I. BACKGROUND

1. At its fourth session, held in Rome from 3 to 7 May 2010, the UNIDROIT Committee of governmental experts for the preparation of a draft Protocol to the Convention on International Interests in Mobile Equipment on Matters specific to Space Assets (hereinafter referred to as the Committee) was seised of comments \(^1\) formulated by a number of representatives of the international commercial space and financial communities expressing concerns regarding certain aspects of the text of the revised preliminary draft Protocol to the Convention on International Interests in Mobile Equipment on Matters specific to Space Assets prepared by Sir Roy Goode (United Kingdom) and Mr J.M. Deschamps (Canada), as Co-chairmen of the Drafting Committee of the Committee, to reflect the conclusions reached by the Committee at its third session, held in Rome from 7 to 11 December 2009, and reviewed by the Drafting Committee (hereinafter referred to as the revised preliminary draft Protocol \(^2\)).

2. These concerns were the subject of due attention during the fourth session of the Committee and were, accordingly, reflected, to the extent considered appropriate, in the text of the revised preliminary draft Protocol as amended during that session, by way of implementation of the decisions taken by the Committee (hereinafter referred to as the revised preliminary draft Protocol as amended) \(^3\). In the light of the decision taken, toward the close of the session, to convene intersessional meetings of two organs of the Committee (the Informal Working Group on default remedies in relation to components (hereinafter referred to as the Informal Working Group on components) and the Informal Working Group on limitations on remedies, certain delegations also

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\(^1\) Cf. C.G.E./Space Pr./4/W.P. 4 rev. This and all the other documents referred to in this document are available on the UNIDROIT web site, at the following address: http://www.unidroit.org/english/workprogramme/study072/spaceprotocol/study72j-archive-e.htm#NR2.

\(^2\) C.G.E./Space Pr./4/W.P. 3 rev.

\(^3\) C.G.E./Space Pr./4/Report, Appendix VIII.
suggested that the opportunity be taken to organise intersessional consultations with representatives of the international commercial space and financial communities in particular with a view to building on the progress achieved by the Committee during the session and ensuring timeous completion of the planned Protocol. It was agreed to do so.

II. OPENING OF, PARTICIPATION IN AND DOCUMENTATION FOR THE CONSULTATIONS

(a) Opening and moderation of, and participation in the consultations

3. The consultations with representatives of the international commercial space and financial communities having previously participated in the development of the revised preliminary draft Protocol were held in Rome, at the seat of UNIDROIT, on 18 October 2010, immediately prior to the meeting of the Informal Working Group on components, held from 19 to 21 October 2010 and that of the Informal Working Group on limitations on remedies, held on 20 and 21 October 2010. They were attended by representatives of the Governments of Canada, the People's Republic of China, the Czech Republic, Germany, Italy, Japan, the Russian Federation, the United Kingdom and the United States of America, representatives of Crédit Agricole S.A., EADS, the European Satellite Operators Association, the German Space Agency, the Satellite Industry Association of the United States of America and Thales Alenia Space and one observer.

4. The consultations were opened by Mr J.A. Estrella Faria, Secretary-General of UNIDROIT, at 9.40 a.m. He reminded participants that the consultations were by way of preparation for the fifth session of the Committee, due to be held in Rome from 21 to 25 February 2011: this being expected to be the final session of the Committee, the Secretariat would expect to be in a position to lay the text of the revised preliminary draft Protocol coming out of that session before the UNIDROIT Governing Council at its 90th session, to be held in Rome from 9 to 12 May 2011, for advice and consent as to the ripeness of its submission, as a draft Protocol, to a diplomatic Conference, for adoption. He further reminded participants that the purpose of the consultations was not to discuss the desirability of the revised preliminary draft Protocol as amended but rather to find solutions to the key outstanding issues arising thereunder, and in particular the issues of the definition of space assets, default remedies in relation to components and limitations on remedies. He invited participants to approach this task in the spirit of compromise appropriate for ensuring the realisation of a commercially viable end-product that would also meet the fundamental policy concerns of States.

5. The consultations were moderated jointly by Mrs A. Veneziano (Italy) and Mr M. Borello (Thales Alenia Space).

(b) Adoption of the agenda

6. The draft agenda, as prepared by the Secretariat was adopted.

(c). Documentation for the consultations

7. The text of the revised preliminary draft Protocol as amended was the basic working document of the consultations. In addition to the draft agenda, and proposals submitted by the

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4 Cf. C.G.E./Space Pr./4/Report, § 149.
7 Cf. the list of participants reproduced in Appendix I to this report.
8 C.G.E./Space Pr./Inters'l meetings/Consultns/W.P. 1.
9 The agenda as adopted is reproduced in Appendix II to this report.
Government of Germany to the Informal Working Group on components, the following documentation was submitted for the consultations:

- Explanatory note on the draft agenda (prepared by the Secretariat) and
- Comments (submitted by Governments and representatives of the international commercial space and financial communities).

III. CONCERNS RAISED DURING THE CONSULTATIONS AND DISCUSSION THEREOF

(a) General comments

8. The representative of one Government, whilst expressing his delegation’s concern at the issues still outstanding in respect of the revised preliminary draft Protocol as amended, particularly in the light of the concerns expressed by representatives of the international commercial space and financial communities it had consulted, nevertheless, indicated that his Authorities were prepared to work on these issues with a view to finding commercially viable solutions. Representatives of other Governments at the same time noted that the representatives of the international commercial space and financial communities they had consulted had voiced very positive views regarding the potential benefits to be derived under the planned Protocol. They also noted that it was important to keep the interests of States in mind and to maintain a constructive dialogue with a view to finding solutions to the concerns being expressed by the international commercial space and financial communities. Expressing support for the revised preliminary draft Protocol as amended, a number of other Governments indicated too their preparedness to continue seeking commercially viable solutions in respect of the outstanding issues.

9. A representative of the international commercial space and financial communities expressed concern that the revised preliminary draft Protocol as amended, as drafted, would not be able to achieve its goal of increasing capital flow to the commercial space sector and was likely rather to inhibit commercial space financing. In order to be successful, he explained that the planned Protocol would need to be responsive to the needs of the commercial space sector, especially since, in the eyes of those representatives of the international commercial space and financial communities that he represented, there was no compelling need for such an international instrument, given in particular that commercial space finance was already being carried out without the help of such an international regimen, and the introduction of such a new regimen would not necessarily make financing any easier.

