has rightfully been stressed by Mr. Stanford in previous contributions, law traditionally applied to issues related to the validity, enforceability and priority ranking of security rights created in a foreign jurisdiction is the law of the state where the asset in question is located. With respect to high-value mobile equipment such as satellites which move beyond national frontiers, this legal principle appears in large part inappropriate. As also rightfully stressed by Sir Roy Goode in a recent contribution to the Uniform law review[4], "(…) *there is no guarantee that a security interest which is created in one jurisdiction and is valid against the debtor's trustee in bankruptcy in that jurisdiction will be treated as effective in a bankruptcy in another State*". The lack of a uniform legal regimen that would be more protective of the creditors' interest makes the latter more reluctant when required to extend secured financing facilities with respect to space assets.

From a credit risk perspective, it is also worth noticing that nowadays satellite owners and lessees are often entrepreneurial companies with limited capital, unproven credit worthiness and little history of operating success. As a result, commercial satellites are rarely owned and transponders are rarely leased predominantly by governmental agencies and well capitalized blue chip companies. Often, the satellite or the transponder and its associated rights will be their only significant physical assets. Accordingly, the ability to take a valid and perfected security interest in these assets may determine whether or not a satellite project can be successfully implemented. Alternatively, or should I say, in addition, security can be taken on the shares of the companies that own the satellite, to allow enforcement "as a going concern".

The special nature of Outer Space means that the problems to be resolved with the future Space Protocol are somewhat more complex than those encountered with Earth-bound equipment, especially when it comes to a creditor seeking to enforce its default remedies in assets physically located in Earth orbit.

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4 Professeur Sir Roy Goode: "Transcending the boundaries of earth and space: the preliminary draft UNIDROIT Convention on International Interests in Mobile Equipment" in Uniform Law Review 1998/1, 52 at 54-56.

As indicated earlier, a satellite financing may take different forms, hence the need to adopt a broad view of the creditors' rights which would not be limited to those of the secured creditors in the narrow sense. This extensive approach would also make sense given the lack of uniform definition of a security interest which varies from one state to another. This broad view is the one that has been taken by the space working group. Indeed, the notion that lies at the conceptual center of the Cape Convention and the future Space Assets Protocol is that of an international interest. The Cape Convention sets out three transaction types that create international interests: (i) an interest granted under a security agreement; (ii) an interest vested in a conditional seller under a title reservation agreement; and (iii) an interest vested in a lessor under a leasing agreement. These three categories have been employed to respect the majority of legal systems that draw distinctions between security and title-type interests.

The notion of international interest shall be of a great benefit knowing that satellite financing can be done through combined means such as a secured facility as regards the satellite and a leasing with respect to transponders.

The future Space Protocol is particularly important because the nature of the jurisdictional issues involved with space assets is quite different and unique in many respects from other categories of mobile equipment.

The future Space Protocol will establish an international registry for space assets. Then, in case of default of the debtor, the holder of a security interest will be able to take certain actions without regard to the location of the asset in which the security interest is registered.

The future Protocol will also be very useful provided that many legal systems do not adequately provide for the registration and perfection of a security interest in a space asset.

IV. Conclusion

To conclude, in a few words, it is fair to say that Financial institutions have in the past relied on ad-hoc solutions to secure their financing, usually relying on guarantees from a third party, or assignment of lease contracts..

Owing to the Cape Town Convention and the future space Protocol, space asset financing of high-value mobile assets will be provided a new level of security.

As a result, risks for creditors and borrowing costs for debtors should be viewed as being reduced and, assuming that lower risks translate into lower costs on a transaction, the financing costs should, in all likelihood, be reduced.

As far as I am concerned, I am convinced that the future space Protocol is of a great interest for financial institutions. To my mind, it is necessary to take part in its adoption in order to improve the jurisdictional regimen of space assets related to financial transactions.

One can legitimately expect that the future space assets protocol will give prospective creditors greater confidence when deciding whether or not to grant a financing.

I thank you for your attention.

Colloquium on Space Assets Protocol – Paris 5th September, 2003

Presentation by Dott. B. Pagnanelli
Managing Director of
Pagnanelli Risk Solutions Ltd, London

Thank you Mr Chairman.

I feel honoured to have been asked by the organisers of this colloquium to present my thoughts and opinions, as an insurance expert, on the Preliminary Draft Space Assets Protocol to the Cape Town Convention.

As a matter of fact, I have to tell you that, directly or indirectly through the involvement at different levels of Assicurazioni Generali, of which I was a Director for many years, I was in a position to monitor since the beginning the activity of the Space Working Group, masterly chaired by Peter Nesgos and so efficiently supported by Martin Stanford and his team. This implies that the Protocol in its present features has also received contributions from the insurance side since its beginnings up until the present day. However this does not mean that the implementation of the Protocol as it is now formulated does not generate any problems at all to the insurers.

Before moving into specific points, I need to make some preliminary statements. Space activity and space insurance are still at an early stage. Although the first space covers go back to the beginning of the '70s, experiences made so far are relatively limited. The number of risks are very small, technology is very complex and continuously evolving, policy wordings have not yet been sufficiently tested by judicial interpretations and decisions, therefore are sometimes subject to long disputes and possible extensive litigation; economical results for the insurance industry were heavily negative for several years so that, nowadays, the sector is seen with much perplexity and, because of its extreme "volatility", negatively evaluated by the rating Agencies when looking at the portfolio composition of an Insurance Company.

The average premium volume per year ranges between 1 and 2 billion US$ at world level. Those who write the business are few and do not constitute a continuous market: excessive reduction of the capacity following a period of heavy losses may generate impressive ups and downs in the level of premium rates (from 5% to 20/25%!) The amount of revenue for commercial space and satellite industries, estimated in excess of 100 billion US$ in 2002, is quite impressive. Less impressive is the expected number of commercial satellites to be launched by the year 2012: less than 300 with an average of 25-30 per year, possibly insured for 300-350 million US$ each.

The underwriters' community is quite limited in number but not yet sufficiently amalgamated in terms of underwriting philosophy and commonly shared principles: this generates frequent differences in opinions, which helps when facilitating competition but is sometimes an impediment when trying to find prompt solutions. This is not a surprise or a criticism: in any new activity, as Space is, there is a learning process which takes its time depending on the difficulties involved.

In insurance, in general, it is not easy to find a person or an institution that can represent the view of the entire industry at an international level, even if confined to a specific sector. This is particularly true for what space insurance is concerned: therefore, I ask you all to consider my observations and comments as my personal views, although I hope they are shared by others too.

I have already anticipated my view that the Space Protocol can be a valuable legal tool aiming at attracting more private investors in space.

A similar Protocol has already been adopted for Aviation. There are opinions that this latter Protocol is rather complicated, therefore not easily workable. Most probably some of you attending this colloquium can better comment on the issue later on.

It has often been said that the Space Protocol is brother to it and, in my opinion, it appears a little complicated in its own but even more so for the frequent references to other already existing legal systems to which it is strictly connected (the Convention) or to which it might be connected (international laws governing the space activities and national laws).

The general recommendation I want to make is that any improvement towards simplicity would be greatly beneficial to everybody. Firstly to the manufacturers, operators, financers and then to the insurers: needless to say that simplicity always helps in reducing the need for long discussions and, in the end, reasons for litigation. Furthermore, it may help to obtain better conditions also with regards to the costs of connected services, of which insurance is one.

The declared Space Protocol objective is to create a document that will protect private financiers, giving them confidence to loan money for space ventures. This should imply that at the same time the Protocol must protect the insurers whose function is to financially sustain all parties involved in space projects if a material/commercial loss occurs. Therefore rules contained therein should not generate or promote a disadvantageous scenario for the insurers. Needless to say that any inadequacy of the insurance protection does not favour any private investments.

So far my comments have been on the very general side….

Carrying out a more detailed examination of the Protocol's articles, it is my view that insurers' appropriate comments can be confined to a few specific critical items. Any issue connected with the Third Party Liability regimen for space activities is obviously a matter for consideration. This particularly in view of the fact that we are moving more and more away from Governmental projects to private ones and, until now, liabilities for space operators have been posed by the international treaties on the States.

On a practical side, a question has already been asked on what would happen in a Third Party Liability policy already in force, for a certain owner, if the insured interest is moved on to a different entity after an enforcement as per articles of Chapter II (default remedies etc.), that in defined circumstances consent the transfer of property or control of space objects. This is a frequent situation common to most insurance policies. The change of the named insured is a material change and policy conditions normally already provide for a renegotiation right of the policy terms, if the insurer wants.

A concern has been expressed about the 'preservation of insurers' salvage rights'. As well known, one of the main features of the Protocol is the implementation of an international Registry upon which banks and investors will have an opportunity to register as many securities as they can on the assets they are financing, and then making their securities enforceable against Third Parties in all State parties to the Protocol. In the space sector, securities will apply to all items pertaining to the control of satellite and to the various associated rights (frequencies and orbital positioning, operative licences, responsibilities etc.). It is obvious that the registration of securities would be performed as a condition of asset-based financing of private commercial space activities.

Therefore it is thought that it is extremely unlikely that there will be any room left for insurers to register, later, any of their rights of salvage and/or rights to take title of an indemnified satellite. Thus, the fear that the contractual salvage privileges, which space insurers enjoy today under the policy conditions, will disappear. Circumstance particularly significant when a partial loss has been conventionally indemnified as a 'constructive total loss' and a meaningful amount of revenue is expected by the insurers as a salvage.