10. Another representative of the international commercial space and financial communities, while noting in particular that her Organisation’s raison d’être was to foster competition and an open space market, indicated that several members of the international commercial space and financial communities that she represented were concerned that the revised preliminary draft Protocol as amended would not achieve its goal because there was no demand for asset-based financing in the commercial space field. Noting that substantive arguments in favour of the planned Protocol had hitherto not been apparent to her members, she urged the identification of arguments that might indeed enable her members to be more enthusiastic about the planned Protocol. Yet another representative of the international commercial space and financial communities, however, pointed out that, if asset-based financing had not hitherto been considered as a viable alternative form of financing in the commercial space context, this was essentially because there was no clear and certain legal regimen to govern such transactions, whereas once the planned Protocol was

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10 C.G.E./Space Pr./Inters’l meetings/Components/W.P. 3 (reproduced in Appendix III to this report).
11 C.G.E./Space Pr./Inters’l meetings/Consultns/W.P. 2 (reproduced in Appendix IV to this report).
12 C.G.E./Space Pr./Inters’l meetings/Consultns/W.P. 3 (reproduced in Appendix V to this report) and Addenda 1-4 (reproduced in Appendices VI to IX to this report respectively).
ratified by States, parties in the commercial space sector would have no reason to shun asset-based financing as an alternative tool for the obtaining of finance. This position was supported by another representative of the international commercial space and financial communities.

11. A representative of the international commercial space and financial communities indicated that current practice in commercial space financing was for the satellite as a whole to be financed by syndicates of banks, rather than for separate parts of the satellite to be financed by distinct lenders. This made it all the more important for the framework of the planned Protocol to be kept as simple as possible, so that agreements between members of these syndicates would not be adversely affected. The representatives of some Governments confirmed that their own consultations with the international commercial space and financial communities had shown how it was, at present, necessary to find multiple lenders for the financing of space assets, the risks being too high for any one lender to assume - particularly in the case of start-up companies - and that this was an area where, in the opinion of the representatives of those communities that they had sounded, the planned Protocol would undoubtedly help.

(b) Comments relating to specific issues

(i) Definition of “space asset”

12. The representative of one Government noted that it had emerged from its consultations with the international commercial space and financial communities that the planned Protocol could be particularly beneficial for the co-financing of space assets, something that was of particular importance to those parties who would not otherwise be able to afford the acquisition of a space asset on their own, a view that was confirmed by different representatives of the international commercial space and financial communities attending the consultations. One such representative added that it was crucial that the planned Protocol should accommodate individual participants in the financing of a given space asset, particularly those wishing to finance separate payloads or transponders. It was agreed in this context that it would be crucial to enunciate a precise definition of “space asset”.

13. In his introduction to the manufacturing phase in the life of a satellite, in particular the mating of a satellite platform with its communication payload, a representative of the international commercial space and financial communities noted that a satellite platform would in most cases be built by one manufacturer (usually a satellite manufacturer) and the payload by another (usually a specialist in the particular application, whether this be telecommunications, Earth observation or something else). This led the representative of one Government to wonder which techniques would be used where a satellite platform and a payload were financed separately.

14. A representative of the international commercial space and financial communities emphasised that the purpose of the definition of “space asset” was to identify those assets that were envisaged as capable of being financed, noting in particular that it would not be practical for a satellite platform to be financed separately from a payload, because, without a payload to generate income, a satellite platform would have negligible value. He indicated that, at present, the financing needs of the international commercial space and financial communities focussed on satellites as a whole or satellite sub-systems, especially in the case of those Governments and operators unable to afford to acquire on their own a whole satellite. In this context, he noted the increasing use of hosted payloads as a means used by many Governments with developing or transition economies to acquire services based in outer space. He confirmed the need to allow for future technological and financing developments. He stressed the importance of bearing in mind that this, as indeed other issues under discussion by the Committee were already regularly dealt with in inter-creditor agreements, and in particular the need to ensure that the planned Protocol respected the solutions worked out between parties to those agreements.
15. The representatives of one Government introduced its proposal for a new definition of “space asset”, under which there would be only two basic categories of space asset, namely a “resource module” and a “payload”, terms which were capable of application to all categories of space asset.\(^\text{13}\) The representative of another Government expressed reservations regarding the universal applicability of this proposed new definition, indicating his preference for the additional new proposed definition of the term “space asset” tabled by another Government that, first, defined a space asset as a whole and, secondly, drew a distinction between such an asset and uniquely identifiable components capable of being individually financed, an approach that, in his opinion, would provide additional flexibility permitting allowance to be made for future technological developments.\(^\text{14}\)

16. In this context, the representative of one Government suggested that one way of providing for future technological developments in the definition of “space asset” would be to provide a mechanism whereby the Supervisory Authority of the future International Registry for space assets would be able to update the categories of space asset to be covered by the planned Protocol, under the regulations to be adopted pursuant thereto.

17. While the representative of one Government considered that a general definition of “space asset” would be more useful at this time than a detailed definition and the representatives of some other Governments agreed, these same other Governments took the view that what was important was to agree on a concrete definition that said Supervisory Authority could then build on.

18. A propos of the term “transponder”, the representatives of some Governments suggested that it was not necessary to define this term in the definition of “space asset”, notably because such a component could be uniquely identified by reference to contracts regarding that asset. Other participants supported this view, although one representative of the international commercial space and financial communities stressed that satellites did not operate only with transponders and that it would, therefore, be necessary to take account of both discreet and common components, a discreet component being, \textit{par excellence}, an individual transponder and common components those that were necessary for all the transponders on a given satellite to work and in respect of which the owners of all the different transponders would have joint ownership. In this context, it was recalled by the representative of one Government that shared and fractional interests could be taken in an object covered by the Cape Town Convention.

19. The representative of one Government stressed the importance of keeping pre-launch finance in mind when considering the most appropriate definition for “space asset”, in particular because the manufacturing of an asset would not typically begin until finance had been granted to a debtor, making it crucial that a creditor be able to register an international interest at the earliest possible moment. It was noted that the question as to whether the planned Protocol should apply to assets “in the course of manufacture” was one that still needed to be taken and that, should the ultimate decision be to include such assets, this might lead to conflicts between the planned Protocol and national laws. Most delegations expressed similar concerns, with one representative of the international commercial space and financial communities pointing out that a space asset would probably pass through numerous jurisdictions between the phases of manufacture and launch and that it would be necessary to provide protection for creditors’ interests throughout this time. To deal with this problem of protecting creditors in the pre-launch period, the representative of one Government supported the proposal tabled by another Government that such a pre-launch interest be capable of being registered as a prospective international interest and of crystallising as a full international interest once launched or inserted into orbit, with priority being determined from the date of its initial registration.\(^\text{15}\)

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\(^{14}\) Cf. C.G.E./Space Pr./Inters'l meetings/Consultns/W.P. 3 Add. 1, Appendix 1, p. i.