As a matter of fact, here, we have a real potential conflict between insurers' salvage rights and secured creditors' rights on the same collateral. What could be the solution to this critical issue? The solution lies, as in any other area of potential conflicts, on the correct and transparent behaviour of the owner who looks for capital for his activities. The negotiations for financial support start normally earlier than those for an insurance protection. Undoubtedly, the implementation of the Protocol in its current formulation will force the owner/operator to avoid such a conflict ab-initio, reconciling what are the legitimate rights of both parties: if he is unable to do that he might not be able to satisfy investors' and/or insurers' requirements or, even worse, he might pose the pre-conditions for future litigations. Situation, in any way, detrimental to the owner himself.

On the other hand, I suspect that such a conflict potentially already exists under the current regulations, apart from those of the Protocol, and I am inclined to think that a satellite owner, if aware of it, would be tempted not to raise the issue with his secured lenders for fear of complicating what is already a delicate process of arranging his financing.

However I am sure that working in full transparency, practical solutions can be found, on the majority of hypothesis, to satisfy the parties' expectations.

On the other hand, we cannot exclude that in extreme cases the solutions will not be so easy. Let us think of an example: assume that, after a loss payment by the insurer, a salvage plan is implemented providing a sharing of revenues between the money lender and the insurer. Assume that, later, the owner becomes insolvent or goes bankrupt. How would Article XI dealing with the issue of 'remedies on insolvency' protect the lenders' and the insurers' interest in the same way and at the same time? Although this is very likely an academic case, I would be curious enough to see how the insolvency administrator in charge in a determined jurisdiction could avoid to privilege the lenders' interests, since these are specifically protected by the Protocol, against the insurers' interests.

Moving on to the right of transfer of space assets from one operator to another, as provided within the Protocol, the main obstacles to the issue descend from the restrictions on transfer of controlled space assets imposed by the United States, which classifies many space assets as munitions and subject to arms control and export control. The insurers already experienced the negative consequences of such regulations and, in various occasions, some of them decided not to participate in the relevant insurance protections. Similarly, asset-based financing of controlled space assets manufactured by the United States companies, when subject to limitation on transfers, might not be attractive to the financiers too.

Some insurance experts have observed with concern the possibility of inconsistencies between agreed loss payee provisions and securities on insured proceeds recorded upon the Registry. In such circumstances, insurers fear that complying with the situation provided by the Registry, this could possibly result in a detriment to the investors. It is an issue put to the attention for the

subsequent workings. Furthermore, much attention will be given to the implications for insurers deriving from the definition of 'associated rights' when such definition will be finalised.

Just to mention another point of great interest, the jurisdiction issue when finally agreed will need to be deeply examined in view of possible implications on the policy wordings.

No doubt, the primary scope of the Protocol is to stimulate more investment in space activity. Insurers can take benefit of it if it produces a larger number of future projects to insure. I have to add to this statement a comment which some of you might not think to be in tune with the purpose of this colloquium. The real main concern for insurers lies with an issue of a different nature: the improvement of reliability of space projects.

Space technology evolves but statistics show that the number of failures is on the increase. It is not entirely appropriate to develop this concept at today's gathering. But there are Articles in the Protocol that regulate duties and rights of the money lenders following partial or total space losses, both during launch or the in orbit operations. After these negative events, it is obvious that financiers and insurers could have good reasons for looking at each other, at least for claims payments and salvage solutions, if the cases allow. Therefore, I am sure that all the representatives of financial institutions share my view that the reliability of space projects is an issue of great importance for both parties. Staying on the insurance side, a number of losses, exceeding a reasonable expectation, affects negatively the insurers' stimulation to dedicate their capital to space insurance. We know how, in modern economy, any entrepreneurial and financial activities are subject to complex actuarial analysis and formulae which, at the end, determine how much capital should be allocated to each sector of a composite activity.

For the insurance industry, a greater emphasis on space ventures can primarily come from significant improvement in the space reliability and loss record. No question that financiers have exactly the same basic interests. It is true that the Protocol introduces some elements of a legal nature that secure investments, but the future success of space commercialisation and exploitation sustained by private investors relies particularly on the performance of technology which should generate a growing trust.

This is my very last conclusion. The Protocol should be refined in some of its issues but this is a primary task for owners, operators, financiers and legislators. They must create a tool easily workable. Insurers can provide their advice to anticipate when and where conflicts and complications could arise. At the end, the main task of the insurers will be to know and to understand the new legislation and be able to adapt their insurance service, their policy wordings and risk appreciations in the most appropriate way in order to satisfy their clients and themselves.

WHITE & CASE

Contribution

by

Rolf Olofsson

Partner, White & Case LLP
Member of UNIDROIT's
Space Working Group

to

the UNIDROIT Colloquium
on the Preliminary Draft Space Assets Protocol to the
Convention on International Interests in Mobile Equipment

held at the offices of the European Space Agency
in Paris on September 5, 2003

Issues of particular importance under the draft Space Protocol

I have been asked to address:

- the definition of associated rights appearing in the Draft Space Protocol and in particular the application of associated rights to:
  - (i) rights of payments; and
  - (ii) contractual rights;
- the desirability of extending the concept of associated rights;
- the need for new separate concept because of possible inconsistency with the Convention

I Application of associated rights

In addressing the topic of associated rights I felt it best to start by illustrating the significance of these rights by reviewing a fairly simple example of a satellite project and its financing.

I will therefore first review an example of such a project and thereafter certain elements of a security agreement relevant to the term associated rights.

Thereafter I will address the

- desirability of extending the concept of associated rights;
- need for new separate concept because of possible inconsistency with the Convention

I A. Transaction

Since this contribution largely comes in the form of a Power Point presentation I suggest you print the text set out below such that you may read the text as you are reviewing the Power Point presentation on your screen. It is my hope that the linkage between this text and the Power Point presentation is sufficiently clear to avoid confusion.

To view the Power Point presentation, ***CLICK WITH YOUR MOUSE*** *and the corresponding animation will appear. Each subsequent click will add a new animation corresponding to the text below.*

1. Satellite owner obtains permits/licenses from a national authority to use certain specified radiofrequencies for up-linking and down-linking from the space station (satellite)
   (Licenses)

Please ***CONTINUE WITH YOUR SECOND CLICK, THIRD CLICK ETC.*** *as you review the explanations.*

2. Satellite owner secures debt financing from Lenders
   (Loan Agreement)

3. Satellite operator enters into an agreement for the on-ground-delivery of the satellite
   (Satellite Manufacturing Contract)

4. Satellite owner enters into an agreement for the launch of the satellite
   (Launch Services Agreement)

5. Satellite owner obtains launch and in-orbit risk insurance covering all or part of the cost of replacing the satellite
   (Insurance Policy)

6. Satellite owner enters into an agreement for the provision of TT&C Services with an operator of such services
   (TT&C Agreement)

7. Satellite owner enters into agreements with customers to provide for instance satellite broadcasting services
   (Transponder Service Agreements)

I B. Security Agreement

At this point slide No 2 of the Power Point presentation should appear on the screen. In the same way as before each new click will add a new animation.

a) Pledge of satellite

b) Assignment of the right to take delivery of the satellite pursuant to the Satellite Manufacturing Contract

c) Assignment of the right to launch services pursuant to the Launch Services Agreement

d) Assignment of rights to proceeds under the Insurance Policy

e) Assignment (conditional) of the right to performance under a TT&C Agreement

f) Assignment of Licenses (to the extent permitted)

g) Assignment of the right to payments under the Transponder Service Agreements

II Desirability of extending concept of associated rights

a) In reviewing the assignments of rights to payments and performance and other contractual rights presented earlier, it would seem that none of them is covered by the definition of associated rights set out in the Convention (Article 1 Para (c)).

b) Given that the pledge of the satellite (space asset) by itself

(i) without the right to use an orbital position and the right to use certain frequencies,

(ii) without in essence a completion guarantee and the warranty from the satellite manufacturer,

(iii) without the undertaking by the Launch Service Provider to launch the space asset,

(iv) without the right to receive the insurance proceeds, in case of a launch failure or in-orbit failure

(v) without the conditional assignment of the right to TT&C services and

(vi) without assignment of the right to payments under the Transponder Service Agreement,

may be of little or, in some instances, no value to the lenders, the protection of these rights is crucial to lenders if lenders are to attribute any value to the asset.

c) It is therefore clearly desirable, if not necessary, to extend the concept of associated rights such that the definition covers the licenses, the rights to payment, performance and other contractual rights.

d) It is my understanding that the definition of associated rights in the Space Protocol (Article I Para 2(a) has been drafted for this purpose.

III Need for new separate concept because of possible inconsistency with the Convention

a) It is clear that the definition of associated rights appearing in the Convention differs entirely from the definition appearing in the Space Protocol.

b) "Associated rights" pursuant to the Convention are "all rights to payment or other performance by a debtor" while according to the Space Protocol, Article I Para 2(a)(ii), associated rights are "rights to payment or other performance due to a debtor" and pursuant to Para 2(a)(iii) of the same Article are "contractual rights held by the debtor".

c) Considering Article 6 of the Convention it would seem that this difference between the definitions of associated rights in the Convention and the Protocol could be overcome.

d) However, having said that, it appears that Chapter IX of the Convention – not surprisingly – has been drafted to fit the definition of associated rights appearing in the Convention and as such may not without alteration fit the definition of associated rights appearing in the Space Protocol.

e) This means for instance that if I apply the wording of Articles 35 and 36 of the Convention to the assignments of

- Licenses
- Launch Services
- Insurance Policy
- TT&C Agreement

these assignments to the Lenders do not have priority under Article 35. This is so because these "associated rights" are not "related to an object" in the manner specified in Article 36 Para 2 of the Convention.

f) There may also be other provisions relating to associated rights that – upon further analysis – may not properly protect the associated rights as defined in the Space Protocol.

g) I leave it to others to determine whether the best solution is to amend the provisions concerning the application of associated rights that appear in the Convention through additional language in the Space Protocol and effectively providing through the Space Protocol a suitable regime for associated rights as defined in the Space Protocol or whether to introduce a new term such as debtors' rights for the rights now referred to as associated rights in the Space Protocol. However, if the latter route is chosen, will it then not be necessary to amend the Convention in order to afford such debtors' rights the protection they require?

C o n t r i b u t i o n

by

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to

UNIDROIT's Paris 2003 Colloquium
on its
"Preliminary Draft Space Assets Protocol",

held at the Head Office of the European Space Agency (E.S.A.),Paris, on
5 September 2003

Geneva, August 2003

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The definition of "associated rights"
in the
"Preliminary Draft Space Assets Protocol"
and their application to licenses and authorizations,
especially in the light of the relevant ITU rules and practice

Mr Chairman,

Before making my substantial contribution to this Colloquium with regard to the above subject, which the Organizers have asked me to speak about for ten (10) minutes, permit me a few, very brief, general introductory remarks.

I. General introductory remarks

1. This Colloquium is designed "as a joint government/industry forum" to pave the way for the eventual adoption of the "Preliminary Draft Space Assets Protocol" (hereinafter referred to as "the Protocol"), which indeed deals with a large number of legally as well as practically rather complicated issues, of which the above subject forms only one, but in itself rather important issue for the well functioning of the Protocol, so that the latter can achieve its goals.

2. In spite of the foregoing, only ten (10) minutes have been allocated to me for dealing with this subject matter, which – to be serious – would deserve easily more than twice the time allocated and should also benefit from an exchange of views on its various aspects amongst the participants present, who – according to the program – may (hopefully!) enjoy just thirty (30) few minutes for a "question-and-answer session", at the end of this afternoon, on all the various and quite different matters presented by the respective speakers during this second half of our Colloquium.

3. Although I fully well realize that UNIDROIT, by programming like it did, simply follows, for reasons of time-, financial- and other so-called constraints, the nowadays prevailing, though most unfortunate pattern of organizing conferences, seminars or colloquia like the present one, which almost all – according to my bitter experience, made for so many years, - are hopelessly overloaded with both program items and respective speakers, so that the other participants are submerged by papers and ideas presented, - without being even given a chance for a real "exchange of views" on the latter, - which after all should be the essence of any real "colloquium" ! - After having made – with regrets – this introductory point, I shall now, Mr. Chairman, start my 10 minutes allocated, shall enter *medias in res* of my specific subject matter and shall stop after 10 minutes, - leaving it to each participant, willing to do so, to read in this paper, distributed as drawn up to cover the reasonable minimum possible within that time-frame, anything, which I was not able to present orally during the time allocated.

II. The definition itself of "associated rights" in the Protocol

4. Currently, the term "associated rights" is defined and contained in the Protocol's Article I, para. 2, subpara. (a), which, in one bloc, comprises three different items, which are - without any change in word or substance and for clarification purposes only - presented one after the other in Annex 1 hereto. The last provision of the Protocol's Article III stipulates that "…the general provisions of the Convention in Article 1, … shall apply to contracts of sale and prospective sales". [1] That very Article 1 itself contains, under "c)", a definition of the same term. [2] That definition in the Convention is substantially different from that in the Protocol.

5. As already recognized in the current footnote "6" to the term "associated rights", I see an imperative necessity to avoid such a contradicting divergence of the two definitions for the same term. As the Convention has already been adopted, there is, in my view, only one way in doing so, namely by choosing for the Protocol another term or terms for the same contents of the current definition. I cannot agree to using the sole term of "debtor rights" for all the three items contained in that definition, as it is suggested in the said footnote "6". From the legal point of view, item (i) is substantially quite different from those in (ii) and (iii). The latter two items – both clearly falling within the purview of private law - can easily be combined under one single term, for which I propose the term "**debtor's rights**", whereas item (i) – belonging, to the contrary, clearly to the domain of public and/or public international law - should be separated from the two others and should be given another term of its own, for which I herewith propose the term "**related rights"**, which from the substance point of view is a quite correct and adequate term for what item (i) in fact covers. Items (ii) and (iii) would thus as "debtor's rights" remain – with the same definitions as before – under sub-para. "(a)" of para. 2 of Article I, whereas item (i) would – with the same definition as before – in future figure – after the definition (f) and at the end of the definitions' listing – as: '(g) "related rights" means any permit, license, authorisation or … '. – It is the foregoing, newly proposed version, which figures – again for clarity purposes only – in Annex 2 hereto.

6. With the foregoing minimal changes or amendments proposed to the present texts, the currently existing problem can easily be solved, the contents of footnote "6" becomes obsolete, and there is, in that respect, no conflict any more between the definition in the Convention and that in the Protocol for the same term, so that both the last provision of Article III of the Convention as well as Article I, paras 1 and 2, and Article II of the Protocol can coexist in legal harmony.

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1 See the "Convention on International Interests in Mobile Equipment", done at Cape Town on 16 November 2001.

2 "(c) "associated rights" means all rights to payment or other performance by a debtor under an agreement which are secured by or associated with the object;"

III. The application of "related rights" to licenses and authorizations, especially in the light of the relevant ITU rules and practice

7. In line with what I pointed out under II. above, I shall from now on speak only of the "related rights" (= old item (i) in sub-para. (a) of current para. 2 of Article I of the Protocol) and shall not repeat the long text of the definition itself in front of you (see also Annex 2 hereto). – But what is of importance to note is the context in which these "related rights" are mentioned and of significance within the Protocol's framework.

8. According to my own checking through the Protocol's texts, which at my request was confirmed by UNIDROIT's Secretariat [3], the term "related rights" is, besides the definition itself, *expressis verbis* only referred to once therein, i.e. in paragraph 2 of Article XVI on "Limitations on remedies", which stipulates that "a Contracting State, in accordance with its laws, may restrict or attach conditions to the exercise of the remedies provided in Chapter III of the Convention and Chapter II of this Protocol where the exercise of such remedies would involve or require the transfer of controlled goods or data, or would involve the transfer or assignment of associated rights referred to in Article I (2) (a) (i)". – It needs to be kept in mind for our further considerations that the foregoing provisions of this Article apply, according to its paragraph 1 "only where a Contracting State has made a declaration pursuant to Article XXVI (1)" of this Protocol, namely "that it will apply any one or both of Articles XII and XVI". [4]

9. However, the term "related rights" has also an undeniable bearing on, at least, one provision in the Protocol's Article XII on "Insolvency assistance", according to paragraph 2 of which "the courts of a Contracting State: …; (ii) from which the space asset may be controlled; … shall cooperate to the maximum extent possible with foreign courts and foreign insolvency administrators in carrying out the provisions of Article XI" of this Protocol, which themselves deal with "remedies on insolvency". - The application of that Article XII is also subject to the aforementioned "declaration"-requirement. [5]

10. Finally, the term "related rights" may equally play a role in the context of paragraph 4 of Article XVII, dealing with "the Supervisory Authority", which "may provide, in the regulations referred to in Article XVIII" – which it is mandated to draw up "so as to take effect on the entry into force of this Protocol " -, " for the placement into escrow with the International Registry, or any other agreed escrow agent, at the time of creation of an international interest or at any time thereafter, of access and command codes required to access, command, control and operate space assets". [6]

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3 My thanks for this re-checking go to Mr. Bruno Poulain, UNIDROIT Secretariat, Rome.

4 Such a declaration may be made "at the time of ratification, acceptance, approval of, or accession to this Protocol" (see its Article XXVI, paragraph 1). See also current footnote 17 to paragraph 2 to that same Article. - For "subsequent declarations" and "withdrawal of declarations", see the Protocol's Articles XXIX and XXX respectively.

5 Cf. the last sentence in paragraph 8 and footnote 4 above.

6 With regard to the "International Registry", see the Protocol's Article XIX and the basic provisions on the "international registration system" etc. in Chapters IV to VI of the Convention.

11. It is precisely the latter, namely "operational" aspect, which leads us fully into the telecommunications domain and thus inevitably to the International Telecommunication Union (ITU). It is a *constat inter omnes*, not requiring here any further justification, that space related activities of whatsoever kind are unthinkable and not workable without telecommunications as being the main tool for their proper functioning. I should, therefore, like to stress here that with the Protocol and the future application of its provisions in practice we are and will always be at the 'legal crossroad' of private and private international law, on the one hand, and public and public international law, on the other hand. The goals, values, interests involved, parameters and tools of application etc. are by far not the same in both those legal areas or 'orbits', but are basically different and may thus easily conflict with each other. We must, therefore, aim at avoiding such conflicts, which would be to the detriment of the whole purpose of the Convention and its Space Assets Protocol.