\(^{15}\) Cf. C.G.E./Space Pr./Inters'l meetings/Consultns/W.P. 3 Add. 1, pp. 2-3.
(ii) Default remedies in relation to components

20. The representative of one Government, whilst acknowledging that the principal function of the planned Protocol must be to avoid situations where a senior international interest could be superseded by a junior international interest, pointed out that it was equally important to provide a default rule that would ensure that international interests in separate and distinct assets which were physically linked would not be adversely affected by the exercise of default remedies over one such asset. 16 It was explained that such a default rule was only intended to apply where no inter-creditor agreement had been reached among the relevant parties. The representative of another Government expressed concern lest such an approach dilute the value of the planned Protocol by reducing the level of certainty that a creditor could expect to have regarding his potential remedies at the time of taking an international interest in an asset simply because there was a possibility that another separate asset might be physically linked to that first asset at a later point in time, all the more so as he might not have been consulted regarding the linking of the assets. It was, however, pointed out by the representative of yet another Government that such an approach would increase the level of certainty that a non-defaulting party and/or creditor in respect of a physically linked asset could expect to have regarding his/their potential remedies, by ensuring that the enforcement of default remedies in respect of physically linked assets would not adversely or technically affect the operation of the asset and, therefore, the revenue stream deriving from that asset for a non-defaulting third party.

(iii) Criteria for the identification of space assets for registration purposes

21. Even allowing for the fact that the planned Protocol was intended to cover all those assets that the financial community was willing to finance, a representative of the international commercial space and financial communities pointed out that, whilst all such assets might have manufacturer designations and serial numbers, these might be changed subsequently to their sale. He, moreover, averred that there were not yet any universally recognised identification criteria available for use in respect of the taking of security - or the like - in space assets of the kind designed to be covered by the planned Protocol, noting that the only analogous criteria devised to date, namely those criteria used to register satellites under the 1975 United Nations Convention on Registration of Objects Launched into Outer Space, were designed for liability purposes. He added that new criteria would, therefore, need to be devised in order to meet the unique needs of creditors. Another representative of the international commercial space and financial communities indicated, however, that the tracking of unique satellites through distinct serial numbers did not present any problems, as manufacturers and operators regularly tracked satellites with extensive documentation that could be used uniquely to identify satellites in orbit.

22. The representative of one Government drew attention to the comments submitted by two representatives of the international commercial space and financial communities, 17 namely that space assets could be uniquely identified by serial numbers assigned by manufacturers and were regularly tracked and monitored by ground stations, that it was a relatively simple matter to trace unique serial numbers through the relevant documentation and that serial numbers would, therefore, serve as an effective identification criterion for space assets, capable of being supplemented by the name of the manufacturer and the model designation. 18 The representative of one Government wondered how a commercial party would be able to obtain the tracking information necessary to confirm that a particular space asset was the same as the one identified by a serial number and in its documentation. A representative of the international commercial space and financial communities indicated that the licensing Authorities of States all had means by

18 C.G.E./Space Pr./Inters’l meetings/Consultns/W.P. 3 Add. 4, p. 1.
which they could track and monitor assets in space and that this information would be readily available to the parties involved.

23. In this context, another representative of the international commercial space and financial communities, however, stressed that it was crucial that the planned Protocol not add burdens and duties for private parties in such a way as to increase costs and add confusion to an already expensive and complicated activity.

(iv) Limitations on remedies (public service)

24. In the light of the consultations which his delegation had had with representatives of the international commercial space and financial communities, the representative of one Government, noting that the purpose of the planned Protocol was to inject capital into the commercial space sector, indicated that his delegation did not see how including a public service limitation on remedies could do anything but increase financing costs and create additional uncertainty for creditors. In this context, he pointed out that individual national licensing Authorities were already in a position to provide for public service limitations under licensing agreements and, accordingly, questioned whether the planned Protocol was the right instrument to provide for such limitations.

25. A representative of the international commercial space and financial communities also noted that the issue of public service limitations was already provided for in inter-creditor agreements and in the negotiations between the parties, a practice that had already proven effective in the past; this was, moreover, a risk that the parties were able to mitigate through the exercise of due diligence at the time of assessing the risks involved when financing a space asset. In the specific context of military activities, he noted that many satellites provided a wide range of services to the military that might or might not be interpreted as public services, ranging from the direct provision of telecommunications for strategic purposes between military units by a satellite operator to the provision of television to troops in the field by a client of the satellite operator. This was, he pointed out, a situation in which a creditor might have no prior knowledge of such a user and would, therefore, be unable to predict when a public service exemption might be applied. Under such circumstances, were it to be felt appropriate to incorporate a public service exemption in the planned Protocol, then a potential creditor would have to seek legal assurances that the intended user of the particular space asset would not be qualified as a public service, something that would be extremely costly and cumbersome to do. The representative of one Government, however, noted in this connection that, whilst it was important to keep the interests of the international commercial space and financial communities in mind, it was also important to consider the interest of the State in maintaining public services, an interest that was seen as a fundamental function of Government.

26. In response to a question as to how a State that was the recipient of a public service but was not a licensing State - and, therefore, not in a position to protect the maintenance of public services at the time of the issuance of the licence - could protect such a service at the time of default, a representative of the international commercial space and financial communities indicated the a term as broad as “public service” was never used but that provisions were often incorporated into service contracts that included the provision of services in emergency situations, moreover noting that satellite operators would almost never enter into a contract that required the maintenance of public services, given their reluctance to leave outside parties the opportunity to interfere in the way in which they managed their business.

27. The representatives of several Governments suggested that, owing to the complexities of the rules of public and private international law governing public service, there was no “one size fits all” solution but that a compromise might still be found.
(v) Debtor’s rights

28. One representative of the international commercial space and financial communities, while recognizing that the inclusion of debtor’s rights in the revised preliminary draft Protocol as amended was vital, suggested that the provisions of the latter on debtor’s rights were at present confusing and unclear but that, if they could be clarified, the usefulness of the envisaged Protocol would be increased. The representative of one Government, speaking as co-Chairman of the Drafting Committee, offered to lend his services to provide the necessary clarification.

(vi) Additional economic enhancements

29. The representative of one Government introduced several proposals that, in the view of his delegation, would increase the economic usefulness of the planned Protocol. One such proposal was for an opt-in provision providing for the pre-approval by a licensing Authority of a substitute operator of a satellite. However, there was general agreement that such a mechanism would not work, in that it would be impossible for licensing Authorities to predict the numerous factors that would influence such a decision in advance and situations could drastically change over a short period of time.

(vii) Salvage insurance

30. A representative of the international commercial space and financial communities took the view that the provisions on salvage interests contained in the revised preliminary draft Protocol as amended were wholly unnecessary and, as drafted, would give undue priority to the interests of insurers and thereby reducing the value of the planned Protocol for creditors. In line with the suggestion made by the representative of one Government, he admitted, however, that the problem might arise from overly broad drafting and, as such, be amenable to solution through redrafting.

IV. CLOSING OF THE CONSULTATIONS

31. No other business being proposed, Mrs Veneziano concluded by noting that good progress had been made during the consultations on the outstanding issues concerning the revised preliminary draft Protocol as amended. In response to a query from Mr Borello regarding the follow-up to the consultations, Mr Estrella Faria pointed out that, in the first place, it would be for the Informal Working Group on components and the Informal Working Group on limitations on remedies during their subsequent meetings to allow the conclusions from the consultations to shape the manner in which they would approach the issues before them and then for the Committee, to which the report on the consultations would be sent, at its fifth session to draw its own conclusions. After thanking all participants, and in particular the co-moderators, for their contributions to the discussions, Mr Estrella Faria declared the consultations closed at 5.45 p.m.

APPENDIX I

LIST OF PARTICIPANTS

STATES

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APPENDIX II

AGENDA

1. Adoption of the agenda
2. Organisation of work
3. Consideration of the revised preliminary draft Protocol to the Convention on International Interests in Mobile Equipment on Matters specific to Space Assets as it emerged from the fourth session of the Unidroit Committee of governmental experts for the preparation of a draft Protocol to that Convention on Matters specific to Space Assets, held in Rome from 3 to 7 May 2010 (C.G.E./Space Pr./4/Report, Appendix VIII)
4. Any other business.
APPENDIX III

PROPOSALS

submitted by the Government of Germany
to the Informal Working Group on default remedies in relation to components

Introduction

In recent discussions about the definition of space assets, the terms “component” and “transponder” played a major role - unfortunately, without finding a viable definition. The current definition in Article I(2)(l) lists a number of objects and contains an opening clause for other objects not explicitly listed. A conclusive definition enumerating all assets would not be acceptable because it would exclude future developments with regard to space objects. It was agreed that a more structured definition should be found.

After intensive consultations with industry and with legal and financial experts, a new definition concept has been developed. This concept focuses on the key elements of every space asset by avoiding enumerative examples and problematic terms.

The new definition is limited to only two categories: “resource module” and “payload”. All space assets are describable using just these two generic terms, because every space asset is either a “resource module” (its function is to support and maintain the payload) or a “payload” (its function is to provide a certain service).

This concept applies to all existing categories of space object, like satellites, space stations and space vehicles. Though the new concept requires a separate registration of every asset, it is in line with the concept of the Aircraft Protocol, under which “airframe” and “engine” must be registered separately too.

A satellite consists of a resource module (satellite bus) plus payload(s) (optical, telecommunication, radar- or scientific payload). A space station consists of the resource module which is also constructed to carry payloads (experimental racks). Space vehicles are usually resource modules too, because they have a supporting function with respect to the transported assets. This paper contains further elaboration of the different space assets.

These examples demonstrate that, in spite of the simplicity of the definition concept, all possible space assets are covered with only two generic terms “resource module” and “payload”.

PART 1 THE DEFINITION OF THE SECURED OBJECT UNDER THE PLANNED SPACE ASSETS PROTOCOL

I. Preliminary remarks

Taking security over certain individual components of satellites and space stations, and thus separate commercialisation of these components, is one of the objectives that the planned Space Assets Protocol is supposed to achieve - so far as the problems involved can be solved. But the planned Protocol will only be able to do justice to this objective if the secured object is defined in such a way that it corresponds to technical and functional reality.
II. Technical considerations

(a) Satellites

Satellites usually consist of the resource module and the payload installed thereon, the components of which differ according to the satellite’s function.

1. Here the resource module, i.e. the "satellite bus", constitutes a functional unit that is uniquely identifiable and is clearly distinguishable, in technical terms, from the remaining items.

2. The payload, too, is a uniquely identifiable functional unit and clearly distinguishable from the remaining items because its individual parts, as specified by the function indicated below,

- are physically linked to each other;
- are indispensable for the functioning of the precise payload concerned; and
- do not take over any function with respect to other payloads or to the satellite bus.

(i) communications satellites

The payload of a communications satellite usually consists of the following hardware components: receive antenna, receiver, switchbank, high-power amplifier, output multiplexer and transmit antenna.

(ii) navigation satellites

The payload of a navigation satellite usually consists of the following hardware components: time generator (e.g. atomic clock), signal coding processor, high-power amplifier, downlink antenna.

(iii) earth observation satellites/weather satellites

The payload of an earth observation satellite/weather satellite usually consists of the following hardware components: sensor(s)/camera(s), data processor, high-power amplifier, downlink antenna (usually an antenna for more than one sensor).

(iv) scientific satellites

The payload of a scientific satellite usually consists of the following hardware components: sensor(s) instrument(s) data processor, high-power amplifier, downlink antenna (usually an antenna for more than one sensor).

3. Transponders

The transponder, on the other hand, which so far has been conceived to be an independent secured object, is not uniquely identifiable as a functional unit and is not clearly distinguishable from the remaining items over which security can be taken. On the contrary, transponders are themselves items (high-power amplifier) of a payload. It is true to say that transponders, as part of a construction unit, are physically linked to each other and that they are indispensable for the functioning of a payload. Nevertheless, several transponders jointly depend on specific hardware of the communications payload (receive antenna, receiver, switchbank, output multiplexer and transmit antenna etc.).
(b) Space stations

Space stations usually consist of a resource module and the payloads, which are the operational elements integrated in the resource module (e.g. laboratory equipment).

1. In functional terms, the resource module corresponds to the satellite bus (e.g. E.P.S., stabilisation, pressurisation, data module) and it thus constitutes a functional unit that is uniquely identifiable and is clearly distinguishable, in technical terms, from the remaining items.

2. An operational element is equivalent to a segment of the payload and, being a functional unit, is uniquely identifiable and clearly and physically distinguishable from the remaining items of the space station, i.e. it can be installed and removed easily.

An operational element is usually a standardised experiment locker (e.g. a 19-inch rack) and it does not perform any function with respect to other operational elements or to the resource module. Although experiments can be configured in every conceivable form in the space station, they are nonetheless always clearly and physically distinguishable.