12. Dealing here myself exclusively with the telecommunications domain, I simply recall that it is the ITU which, at the international level, "shall" – *inter alia* – "in particular: effect allocation of bands of the radio-frequency spectrum, the allotment of radio frequencies and the registration of radio-frequency assignments and, for space services, of any associated orbital position in the geostationary-satellite orbit or of any associated characteristics of satellites in other orbits, in order to avoid harmful interference between radio stations of different countries". It also shall "coordinate efforts to eliminate harmful interference between radio stations of different countries and to improve the use made of the radio-frequency spectrum for radiocommunication services and of the geostationary-satellite and other satellite services". [7] In this very context, it is also of paramount importance to keep in mind that the 189 ITU "Member States, in using the frequency bands for radio services, shall bear in mind that radio frequencies and any associated orbits, including the geostationary-satellite orbit, are limited natural resources and that they must be used rationally, efficiently and economically, in conformity with the provisions of the Radio Regulations, so that countries or group of countries may have equitable access to those orbits and frequencies, taking into account the special needs of the developing countries and the geographical situation of particular countries". [8]

13. Whereas the distribution of frequencies takes first place at the international level, namely via their "allocation " to the various "services" in the "Table of Frequency Allocations" contained in the ITU Radio Regulations, which are periodically reviewed and revised, as necessary, by the ITU world radiocommunication conferences, and also via their "allotment" to the various "areas and countries" by those conferences adopting frequency allotment plans [9]. Thereafter, the distribution of frequencies, at the national level and in conformity with the ITU determined allocations and allotments, is effected via "assignment", i.e. by "an authorization given by an administration for a radio station to use a radio frequency or radio frequency channel under specified conditions" (emphasis added) [10]; the same is true for orbital positions. As far as the special ITU provisions for "space services" are concerned, reference can here only be made to Article S22 of the ITU Radio Regulations. - It is also on

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7 See Nos. 11 and 12 in Article 1 of the Constitution of the ITU, Minneapolis, 1998 (hereinafter: "the ITU S").
8 See No. 196 in Article 44 of the ITU CS.
9 See the ITU Radio Regulations, 1998 Edition, Articles S1 and S5.
10 Ibid., and Article S4 thereof.

that national level that "licenses" for establishing or operating transmitting stations are issued "by or on behalf of the government of the country to which the station in question is subject". [11]

14. It is against this here relevant ITU background, as very briefly outlined in the two preceding paragraphs, that the provisions of the Protocol have also to be seen and applied, in particular with regard to the "related rights" here specifically under consideration.

15. As far as the contents of the latter's definition itself is concerned, the denomination as such of the granted or issued document is immaterial, provided its contents is "equivalent" to the examples listed therein. - The issuing "body or authority" is, of course, usually "a national "one, but it could also be or in the future become an "intergovernmental or other international" one, e.g. a "regional economic integration organization", as Article 48 of the Convention itself envisages with good reasons (cf. the European Union). – Whereas the essential middle part from "to control" up to "space asset" is quite in conformity with the ITU requirements outlined above, the last half sentence merits three short observations, in order to avoid some possible misunderstanding: (i) The liaison word "which" - as the whole of that half-sentence - does, of course, not refer to the immediately preceding term "space asset", but it refers back to "any permit, license, authorisation or equivalent instrument". The latter's transferal or assignment is herein at stake and not that of the space asset itself. – (ii) To mention at all, in the definition itself already, that "instrument" 's eventual transferal or assignment appears to be appropriate, as it reminds both creditors and debtors as well as governments not to loose sight of this – mostly for future, unforeseen events - important operational aspect. The two words "and assignable" are somewhat repetitive, as already covered by "permissible", but their eventual retention does not do any harm. – (iii) Last, but not least, the term "under the laws concerned" is deliberately and well chosen, as no mention should be made here of any "applicable law", which is dealt with in Article 5 of the Convention, in particular in that article's paragraph 3, and reference is here especially made to the laws and regulations, under which "a national or intergovernmental or international body or authority" has granted or issued such an "instrument".

16. In the light of the paramount principles quoted in paragraph 12 above, the limitative character of paragraph 2 of the Protocol's Article XVI appears to be quite justified. Governments themselves are, therefore, well advised to exercise their right to make a declaration that they will apply Article XII. Members of the industry and thus the private sector might consider the general wording of "may restrict or attach conditions" as too broad and far going and not specific enough. It is to be admitted that any "conditions" must be "specified" *in casu*, i.e. for each particular case [12], and that they must, of course, also be "in accordance with the laws" of the Contracting State having made such a declaration. But to be in this context more specific, appears in "the exercise of such remedies", which "would involve the transfer or assignment of the" related "rights referred to in Article I (2) (a) (i)", more than difficult, if not impossible, as the variety of remedy constellations is quite numerous and unforeseeable, so that it appears to be preferable to decide only in the light of the prevailing circumstances of each particular case whether or not any transfer or

11 For more details, see ibid., Article S18.
12 Cf. paragraph 13 above.

assignment should be totally restricted or be granted "under specified conditions" [13]. Taking the latter reasoning into account, it would also on the governments' side be unwise to declare any such total restriction generally and right from the beginning.

17. As far as "insolvency assistance" by virtue of the Protocol's Article XII is concerned [14], governments intending to become parties to the Protocol would be well advised to declare indeed that they will also apply that Article XII. [15] "The courts of a Contracting State", whose authorities have authorized the use of certain frequencies and related orbital position(s) for operating and thus also controlling a space asset by the debtor having become insolvent, may in such a case very well by called upon by "foreign courts" or "foreign insolvency administrators" to assist them "in carrying out the provisions of Article XI" of the Protocol. As any such assistance may in future equally be needed in case of insolvency of a debtor national of that State and is thus a matter of reciprocity, those courts would be well advised to respond favorably to such requests for "insolvency assistance" and to "cooperate to the maximum extent possible" in that respect.

18. Should there be any "code(s)" in respect of "related rights", as defined in Article I, paragraph 2, sub-paragraph (a), then paragraph 4 of Article XVII [16] would, of course also become applicable to such (a) code(s).

19. Having thus come to the end of my contribution, I conclude it by stating that, in my opinion, the term or concept of "related rights" has, in particular in the light of the ITU rules and practice, a vital role to play in the practical application of the Protocol, though its true significance and importance will only come to full light during the latter's implementation phase, i.e. by its use and testing "in the field". [17]

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13 Ibid.
14 See paragraph 9 above.
15 See Article XXVI, paragraph 1, sub-paragraph (b).
16 See paragraph 10 above.
17 See also Annexes 1 and 2 hereto.

Annex 1

Current version (August 2003) of the definition of "associated rights" in paragraph 2 of Article I of the "Preliminary Draft Space Assets Protocol":

…….

(a) "associated rights" means:

(i) any permit, license, authorisation or equivalent instrument that is granted or issued by a national or intergovernmental or other international body or authority to control, use or operate a space asset, relating to the use of orbital positions and the transmission, emission or reception of radio signals to and from a space asset, which may be transferred or assigned, to the extent permissible and assignable under the laws concerned;

(ii) all rights to payment or other performance due to the debtor by any person with respect to space assets; and

(iii) all contractual rights held by the debtor that are secured by or associated with the space assets;

…….

Annex 2

The newly split-up version of the current definition contained in Annex 1 into two separate definitions, as proposed by the author of this contribution reads as follows:

……..

(a) "debtor's rights" means:

(i) all rights to payment or other performance due to the debtor by any person with respect to space assets;

(ii) all contractual rights held by the debtor that are secured by or associated with the space assets;

(b) …….
(c) …….
(d) …….
(e) …….
(f) …….

(g) "related rights" means: any permit, license, authorisation or equivalent instrument that is granted or issued by a national or intergovernmental or other international body or authority to control, use or operate a space asset, relating to the use of orbital positions and the transmission, emission or reception of radio signals to and from a space asset, which may be transferred or assigned, to the extent permissible and assignable under the laws concerned.

……..……

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THE PRELIMINARY DRAFT SPACE ASSETS PROTOCOLE TO THE CAPE TOWN CONVENTION ON INTERNATIONAL INTERESTS IN MOBILE EQUIPMENT: AN OPPORTUNITY FOR GOVERNMENT AND INDUSTRY TO COMPARE NOTES

(A colloquium organised by the International Institute for the Unification of Private Law (UNIDROIT) at the Head Office of the European Space Agency (E.S.A.), Paris 5 September 2003):

What are the specific issues arising out of the **remedies provisions** of the draft Protocol?

Jacques Bertran de Balanda

In order to make any security or other proprietary interest operational from a practical standpoint, there needs to be:

1) clear definition of what creditors are eligible to benefit from such regime;
2) clear definition of the assets that may be charged or affected;
3) simple and efficient perfection mechanics so that the security or other interest is known to third parties; and
4) efficient remedies: what is available to the beneficiary if things turn bad?

Item 1 is straightforward, item 2 has been discussed in previous speeches, item 3, as in all non-possessory pledge systems, will be dealt with by way of entries on a registry (which is conceptually easy to understand even though not necessarily that easy to set up and operate).