3. The I.S.S. and its predecessor SpaceLab provide examples of usage in relation to space stations.

The Columbus module is an independent resource module with its own experimentation apparatus, i.e. operational elements. After docking to the I.S.S., the Columbus resource module shares the E.P.S. with the I.S.S. resource module.

(c) Space vehicle

Here the classification under (b) above - by division into “resource module” and “payload/operational elements” - also applies.

An instance of usage with regard to space vehicles is the Space Shuttle or the Automatic Transfer Vehicle (A.T.V.). Space vehicles are used for independent experimental or repair missions, and they are also used for transporting infrastructure parts and resources to space stations.

(d) Launch vehicle

Launch vehicles comprise the bus and the asset requiring transportation (i.e. usually the satellites). In contradistinction to (a) 2., the payload in this case is, for example, the satellite itself that has to be transported – and not part of a satellite.

1. Here the bus constitutes a functional unit that is uniquely identifiable and clearly distinguishable, in technical terms, from the payload.

2. The payload is clearly distinguishable from the remaining items of the bus.

3. In future, parts of the bus, too, could be susceptible to economic re-use.

III. Legal considerations

(a) Satellites

The objective of creating a security interest as a means of credit protection necessitates clear and unequivocal designation of the objects to which such an interest may relate. At the same time,
the creditor must be certain that the object he is financing corresponds exactly to the object to which the security interest relates. The reference to the satellite bus and the payload as the secured objects of a satellite takes account of both these aspects.

By itself the satellite bus is a clearly defined and distinguishable technical unit and, therefore, suitable as a secured object. It also falls under the conceptual heading "resource module".

Following the technical descriptions in Section II, a payload consists of hardware components jointly assigned to a specific service (mission) provided by the space asset concerned. These hardware components are used solely for this service, which means that, on the basis of their mission, they are clearly distinguishable from other hardware components installed on the satellite bus. At the same time, the sum total of these components constitutes the hardware needed in order to implement the services/business venture, thus entailing a need for credit financing, where applicable.

In view of the fact that an individual transponder shares the infrastructure of the same payload (receive and transmit antenna, receiver etc.) with other transponders, a transponder as such is not suited to constitute an independent secured object. Where there is a division of ownership / security (collateralisation) among the transponders embraced by one payload, conflicts would arise under property law (rights in rem) concerning the components used jointly by the transponders concerned. It is true to say that a legal construction would be conceivable here via "joint and several ownership" or via indivisible (ownership) shares for the respective owners/creditors; nevertheless, such a complicated construction would also need to be justifiable in economic terms - after all, it would lead to difficult conflicts on the compulsory execution level as well (e.g. regarding the adjustment of an antenna). But – as already explained – this is not possible here.

By referring to the secured objects of a "resource module" here, the "satellite bus" and a "payload", two concepts have been found which are abstract enough to avoid also ruling out anticipated future developments from the realm of susceptibility to security (collateralisation); these concepts are, at the same time, precise enough to meet the certainty requirements applying to a secured object. Moreover, taken together, both concepts define a satellite in its entirety, because each component is functionally assignable either to the satellite bus or to the payload. Components not falling within these categories are not additionally conceivable.

(b) Space stations, space vehicles and launch vehicles

Space stations and space vehicles also consist of technically distinguishable and functionally clearly assignable individual components, as described under II (b) above. The resource module and the payloads are conceivable as an independent object over which security can be taken.

Launch vehicles will also fall under the term "space vehicles". They consist of the bus (resource module) and the asset requiring transportation. At present, only the resource module with respect to launch vehicles can be the subject of an international interest, because the "payload", usually comprising a satellite in its entirety, can in its components already form the subject of separate rights - as set out under III (a) above.

Even though reusability of launch vehicles does not currently present a realistic scenario, these objects should be seen as being susceptible to the international interest. If future developments allow the reuse of launch vehicles, payloads in the meaning of the definition below might be thinkable. Therefore, the phrase "payloads with respect to space vehicles" can be justified, even with respect to launch vehicles.
IV. Proposed new definition of “space asset”

Article I(2)(l) of the revised preliminary draft Protocol as amended could read as follows:

“Space asset” means resource modules and payloads with respect to satellites, space stations and space vehicles, in space or intended to be launched into space. The Supervisory Authority shall describe technical details of space assets in the regulations.

PART 2 LIMITATIONS ON DEFAULT REMEDIES IN RESPECT OF PHYSICALLY LINKED ASSETS

I. Explanation

The default remedies under the Cape Town Convention are to take possession or control of an object, to sell or grant a lease of any object or to collect or receive any income or profit arising from the management or use of the object (see Article 8(1) of the Convention). The value of the international security interest suffers where the default remedies are limited. Thus, it is absolutely essential to keep creditors’ default remedies as unlimited as possible. On the other hand, the value of an international security interest suffers too where the use of the international interest in, or other rights related to the space asset are possibly and unlimitedly impaired by others. Therefore, creditors must be authorised freely to exercise those of their default remedies which only have an impact on their secured asset, (e.g. to collect or receive any income or profit arising from the management or use of the asset.)

In cases where the impact of a default remedy would not be limited to the secured asset but would have an effect on other physically linked assets, a considerable conflict of interest must be resolved.

A general rule is that a creditor exercising its remedies can only invoke its rights against the object it has rights in. Because of this rule, that the international security interest solely encumbers the asset in which it is registered, default remedies can only be exercised as far as that asset is concerned. Thus, it is basically not acceptable that a creditor holding a registered interest in only one asset impairs another asset (in which he does not hold any right). Therefore, to extend the impact of a default remedy to other parties (who have rights and interests in the impaired physically linked asset) should only be permitted where the impaired party consents thereto. Taking into account the fact that the defaulting debtor has still to agree with the relevant default remedy (see Article 8(1) of the Convention), it is even more logical that uninvolved parties have to agree too. All limitations on default remedies solely concern relations between the creditor and other involved parties. In relations between the creditor and its debtor no restriction shall take place.

II. Proposed new provision on limitations on default remedies in respect of physically linked assets

Article XVIII

1. Unchanged

2. Unchanged

3. The creditor shall only exercise default remedies against its secured asset in accordance with Chapter III of the Convention in so far as this does not
[technically] affect the current use of international interests in, and other rights relating to other space assets physically linked to the secured space asset.