What about item 4 when one deals with controlled, "sensitive" technology and data on the one hand and licenses on the other hand?

Before going into the discussion, let us restate which interests are eligible for protection under the Protocol. They are:

- conditional/deferred sales;
- leases; and
- security agreements.

In the first two cases, the vendor or lessor has actual ownership of the assets whereas in the third one it is a security right (as we would say under civil law *droit réel principal* and *droit réel accessoire*).

Now, what remedies are there under the Protocol?

- take possession or control of the object;
- sell or grant a lease over the object;
- collect or receive income arising from the management or rise of the object; and
- apply for a court order authorising or directing any of the above.

(in the time given for this communication, I am leaving aside the issues that could be specific to "expedited remedies" intended essentially for the preservation of the relevant space object. However, in the case of satellites for example, in the event of difficulties, time is of the essence and the need for quick and effective remedies should not be underestimated).

If we were talking about a standard piece of equipment (i.e. in satellite terms, the "bus" or platform) the above remedy provisions would not raise any specific concern apart, maybe, with respect to their compatibility with bankruptcy legislation and "self help remedy" prohibitions that exist in certain jurisdictions.

However most space objects (we are dealing here principally with satellites) are complex equipments that can be operational - and thus generate revenues - only if:

- they can use "restricted" technology;
- the operator has the relevant license (telecoms in the wide sense being a regulated activity); and
- the operator has the relevant access and command codes.

With respect to restricted technology, it can be assumed that in conditional sales and leases the technology has gone from the seller/lessor (whether as proprietor or as lawful user) to the buyer/lessee legally in the first place (i.e. necessary consents and clearances were obtained) so that getting it back would not be an issue. However, if the idea of the conditional seller/lessor and for that matter of the beneficiary of a security interest were to transfer the asset (and the restricted technology that it contains) to a third party, that would be a very different story.

That is why the Protocol (Article XVI paragraph 2) allows for Contracting States the possibility to "*restrict or attach conditions*" (sic) to the exercise of the above remedies that would involve the transfer of "*controlled goods, technology or data*".

The position is very similar with respect to licenses defined in article I paragraph 2 (a) (i) of the Protocol (basically licenses and permits that are necessary for the operation of space assets) and the Contracting States are allowed to make the same transfer restrictions.

I would like to take an example of what these could be in practical terms. Being a French lawyer, I will take existing French law on the matter:

- **restricted technology**: transfer of products and technologies that are listed in a decree of 1995 (which includes most satellites and control stations as well as encryption equipment) is subject to prior approval by the Ministry of Defence;
- **licenses**: licenses to operate telecoms networks, whether or not involving satellites are compulsory and delivered by an independent authority on the basis of the financial and technical capacities of the applicants. Such licenses cannot be assigned or transferred in any manner without the authorities' prior consent.

Clearly, the need for consents to actually exercise a given remedy under the Protocol goes against the need for quick - yet fair - enforcement mechanics which, in the case of satellite financing, is of the essence.

Naturally, that objective has to be weighted against the need for Contracting States to protect interests which they consider paramount. Limited recourse financings structures have encountered these issues in other regulated areas such as oil, power or terrestrial telecoms. Solutions have been found with, for example, so called "direct agreements" between the lenders and the regulatory authorities which aim at speeding up/organising the consent process in case of a default; or "back-up services" that would be "pre approved" to operate the asset for the period during which a definitive solution (eg sale to a competitor of the defaulting debtor) is being discussed. Other possibilities can - should? - be explored, such as the creation of a "secondary market" for licences organised by the relevant state or the buy-out of the defaulting debtor by the Government or the relevant authority (presumably in cases where the asset provides emergency or other type of public service).

However, as a lawyer advising both financiers and sponsors in limited recourse financings, I would like to stress that effectiveness of remedies is key and anything that stands in the way of efficient repossession

(which may be perfectly legitimate) is counterproductive to the development of a private financing market. It is really up to the Contracting States to consult with the interested parties and devise legislative and regulatory frameworks that will facilitate the use of the Protocol (and thus foster the development of commercial space industry).

If Contracting States are mindful of these needs and seek to achieve a balanced regime when exercising their rights to restrict remedies, I have no doubt that the Space Protocol will be a success.

[*NB: the following was not delivered orally on 5 September*.]
I will now consider briefly the issue of escrow of access and command codes: these codes are vital to operate the asset and, in order to get effective repossession, one must be able to have effective access to them; this is why this possibility has been opened in the draft Protocol.

In strict legal terms, it could be an issue under the law of bankruptcy and security interests in some Contracting States, especially civil law countries. However, the idea of escrow is present in most legal systems and, provided that the above issues on transfers of restricted technology listed above are dealt with, should raise only technical legal issues (as opposed to issues of substance).

The views I expressed are those of a private finance lawyer confronted to these issues and who is asked to make financing structures workable. We should now hear the views of governmental experts on this delicate issue of remedies.

Jacques Bertran de Balanda

Colloquy on the preliminary draft space assets protocol to the Cape Town Convention on international interests in mobile equipment, Paris, September 5th 2003

SPECIFIC ISSUES OF PARTICULAR IMPORTANCE UNDER THE PRELIMINARY DRAFT PROTOCOL

The definition of space assets (Art. I(2)(f))

by Dr. Michael Gerhard and Dr. Bernhard Schmidt-Tedd *

The definition of space asset which is set out in Art. I(2)(f) of the preliminary draft space protocol (Space Prot.) is of special importance because it will determine the sphere of application of the Cape Town Convention in the view of the Space Prot. As the aim of the Unidroit project is to facilitate asset based financing and to reduce the cost thereof, we are only at the beginning of a promising prospect of space financing, if the Space Prot. will be ratified by a quite reasonable number of States[1] and if the opportunities disposed by the international agreements are broadly (accepted and) used by the space as well as the financing industry. To this end the definition of "space assets" has to be well balanced between a rather wide inclusion of assets that can serve as collateral and a wording which is clear and useful.

The definition of "space asset", as it stands now[2], reads as follows:

> *"Space assets" means*
>
> *(i) any separately identifiable asset that is in space or that is intended to be launched and placed in space or has been returned from space;*
>
> (ii) *any separately identifiable component forming a part of an asset referred to in the preceding clause or attached to or contained within such an asset;*
>
> (iii) *any separately identifiable asset or component assembled or manufactured in space; and*
>
> (iv) *any launch vehicle that is expendable or can be reused to transport persons or goods to and from space.*
>
> *As used in this definition, the term "space" means outer space, including the moon and other celestial bodies.*

I. General observations from a governmental point of view

From *a* governmental point of view, the above mentioned issues have to be balanced considering

(1) the compliance of the international treaty to be ratified with other obligations of that State under international law,

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* The authors are with the legal support agency of the German Aerospace Center (DLR). The text – which was drafted with the assistance of Mr. Matthias Creydt – represents the personal views of the authors.

1 Especially those States which are or might become in due time a launching State of a space object (Artt. II (1), I (a) RegConv, Art. VIII OST), a space object which might be an asset financed under the Space Prot. or to which a financed asset is part of or linked to. The assets are – as long as they are in outer space and qualified as space objects by international law – under the jurisdiction of the launching State. And because of the *lex rei sitae* principle, the domestic law of the launching State applies, e.g. to the exercise of remedies.

2 Unidroit 2003, Study LXXIIJ – Doc. 10 rev. (May 2003).

(2) the interaction of the terms to be ratified with domestic law already valid and

(3) its usefulness and conclusiveness under consideration of the interests of the (national) financing and space industry.

1. Compliance with other obligations under international law

First of all, briefly looking at the compliance with other obligations under international law, we might refer to a study submitted by a sub-working group of the Unidroit Space Working Group under the chair of Prof. Paul B. Larsen.[3] The study dealt with the question of "space assets" and came to the conclusion that there is no conflict as to the scope of examination. The main focus of the sub-working group hereby was directed on the notions of "space assets" in the Space Prot. and "space object" in the UN Treaties and Principles on Outer Space. We absolutely agree that there is no need for common terminology of the two areas, as the Space Prot. concerns private law financing of contracts which is different from the public law objectives of the UN space law treaties. But not only the notion of "space assets" is in no conflict with international space law. We might only identify one area of possible conflict of the definition of "space assets" with one of the UN space law treaties. But even this is of minor importance as we will demonstrate later.

2. Interaction with domestic legislation

The question of a possible interaction with the valid domestic regime is next to be considered. An international treaty ratified by a State is valid national law either directly or by transformation. And since opposing national law is no reason for not complying with any international obligation, a government has to bring the law in line. We are now just before the first diplomatic conference. Thus, a government is confronted with two questions:

(a) does the treaty to be ratified contravenes basic principles of national law in such a way that it would be better not to ratify the treaty and

(b) are there any conflicts with national law that might lead to the necessity of a change of such domestic norms.

The first question should be of minor importance here. We do not identify any such conflict at least from the angle of a legal system based on Roman law. The second question is more interesting with regard to Art. I(2)(f)(ii) and will be discussed later.

3. Usefulness and conclusiveness

Finally, if all the aforementioned issues are given, the usefulness and conclusiveness of the treaty has to be of special importance to the government. From a legal point of view[4] the decisive question should be, how broad the wording of the definition might be in order to enable the industry to make numerous use of the instruments of the treaty, without leading to an insecure, useless or inconclusive definition. The latter might lead to a quite contrary effect. Most of the following issues concentrate on this matter.

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3 UNIDROIT draft space protocol: The relationship between the protocol and existing space law, January 2002.

4 The practical point of view was presented by the representative of the industry earlier.

II. Any separately identifiable asset that is in space, intended to be launched and placed in space or has been returned from space

The first part of the definition deals with assets which are in space, intended to be launched in or has been returned from space.

1. Separately identifiable assets that are in space

The term "asset" is not further determined by the Space Prot. It is only limited by its identification criteria according to Art. VII Space Prot.[5] How this will look like will be discussed later today. Furthermore the term asset has to be interpreted according to the preamble of the Cape Town Convention: the asset needs to be mobile and high-value. Though the wording of these terms is neither clear, the notion will be limited in practice to those assets which are commercially reasonable collaterals. In this way the Space Prot. remains applicable to collaterals which might be created under future space activities which are not yet easy to foresee today.

2. Separately identifiable assets that are intended to be launched and placed in space

At first glance, the inclusion of assets intended to be launched and placed in space is somehow contradictory to the aim of the Space Prot. It is intended to create a new international security interests in mobile equipment, as the transfer of high value equipment from one country into another might lead to a situation of legal insecurity because of the *lex rei sitae* principle. But where is such a transfer here? If an asset is intended to be launched it is either in its process of manufacturing or on its way to the launch site. No question that a security interest is necessary also at this stage.[6] But if a transfer of boundaries will take place here, it is predictable which legal regime will apply, e.g. in case of a default.

Nevertheless there is a good reason for including assets which are not yet in space: manufacturing, launching and operation of an asset, let's say a satellite, is a coherent process. Usually the creditor is interested in the continuation of his security interest created in an asset intended to be launched also later while it is in orbit.[7] If there is in one State a different legal system for an asset intended to be launched (since not yet being a space asset) and a high value mobile space assets, such a continuation might be doubtful. It might also happen that a satellite can not be launched as intended by a certain launch vehicle (e.g. because of several failures shortly before the intended launch) and another launcher is able to sent out the asset, but from another launch site situated on the territory of another country.

3. Separately identifiable assets that have been returned from space

The possibilities to return an asset from space to earth are very limited. If an asset re-enters (voluntary or involuntary) earth atmosphere it will burn-up and a remaining conglomerate will crash down on earth or (for safety matters) in the high seas. This would not be of much value to

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5 According to Art. VIII OST one might require a special linkage to a space object. Outer Space is an international territory and therefore without any territorial jurisdiction. A quasi-territorial jurisdiction is set up via Art. VIII OST: the launching State remains jurisdiction over a space object. Considering this, it is not possible to attribute a *lex rei sitae* to an asset, which is not itself a space object or in respectively connected to a space object. This might lead to problems e.g. for assets manufactured in outer space, as we will discuss later.

6 Martin Stanford / Alexandre de Fontmichel, Overview of the current situation regarding the preliminary draft Space Property Protocol and its examination by COPUOS, in: Uniform Law Review 2001, pages 68.

7 This scenario might also be justified as a special kind of an internal transaction, admitted by Art. 50 of the Cape Town Convention.

a creditor. So the only possibility is to return such an asset via the US Shuttle or any comparable system to be developed or a reusable launch vehicle. So the inclusion of assets returned from space is of further interest for assets which are part of an experiment in outer space (e.g. on a space station) and intended to return in order to be analysed. Thus, as an example for assets that have been returned from space, some authors name hardware, ultrapure crystals or pharmaceuticals.[8] As long as the returned asset was part of an experiment we might create a conflict with regard to intellectual property rights: There might be contractual stipulations, who will become the owner of the result of an experiment. This is not necessarily the owner the financed asset. And the asset returned might be part of the result. Intellectual property rights will be treated later today as an associated right. As such it might be subject to an own security interest. But here it might get in conflict with a security interest in a material asset.

We have earlier referred to a case, where the Art. I(2)(f) Space Prot. might contravene international space law. What we have had in mind was the 1968 Agreement on the rescue of astronauts and the return of objects launched into outer space. Art. 5(3) of this agreement requests that a space object or its component parts found on the territory of a State shall be returned to the authorities responsible for the launching. Some space assets might be a space object to which these articles would apply (satellites, platforms, launch vehicles – maybe also bigger parts of hardware). One might fear that an asset returned to earth could be withdrawn from the (indirect) possession of the creditor by applying this norm. But one has to consider the reason for the Rescue Agreement, which was to entitle the launching authority to request return of astronauts and objects under the jurisdiction of a foreign State in the event of an accident, distress or emergency landing.[9] The agreement will not apply to an intended return of an asset. Furthermore the return of an asset is of little value (cf. above). Assets in space are of high interest because of their operational use and the profit deriving thereof.

III. Any separately identifiable component forming part of an asset referred to in the preceding clause or attached to or contained within such asset

Also component parts of an assets (as discussed under II.) are defined to be “space assets”. Having first of all a look at the UN Space Treaties again, we find a rather comparable definition of the term “space object”: *the term “space object” includes component parts of a space object as well as its launch vehicles.*[10] But having changed the notion of “space property” to “space asset” and being aware of the distinction between “space object” and “space asset” there is no need to bring the two definitions in line because of the quite different goal of the treaties.

From the perspective of a prospective State Party to the Protocol this part of the definition might be of special interest. Creating a security interest in a component part means to constitute rights in relation to that single component part, legally independent from any rights in the asset in terms of Art. I(2)(f)(i). As we have already learnt during several sessions of the space working group, there are domestic legal systems which do admit rights and obligations in component parts only, if they are not an integral part of the principal “object”; otherwise rights and obligations are only in relation to the entire asset. This is a problem related to the separation of rights *in personam* and *rights in rem* (the contractual relations between persons and the legal status of an object), based in the Roman law. One of the goals of legal regulations *in rem* is to protect different rights / titles in one object. This is only possible because respectively if it is de facto feasible to separate an object

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8 Dara A. Panahy / Raman Mittal, The prospective UNIDROIT Convention on international interests in mobile equipment as applied to space property, in: Uniform Law Review 1999, pages 303(306).

9 Preamble of the 1968 Agreement on the rescue of astronauts and the return of objects launches into outer space.

10 Art. I (d) LiabConv, Art. I (b) RegConv.

in case of opposing interests of several creditors in different parts of one object – thus, if one of these is not an integral part of the other. As the majority of space assets are not coming back to earth, component parts are not physically separable in order to be used otherwise. For those States, where security interests are rights *in rem*, it might be difficult to argue, that e.g. a transponder is not an integral part of the satellite (bus), as they are connected for their lifetime and dependent in its functions and aims, irrespective of what the creditor and the debtor have agreed to by contract. Therefore the inclusion of component parts in the definition of "space assets" may lead either to an extraordinary effort in arguing that e.g. transponders are not integral parts of satellites or on the other hand to the necessity to exceptionally admit rights and obligations by the way of changing domestic legislation.

As there is no question that security interests in transponders are common and absolutely necessary from a commercial point of view, the solution might perhaps be found in a amendment to the Space Prot. Such should balance the needs of such States, where a security interest is a right / title *in rem* and the common practice of agreeing therein by contract, i.e. *in personam.* Those States will not have any problems if the security interest is created in an asset as a whole, but if there are different security interests in components parts and assets of which they are part of (e.g. in a satellite and ten transponders on the one hand and in two more transponders on that same satellite bus on the other hand). The example of satellite and transponders shows that separate financing of assets and components of assets does not automatically lead to a separate utilisation thereof. As the Space Prot. stands now, it is up to the contractors to stipulate the relationship between the two security interests connected to one object. Is the creditor of the satellite and the ten transponders entitled to sale – in case of default of his debtor – the satellite to another operator, who is transferring it to another orbital position undertaking his applications there? How to consider the security interest of the second creditor, which still exists? The debtor is not able to undertake his application in order to fulfil his obligations with regard to the second creditor any more.[11] These question are not sufficiently solved by the term "exercised in a commercially reasonable manner", as it is stated Art. 8(3) of the Cape Town Convention. And also the priority provision (Art. 29 of the Cape Town Convention, Art. XIII Space Prot.) does not apply, since the interests concern two different assets.

Having in mind the above given simple scenario and considering the fact, that it might become difficult for some States to transform Art. I(2)(f)(ii) Space Prot. into domestic legislation, it might be advisable to amend the Space Prot. in such a way that the needs and aims of rights / titles *in rem* are safeguarded. This should not be to unusual to the other States, as it might also be kind of harmonisation of contractual stipulations in case there are several creditors involved. Therefore we would suggest to draw up a rather detailed regulation on how default remedies should be exercised if there are security interests in component parts involved. Either the owner or the creditor of the part which is not subject to default has to be safeguarded by codifying his rights in parts of the asset – being e.g. a sort of mortgage to the creditor who wants to exercise default remedies on parts of the asset respectively on the asset of which a component is part of.

IV. Any separately identifiable asset or component assembled or manufactured in space

The manufacturing of space objects has not yet taken place in space. Though the International Space Station is going to be assembled in space, the creation of security interests in one of its elements or the Station as a whole is out of question. Other space objects have not yet been

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11 Alvaro Fabricio dos Santos, Financing of space assets, in Space Policy 2003, pages 127(128).

assembled ins space. Nevertheless one might think of an asset (not being a space object) being manufactured or assembled in space already today.