4. Other default remedies than those referred to in paragraph 1 may be exercised against the secured space asset where

(a) the user or holder of an international interest in, and other rights relating to other space assets physically linked to the secured asset consents to it as far as he/she/it is impaired, or

[(b) the creditor offsets the impairment of the current use of the physically linked space asset by taking equivalent technical measures. ]
EXPLANATORY NOTE ON THE DRAFT AGENDA

(prepared by the UNIDROIT Secretariat)

I. INTRODUCTION

(a) Origins of the consultations

1. At its fourth session, held in Rome from 3 to 7 May 2010, the UNIDROIT Committee of governmental experts for the preparation of a draft Protocol to the Convention on International Interests in Mobile Equipment on Matters specific to Space Assets (hereinafter referred to as the Committee) was seised of comments 1 formulated by a number of representatives of the international commercial space and financial communities expressing concerns regarding certain aspects of the text of the revised preliminary draft Protocol to the Convention on International Interests in Mobile Equipment on Matters specific to Space Assets prepared by Sir Roy Goode (United Kingdom) and Mr J.M. Deschamps (Canada), as Co-chairmen of the Drafting Committee of the Committee, to reflect the conclusions reached by the Committee at its third session, held in Rome from 7 to 11 December 2009, and reviewed by the Drafting Committee. 2

2. These concerns were the subject of due attention during the fourth session of the Committee and were, accordingly, reflected, to the extent considered appropriate, in the text of the revised preliminary draft Protocol as amended during that session by way of implementation of the decisions taken by the Committee (hereinafter referred to as the revised preliminary draft Protocol as amended). In the light of the decision taken, toward the close of the session, to convene intersessional meetings of two organs of the Committee (the Informal Working Group on default remedies in relation to components (hereinafter referred to as the Informal Working Group on components) and the Informal Working Group on limitations on remedies, certain delegations also suggested that this opportunity be taken to organise intersessional consultations with representatives of the international commercial space and financial communities in particular with a view to building on the progress achieved by the Committee during the session and ensuring timeous completion of the planned Protocol. 3

(b) Organisation of, and participation in the consultations

3. The UNIDROIT Secretariat has, therefore, taken the opportunity of prefacing the meeting of the Informal Working Group on components due to be held in Rome on 19 and the morning of 20 October 2010 and that of the Informal Working Group on limitations on remedies due to be held in Rome on the afternoon of 20 and on 21 October 2010 by consultations with representatives of the international commercial space and financial communities having to date participated in the development of the planned Space Protocol, to be held on 22 October 2010, at the seat of UNIDROIT in Rome. The Governments participating in the work of the two Informal Working Groups will also be invited to attend the consultations.

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1 Cf. C.G.E./Space Pr./4/W.P. 4 rev. This and all the other documents referred to in this document are available on the UNIDROIT web site, at the following address: http://www.unidroit.org/english/workprogramme/study072/spaceprotocol/study72j-archive-e.htm#NR1.
3 Cf. C.G.E./Space Pr./4/Report, § 149.
II. SOME CONSIDERATIONS REGARDING THE STRUCTURE AND POTENTIAL SUBJECT-MATTER OF THE CONSULTATIONS

(a) Structure of the consultations

4. The Secretariat would propose that the essential focus of the consultations be on broad, general issues arising under the revised preliminary draft Protocol as amended, of the sort raised in the concerns submitted prior to the fourth session of the Committee by certain representatives of the international commercial space and financial communities, as opposed to technical aspects of the drafting of individual provisions of the revised preliminary draft Protocol as amended. Clearly, however, to the extent that the discussion of such general issues also raises technical aspects of the drafting of the revised preliminary draft Protocol as amended, then it is both right and necessary that any proposals that representatives of the international commercial space and financial communities may care to formulate on such technical details also be capable of consideration during the consultations.

5. The Secretariat believes that the consultations will be facilitated by the use of co-moderators, one to be drawn from among the representatives of Government and the other from among the representatives of the international commercial space and financial communities. It would submit that such a structuring of the proceedings will have the advantage of facilitating the emergence of consensus, the co-moderators being able to act as filters for, and contribute to the achieving of common ground on behalf of their respective constituencies. The Secretariat would, therefore, propose that the co-moderators jointly present the conclusions to be drawn from the consultations, thus not only contributing to the bringing together of the different strands of the discussions but also showing the way forward for further possible dialogue.

6. The Secretariat would propose that the revised preliminary draft Protocol as amended, set out in Appendix VIII to the Report on that session, be taken as the basic point of reference for the consultations, and in particular any comments or proposals that those invited to participate may care to formulate for consideration during the consultations.

(b) Potential subject-matter of the consultations

7. It would be invidious for the Secretariat to delimit the subject-matter of consultations which, as mentioned above, are intended to be capable of ranging across the whole spectrum of the matters dealt with in the revised preliminary draft Protocol as amended of concern to the international commercial space and financial communities.

8. The Secretariat, nevertheless, considers that it might be helpful for it not only to share with those considering participating in the consultations its thoughts concerning the fundamental objective capable of being pursued through the consultations but also to recall the key issues outstanding in respect of the revised preliminary draft Protocol as amended. The two are, moreover, it would submit, closely related.

(i) Objective of the consultations

9. Taking first what might be considered to be the fundamental objective capable of being pursued through the consultations, the Secretariat would submit that it is important to bear in mind that, if the Committee was able, at its fourth session, to make substantial progress - sufficient for it to recommend that the UNIDROIT Governing Council authorise the convening of a fifth session to finalise the revised preliminary draft Protocol as amended, a recommendation that was duly endorsed by the Council at its 89th session, held in Rome from 10 to 12 May 2010 - this was in large measure thanks to the valuable contribution made to its work by representatives of
the international commercial space and financial communities, whether in the shape of the comments submitted in advance of the session or in the expertise provided during the session on issues of a quintessentially technical dimension.

10. The Secretariat has, throughout the intergovernmental consultation process - and, indeed, even before that process was engaged - signalled its firm commitment to the Institute’s work on this project resulting in an instrument that will be commercially viable, thus an instrument that will, while being in line with international space law, respond to the reasonable business needs of the parties to the transactions potentially covered by the proposed Protocol: this is in line with the way in which UNIDROIT always works when preparing international commercial law instruments.

11. The consultations are, in this perspective, to be seen as affording representatives of the international commercial space and financial communities an invaluable opportunity to set forth any concerns that they may still have with regard to the revised preliminary draft Protocol in an open, informal dialogue with representatives of the Governments of the key space-faring nations serving on the Committee, unconstrained by the formal confines of the intergovernmental negotiations. This opportunity is particularly important given the crucial point that has been reached in the negotiations, especially as regards the key outstanding issues, and the possibility that the informal nature of the consultations may be expected to offer for frank discussion and the narrowing of divergences of opinion.