Considering that an asset is assembled in space of two component parts, each of them owned by another person. If the creditor of one of them intends to create a security interest in the assembled asset, he has to ensure that under private international law his debtor is the owner of it. The same problem might occur in case of asset manufactured in space. It might be worth to mention that the ownership of objects[12] launched into outer space is not affected by their presence in outer space.[13] Anyhow – this is a problem well known to creditors of earth bound assets and has to be solved within the security agreement.

Outer space is an international territory. The *lex rei sitae* principle therefore only applies with regard to space objects, which remain under the jurisdiction of a State as determined by Art. VIII OST. This is the launching State of the space object. Therefore we are only able to identify an applicable law with regard to assets manufactured in space, if they are in some kind in or connected to a space object which was launched once from earth into outer space. Otherwise, (even if the asset manufactured in space might be qualified as a space object) one might have difficulties to identify a State which launched the object into outer space[14], i.e. a State which jurisdiction will apply to that object.

V. Any launch vehicle that is expandable or can be reused to transport persons or goods to and from space

This part of the definition is another one to see that the drafters of the Space Prot. were very sensible to what might become a space asset in future time. For the time being, there does not exist any such asset (supposing that the State owned US shuttle will not be subject to any creation of a security interest). As we do not now much about the application of legal terms to such an activity, the only question which might be raised now is whether such an activity has to be dealt with by air law, by space law or both. For the creation of a security interest according to the Cape Town Convention, the question would be whether such a vehicle is (also) an airframe according to the Protocol specific to aircraft equipment. One might argue that its mention only within the Space Prot. leads to the conclusion that the Protocol specific to aircraft equipment does not apply. But this is contestable. E.g. they do come back to earth and the taking of material possession of some parts therefore is possible. Thus, the relation between the two protocols with regard to expandable or reusable launch vehicle might still be determined.

Finally one might further discuss whether sub-orbital flights are undertaken in order to transport persons or goods to space. From an interpretation based on the pure wording of this paragraph, though a sub-orbital plane is a reusable launch vehicle, it does not intend to transport people or goods to space, as it won't reach an orbit. It is also doubtful whether they are included as *air*frames under the Protocol specific to aircraft equipment. Therefore one might consider an amendment if there is any need to include sub-orbital planes.

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12 One has to be aware that the UN Treaties and Principles on Outer Space deals with "space objects" and that not every "space asset" is also a "space object".

13 Art. VIII (2) Treaty on Principle governing the Activities of States in the Exploration and use of Outer Space, including the Moon and Other Celestial Bodies.

14 With regard to this definition it is contested, whether or not an object need to be launched from earth into outer space or if a launching State is also a State which launched an object from outer space into outer space.

VI. Conclusion

There are two parts of the definition of “space assets” as given in Art. I(2)(f) Space Prot. which need further consideration. The inclusion of component parts of space assets is advisable, but should come with a more detailed regulation of their relationship to security interests in the rest of the asset, especially in case of default. Finally it still has to be determined, whether reusable launch vehicles and sub-orbital planes really should be subject to the Space Prot.

Space Protocol-Colloquium Unidroit/ECSL-ESA 5th september

Definition of the associated rights under the Preliminary Draft Space Protocol : a governmental point of view

Contribution by Alexandre de Fontmichel [1]

Mr. Chairman, before starting this brief presentation on such an important issue , I would like to thank UNIDROIT, ECSL and ESA for their very kind invitation. It is a great honour for me to be here this afternoon to share and exchange few thoughts on the subject.

I also want to apologize to the English readers, a more complete contribution will be submitted to the organizers of this colloquium in French, since English grammar and syntax are some old enemies and I do not wish to give them the chance to prove, once again, their overwhelming superiority.

As the previous speakers pointed out, the space object, as a tangible property, represents little value to the beneficiary of the security interest if the latter cannot also benefit from its "associated rights".

The actual definition of associated rights covers some rights of very different nature. It is far from being an homogenous category. In current art. 1 § 2 of the Preliminary Space Protocol, associated rights can be both contractual rights (that is rights created under a private contract between the debtor and another party), or legal rights (that is rights granted by law to the debtor), the examples given for this sub-category are " any permit, licence, authorisation relating to the use of orbital positions and the transmission, emission or reception of radio signals to and from the space assets (…)".

Several questions can be raised from a governmental point of view. First can those legal right be included in the definition of the space asset? If yes, can those legal rights be automatically transferred or assigned with the asset to the secured creditor implementing his security interest?

In order to answer in a very general way to those questions, I will first attempt to draw a typology of those legal rights in order to stress out there very particular legal regime and than express some views on the solutions given by the UNDROIT Preliminary Space Protocol.

I – Typology

Licences and authorisations

Talking about French Law, you can for example distinguish between :

- Licences granted to an operator by the ANFR. ANFR is the French administrative body in charge of the distribution of spectrum frequencies allocated to France within the frame of the ITU.

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[1] Docteur en droit, Juriste au Ministère de la Justice, Chargé d'enseignements à l'Université Panthéon-Assas. The views expressed by the contributor can only be considered as personal opinions.

- Licences granted to an operator under the telecommunication regulations and in particular the 1986 Act, revised a several amount of times, and being revised today in order to transpose EC "communication package" directives. In this category you can also distinguish between licences delivered by the CSA (Conseil superieur de l'audiovisuel) for example for the transmission via satellite of TV shows to ground segment, and authorisations delivered by ART (Agence de regulation des telecommunications) in order for example to transmit by satellite high speed internet.

Permits:

I will not discuss here in length the issue of export permits. I doubt that they are covered by the definition in art. 1 § 2. Export of commercial space objects like satellites, launchers, but also the data they contain, use some very sensitive technologies which are also used in military equipment. States, for national safety reasons, have a right to control the export and re-export of such tangibles and intangibles under their jurisdictions. Those legislations are designed to prevent sensitive technologies from falling into the wrong hands. Two very illustrative examples are the US Satellite Trade and Security Act of 2001 and the EC regulation n° 1334/2000. The way those regulations can articulate with the Unidroit Space Protocol will probably be discussed in length by the following speakers on remedies and the transfer of technology.

Now coming back to licences and authorisations, let say a word about their legal regime. What do they have in common?

Legal regime

All licences and authorisations delivery process are dictated by national interest or public interests matters. Under Space Law, each state has a certain amount of international obligations, control of technical abilities of the operator of the space object under its jurisdiction, control of the allocation of frequencies and orbital positions which are very rare resources. Under internal public law, States may also which to exercise a certain control over radio frequencies, for public services reasons or in order to protect a certain market competition. For those reasons, licences and authorisations can be seen as the legal tools for public interests policies taken in its broadest sense.

How can we now qualify in private legal term such rights?

They are in most cases not "in rem" rights that means that they are not linked to the asset but are delivered to a legal person. They are rights "in personam". Therefore, those licences are not attached to the tangible but to the operator (in the Unidroit Space Protocol, let's talk about the debtor)

They are rights in "personam" but of a very particular nature since they are delivered on an "intuitu personae" bases. That means they are not delivered to any legal subject of the same kind, but to one legal person specifically chosen by the competent national or international authorities.

The main consequence is that those rights are not transferable by the licensee to another person without the consent of the public licensor and it would be a unilateral decision for this public licensor to accept or refuse such transfer.

For those of you familiar with French law, this regime is very much identical to the one applicable to “decisions administratives” granting an authorisation for a private person to use public domain facilities.

You can very much feel the difference between those associated rights and the other associated rights of purely contractual natures, or the right of payments also addressed in article 1 of the Preliminary Space Protocol.

II- Solutions given by the Unidroit Space Protocol

As regard to the inclusion of those legal rights in the definition of the space asset itself and their transferability or assignibility, the solution given by the Space Protocol is from my point of view the wisest.

If you read art. 1§2, these issues are dealt by the national law concerned.

However, one may ask which is the law concerned by the transferability of the authorisation or the licence, the law of the debtor? The law of the guaranteed creditor? The law of the administration who granted those specific rights.

To my point of view, only the latter is relevant both from and international private law and from and international public law analysis.

To be brief, one can only consider the regulations organizing the licence delivery procedures as “lois de police” or public order regulations which by nature are allergic to traditional conflict of laws theory.

I doubt that anything else could be done in text of the present draft on this issue.

The goal of the Space Protocol is to provide for an uniform international private law security interest system and it would be very difficult, in the same instrument and under the auspices of UNIDROIT, to unify or even coordinate public law regulations.

However, the existence of this Protocol should be seen by the governments wishing to gain full benefit from this new regime, as an opportunity to reconsider their internal law on licensing procedures as well as their legal regime.

This could lead government to adopt measures in order to speed up those procedures, to admit without restriction foreign operators to apply for a licence, or to admit to a certain degree and under a certain control a “second markets” for those legal rights.

To a certain extent, this trend can already be observed within the EU with the transposition of the “telecommunication package’ 1999 directives.