(ii) Key issues outstanding in respect of the revised preliminary draft Protocol as amended

12. Without prejudice to any other issues that may be of concern to the international commercial space and financial communities, the Secretariat would submit that the key issues outstanding in respect of the revised preliminary draft Protocol as amended may be considered as being essentially three in number, the first the matter referred to the Informal Working Group on components, the second the matter referred to the Informal Working Group on limitations on remedies and the third the testing of the criteria for identification of space assets, for registration purposes, proposed in Article XXX of the revised preliminary draft Protocol as amended.

13. The Informal Working Group on components was established at the third session of the Committee, held in Rome from 7 to 11 December 2009. It was given the task of finding a solution to a problem which, in its essence, comes down to the most appropriate way of resolving those conflicts that may arise at the level of the exercise of default remedies where the action of the holder of an international interest in one space asset might otherwise adversely affect the international interest held by another creditor in a space asset physically linked to that asset, conflicts typically likely to arise in respect of components of a satellite, such as transponders. The remit of the Informal Working Group on components was delimited by reference to the definition of space assets as this related to components and the related question of default remedies in relation to components.

14. To quote from the Report of the Informal Working Group on components to the Committee on the work accomplished by it during the Committee’s third session, “[c]onsiderable progress [had been] made … , notably in exploring the divergent points of view on the most appropriate solution to this problem. Time, however, did not permit the reaching of a definite conclusion.” The Informal Working Group on components, accordingly, continued with its task at the fourth session of the Committee. As the Secretary-General of UNIDROIT reported to the Committee at the conclusion of that session, “significant progress had been made, though no solution had yet been

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reached”. However, he "indicated his belief that this progress was such as to serve as a firm basis for the finding of an acceptable solution in future. In particular, he pointed out that the Informal Working Group had agreed that, while the future Protocol had to provide legal certainty, it was not desirable for it to become locked into a particular system for the determination of those assets that should qualify for registration in the future International Registry for space assets; in this connection, he noted that the Informal Working Group saw the regulations to be made or approved by the Supervisory Authority pursuant to the future Protocol as being able to play a part in providing the desirable measure of flexibility regarding the establishment of identification criteria for the purposes of the registration of international interests in assets that might become valuable to creditors in the future. He indicated, in addition, that the Informal Working Group had agreed that for individual components to be registrable in the future Registry, it would be necessary that the sum total of such components should correspond to the entirety of the space asset as a whole and not allow for an inflation of international interests in such assets without value, so as to avoid gaps in the information available in the future Registry to creditors”. 

Significantly, “[s]everal delegations that had served on the Informal Working Group noted their satisfaction at the progress made and indicated that they shared the views expressed by [the Secretary-General]”.

(β) Limitations on remedies

15. The Informal Working Group on limitations on remedies was established at the third session of the Committee, held in Rome from 7 to 11 December 2009. It was given the task of finding a solution to a problem which, in its essence, comes down to the appropriate balance to be struck in the planned Protocol between, on the one hand, the interests of a creditor seeking to exercise remedies against a space asset performing a "public" service in the event of its debtor's default, and, on the other, those of one or more organs of the State anxious to ensure the continuity of the performance of the particular “public” service, notwithstanding the debtor’s default.

16. The work accomplished by the Informal Working Group at that session was reflected in a discussion paper setting out a proposal for a new provision on limitations on remedies prepared by the Secretariat, on the basis of informal proposals submitted by the representative of Germany. In presenting this paper to the Committee at the conclusion of that session, the Secretary-General noted, however, that it had neither been approved by the Informal Working Group nor reviewed by the Drafting Committee but was rather intended as the basis for further consultations. Significantly, though, a number of delegations welcomed the discussion paper as providing an important step forward in the development of a balanced solution.

17. The consultations continued at the fourth session of the Committee, where the Informal Working Group came up with a new discussion proposal, couched in two technical approaches - one a rights approach and the other a remedies approach - to the achieving of the conceptual goal of ensuring that contractual obligations for the provision of public services be maintained both where a creditor was exercising its rights under the Convention on International Interests in Mobile

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8 Idem.
9 Idem.
13 Idem, § 37. One delegation, though, noted that paragraph 5 of the discussion paper did not take account of its proposal that the requirement of prior notice be treated as unnecessary in the event that the State had exercised an option pursuant to paragraph 3. It was agreed that, given the nature of the discussion paper as a basis for further consultations, this matter could be dealt with at the following session of the Committee (C.G.E./Space Pr./3/Report rev., § 35). Another delegation sought clarification that the ability of a State, under paragraph 5 of the discussion paper, to register a notice recording that a space asset was used for the provision of a public service in the vital interest of that State within six months after the launch of that asset did not prohibit a State from filing such a notice after the six-month period but that any previously recorded interests would not be affected by such a notice (idem, § 36). This point was agreed (idem).
Equipment (hereinafter referred to as the Convention) as applied to space assets and where the ownership of a space asset was being transferred. 14 Several delegations viewed the new discussion proposal as a positive step toward the goal of finding an acceptable solution on public service and indicated that they would be happy to make it the subject of further consideration by their Governments and consultations with their commercial space sectors. 15

18. Following discussion, it was decided that the discussion paper that had emerged from the work accomplished by the Informal Working Group during the third session of the Committee and the discussion proposal having emerged from the Informal Working Group’s work during the Committee’s fourth session should be presented as Alternatives A and B of Article XXVII bis of the revised preliminary draft Protocol as amended respectively, as options for further consideration. 16 Some delegations noted that the retention of the discussion paper that had emerged from the work accomplished by the Informal Working Group during the third session of the Committee alongside the later discussion proposal need not preclude amendment of the former. 17

19. Article XXVII bis of the revised preliminary draft Protocol as amended, which appears in square brackets, reflecting the fact that the Committee has not to date taken a decision on the matter, accordingly reads as follows:

[Article XXVII bis – Limitations on remedies in respect of public service]

[Alternative A]

1. – A State has the right to object to the exercise of default remedies, as provided in Chapter III of the Convention and Articles XVIII to XXIII of this Protocol, in respect of a space asset needed for the provision or maintenance of a public service which is in the vital interest of that State if the exercise of those remedies would cause interruption in the provision or maintenance of that service.

2. – Within twenty days from the date on which the State has notified the creditor of its objection to the exercise of remedies under the preceding paragraph, the creditor may exercise the right to step in and assume responsibility for the provision or maintenance of the relevant service in the State concerned or appoint a substitute entity for that purpose, with the consent of that State and of the licensing State.