Comments to Preliminary Draft Space Assets Protocol
by Igor B. Porokhin
Partner, Inspace Consulting LLC (Russia)

(UNIDROIT's Paris 2003 Colloquium held at the Head Office of the European Space Agency on September 5, 2003)

Article XVII.4 of the Draft Protocol says that the Supervisory Authority may provide, in the regulations, for the placement into escrow with the International Registry, or any other agreed escrow agent, at the time of creation of an international interest or at any time of thereafter, of access and command codes required to access, command, control and operate space assets. This provision with some modifications has been moved to Article XVII from Article IX related to default remedies. The ground for that move was, presumably, to make this provision unconditional and not subjected to the declarations of the States.

The issue of placement into escrow of access and command codes in order to facilitate the exercise of remedies of the creditor has been for long at the centre of discussions. Being obviously the effective means to protect the interests of the creditor with respect to the satellites, in our opinion, it can create certain legal and practical problems.

(1) It's very common that transponders on one satellite are being leased or sold to several buyers or lessees, at the same time the TT&C services are provided to the satellite as a whole. In view of first-to-file concept which is applicable here it can cause that only one creditor who owns one or several transponders will get the internationally registered right to control the whole satellite where other transponders are owned by other entities. This could unreasonably undermine the balance of interests of the creditors and even meet resistance from the governments, especially in the case when some transponders belong to a government.

(2) In many jurisdictions access and command codes, being the software of the control system of the satellite, are subject to the export control regulations based on the international agreements. Transfer of access and command codes requires the observance of the mandatory rules. Among them are: precise identification of the end user, the expressed obligation of the end user not to transfer the controlled software to any third party without the permission of the exporter and approval of the export control bodies of his country, the certificate of the state, where the software will be placed, confirming the obligations of the end user, the right of the exporter to make inspections with respect to the software, and some others. The role and place of the International Registry as an escrow agent or any independent escrow agent under such a regimen is not quite clear and requires further consideration.

(3) The satellites are the core elements of the national communications systems. The possibility of unforeseen change of control over a satellite that provides communications for the vast territories and numerous users (including governmental bodies and emergency services) may be considered by the governments as potentially detrimental to the national security. Furthermore, the storage of access and command codes for control of tens, may be hundreds of satellites from all over the world in one place will require the higher level of security. In this connection, what security guarantees may be given by the International Registry or escrow agent to the governments? Will they be sufficient for the governments which are responsible before their people for the secure functioning of their national communications systems. In addition, if we aim at the creation of the universal registration system, we should not ignore the political

sensitivity of storage of access and command codes of the satellites from different countries on the territory of one particular state.

(4) Nevertheless, the above said does not mean that the placement of access and command codes into escrow can not be implemented for the purposes of the Space Assets Protocol. There can be cases where the above mentioned complications are not applicable or the contracting parties are prepared to handle them or accept all the relevant risks.

(5) The reasonable alternative may be to make the escrow scheme optional. To that end, the provision on the access and command codes is to be moved from Chapter III, Article XVII back to Article IX and to be put in the sense that the debtor and the creditor may in any particular case specifically agree on placement of access and command into escrow with the International Registry or any other agreed escrow agent. Taking into account Article XVI of the Draft Protocol that provides for the Contracting State the possibility to restrict or to attach conditions to the exercise of remedies, it will be up to the States to decide whether they agree to grant the right to use such escrow scheme to their national entities or not.

ANNEXE II

Texte des observations faites en rapport à la présentation de M. Stevignon et les commentaires relatifs de MM. Gerhard et Schmidt -Tedd par M. Caplan

UNIDROIT - PARIS, 5 SEPTEMBER 2003

PRELIMINARY DRAFT "SPACE ASSETS" PROTOCOL
Points made by Harold Caplan

1 I would like the Space Assets Protocol to succeed. I offer no comment on the Aircraft Protocol which its supporters say is exactly what the aviation financing and leasing community needs.

My aim is to explain what I think is wrong with the Space Protocol and what might be done to make it a success.

2 I start with my concept of the role of a Convention on private law. If I am wrong in this, everything I say may be disregarded.

In my view, the sole purpose of any international agreement in the field of private law is to provide a uniform code which ratifying States can respect either by incorporation into municipal law or by promoting uniform model laws.

I note that this is consistent with UNIDROIT legislative policy: "Technical approach to harmonisation or unification favoured by UNIDROIT".

3 The best example known to me in the area of private law is the 1929 Warsaw system concerning the liability of international air carriers. This is believed to be the most widely-adopted treaty affecting private law in human history. As at 5 September 2003, ICAO lists 151 State parties plus 134 to the 1955 amendment. And the treaty which will, in due course, consolidate, modernise and replace the Warsaw system was opened for signature in Montreal in May 1999 (just 6 months before the Capetown Convention): it has already acquired 31 ratifications and will come into force 4 November 2003. It is important to note that the only reservation which may be made to the Warsaw system and its successor relates to carriage performed by the State. No derogations from the uniform code are permitted. It is beyond dispute that this aim of uniformity is the key to widespread adoption of the Warsaw system and its successor.

4 The uniform code in the Warsaw system contrasts dramatically with the basic plan of the Capetown Convention in which no reservations are allowed but individual declarations by States may be made (or with one exception withdrawn) at any time on 10 different topics; moreover party autonomy may prevail in no less than 8 different areas. I do not challenge this wide range of choices for States or for negotiating parties because this flexibility is designed to accommodate a variety of implementing Protocols according to subject matter. In the event of inconsistency between Convention and Protocol "the Protocol shall prevail" (A.6.2). Thus the Protocol is <u>the</u> opportunity to choose wisely from the Convention and introduce as much uniformity and value in the Protocol as may be calculated to promote the financing of commercial space.

5 Instead, the present DRAFT Protocol includes 8 topics on which States may make declarations - all but one of which can be made or withdrawn at any time, plus 6 areas of party autonomy - one of which is so broad in scope (A.IV) that the parties can effectively agree to disregard the complete Protocol! This galaxy of State choice plus party autonomy means that even the most gifted lawyer on the planet could not give a firm opinion on any aspect of space financing without knowing first: what declarations have been made (and not withdrawn) by States under the Convention and under the Protocol and second: to what extent the parties have decided to use the Protocol provisions (if at all). Moreover, this gifted lawyer could not say that his/her opinion would be valid throughout the lifetime of the contracts. To protect himself (or herself) against allegations of professional negligence he would be well-advised to maintain a continuous watch on the Depositary's website and to stipulate that his/her opinion would be subject to periodic review at no less than quarterly intervals.

These inescapable difficulties for a 'gifted lawyer' are mirrored and multiplied for the diligent official (not necessarily a lawyer) whose task will be to explain to a politician how the Convention and Protocol work together; why certain declarations (or withdrawals) should or should not be made by the State and if so, when; and regularly monitoring declarations (or withdrawals) by other States and advising whether it is necessary or desirable to make consequential declarations or withdrawals.... without denouncing the Convention or the Protocol.

6 I do not seek to ridicule what I have called this "galaxy of choice" because I am sure that the opportunities for choice have been created by knowledgeable lawyers for specific purposes. Indeed some of the choices are quite common in international private law treaties - such as the extent to which all of a State's territories are to be involved, or choice of law for a contract. However, in passing:-

- I ask whether the intention of A.III is to apply certain parts of the Convention only to sales and prospective sales? If so, what happens to leases?

- I do not understand in what sense Declarations under the Convention can be deemed to have also been made under the Protocol (A.XXVII).

7 In order to be constructive I take my cue from Mr Robert Gordon of Boeing who listed three factors critical for financiers:

- the borrower's ability to repay
- the market value of the asset
- transparent legal process

The Space Protocol can only make a contribution to the third factor and, as I have outlined above, the Preliminary Draft cannot deliver this unless, perhaps, all States and all parties agree to adopt the laws of a single jurisdiction *eg* USA - and even then, it might be necessary to identify Federal law, or the laws of a financially-sophisticated State such as New York.

8 Once launched, few space assets can be retrieved or physically repossessed. Thus all the possible systems of law of interest to financiers are essentially earthbound, and they already exist. A Space Protocol might consist of a distillation of the rules which have proved most practical and useful. If that was so, there would be no need for the galaxy of choices outlined above. In order to advance it is therefore essential to concentrate initially on areas where there are no rules whatsoever - namely the creation and enforcement of internationally-registrable interests and the resultant priorities.

9 Hence my view is that, as a first step, the Space Protocol will yield immeasurable benefits to the world of commercial space exploitation if it is ruthlessly limited to the identification of internationally-registrable interests, the creation and maintenance of an international register and a foolproof system of enforcing uniform priorities as between registered interests. State declarations and party autonomy should be excluded from the operation of this new register. If this can be done, the benefits will be visible within a decade of operation. If this cannot be done, I am bound to question the need to do anything else at this stage.

10 Of course I do not deny the potential usefulness of an internationally recognised legal system which would include default remedies, transparent insolvency laws and the like. If experience with the Aircraft Protocol yields positive results in this area, the same rules can be used for Space Assets: it is doubtful whether they would even need adaptation - but if they do, then they can be added in a later amending Protocol, based on the secure foundation of an international registration system which, by that time, should have proved itself.

11 It is obvious that if the first Space Protocol is strictly limited to a uniform non-variable system of internationally-registered interests, the future agenda for discussion may be considerably curtailed. In my view this is a more certain pathway to practical success than the present galaxy of choices on so many topics - not all of which are ripe for harmonisation.