3. – If the creditor chooses not to exercise its rights under the preceding paragraph, the State that objects to the exercise of default remedies by the creditor under paragraph 1 shall have the option of:

   (a) curing the default by the debtor by paying to the creditor all sums outstanding for the entire period of default; or

   (b) taking or procuring possession, use or control of the space asset and assuming the debtor’s obligations by stepping into the obligations of the debtor for the provision of a public service in the State concerned.

4. – A State that objects to the exercise of default remedies by the creditor under paragraph 1 shall exercise its rights under the preceding paragraph within ninety days. After such period, the creditor shall be free to exercise any of the remedies provided in Chapter III of the Convention and in Articles XVIII to XXIII of this Protocol, in respect of the relevant space asset.

16 Idem, § 137.
17 Idem, § 138.
5. - A State may only invoke the right to object to the exercise of default remedies in accordance with this Article if it has registered in the International Registry a notice recording that the space asset is used for providing a public service in the vital interest of that State prior to the registration of an international interest in that space asset by a creditor [or if it has registered such notice within six months of the launch of a space object, even if after the registration of an international interest by the creditor]. \(^{18}\)

[Alternative B

*Concept*

Contractual obligations for the provision of public services should be maintained both where a creditor is exercising its rights under the Convention as applied to space assets and where the ownership of a space asset is being transferred.

*Two technical approaches to achieve this goal*

I. Rights approach

*Article* ...

1. - A lease of a space asset for the provision of public services which is so acknowledged by the parties may be registered by notice in accordance with Article 16 of the Convention.

2. - The registration of a notice of a public services lease made within a six-month period after the date of launch of a satellite prevails over other rights previously registered.

3. - Any transfer of ownership of a space asset, either through a sale or through the exercise of the remedies provided in Chapter III of the Convention and Chapter II of this Protocol, is subject to the previously registered lease notice. The transferee is bound by the obligations of the lessor under the lease.

4. - Any lease registered by notice under paragraph 2 which is in breach of a previously registered financing contract may be struck from the International Registry at the request of the creditor.

II. Remedies approach

*Article* ...

1. - The creditor may not exercise the remedies provided in Chapter III of the Convention and Articles XVIII to XXIII of this Protocol in respect of a space asset which is used for the provision or maintenance of a public service, to the extent that this could interfere with the contractual obligations of the debtor concerning the provision or maintenance of the public service.

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\(^{18}\) A footnote to the text of Alternative A indicates that it constitutes a discussion proposal that emerged from the Informal Working Group on limitations on remedies during the third session of that Committee.
2. The preceding paragraph shall only apply if a notice is registered in the International Registry recording that the debtor is contractually obliged to provide or maintain public service through that space asset

(a) prior to the registration of the international interest in that space asset by the creditor exercising remedies or

(b) within [six months] from the date of launch of the space asset, even if after the registration of the international interest by the creditor.

Such a notice can be registered by the parties to the contract or by the State to which the public service is provided.] 19]

The testing of the criteria proposed for identifying space assets

20. Under the Convention, unique identification of a space asset is required for the constitution of an international interest and for the registration of such an interest. 20

21. The provisions of the revised preliminary draft Protocol as amended dealing with the identification of space assets are to be found in Article XXX, which is worded as follows:

Article XXX – Identification of space assets for registration purposes

1. With respect to a space asset that has not been launched, a description of the space asset that contains the name of its manufacturer, its manufacturer’s serial number, and its model designation, and satisfies such other requirements as may be established in the regulations is necessary and sufficient to identify the space asset for the purposes of registration in the International Registry. After launch of the space asset the creditor may add to its registration data all or any of the additional data specified in paragraph 2 but failure to do so or the addition of incorrect data shall not affect the validity of the registration.

2. With respect to a space asset that has been launched, a description of the space asset that contains the date and time of its launch, its launch site, the name of its launch provider and [...] and satisfies such other requirements as may be established in the regulations is necessary and sufficient to identify the space asset for the purposes of registration in the International Registry.

22. These provisions reflect the recommendations that came out of the meeting of the Subcommittee of the Committee to examine certain aspects of the future international registration system for space assets held in Rome on 26 and 27 October 2009 21 as endorsed by the Committee at its third session, 22 the idea being that there should be, first, three mandatory identification criteria for all space assets for the purposes of registration, namely the name of the manufacturer of the asset, a unique serial number and the model/category of that asset - all information to be supplied by the manufacturer to the Registrar of the future International Registry - and, secondly, that certain additional optional criteria, such as the name of the asset, its orbital slot, the country of administration in respect of that asset, its ground station or the date of its launch, could also be used to supplement the mandatory criteria in respect of assets having been launched - however, with such additional criteria only being used for evidentiary purposes and only so long as they did

19 A footnote to the text of Alternative B indicates that it constitutes a discussion proposal that emerged from the Informal Working Group on limitations on remedies during the fourth session of that Committee.
20 Cf. Articles 7(1)(c) and 32(1)(b) of the Convention.
not contradict the mandatory criteria.\(^\text{23}\) It should be noted that there was, moreover, general support within the Sub-committee for these additional criteria being mandatory in cases where a space asset had been launched without there being any registered international interest therein\(^\text{24}\) and that there was also consensus within the Sub-committee that the Supervisory Authority of the future International Registry for space assets should be able to impose additional identification criteria for space assets that would not otherwise be sufficiently identifiable.\(^\text{25}\)

23. At the close of the third session of the Committee the question was raised as to the way in which Article XXX was intended to apply in the case of a space asset in respect of which a first international interest had been registered prior to launch and then a second international interest had been registered after launch.\(^\text{26}\) This is an example of a matter that is still open, in particular as a result of the discussion that took place during the fourth session of the Committee, where the question was raised whether it might not be more appropriate to have a single set of identification criteria for registration purposes, the idea being to avoid creating difficulties for those searching the future International Registry: it was pointed out that the possibility of different criteria being employed to search against the same asset could lead to separate registrations against the same asset each with the same priority ranking.\(^\text{27}\)

24. It is worth noting that, independently of the question whether a dual or a single set of identification criteria should be required for registration purposes under the revised preliminary draft Protocol, there was a suggestion at the fourth session of the Committee that the names of the parties to the agreement under which the international interest was created should be added to the mandatory criteria listed in Article XXX.\(^\text{28}\)

25. Before proceeding further with the question as to the most appropriate solution to be adopted in the revised preliminary draft Protocol as amended on this issue, the Committee at its fourth session, nevertheless, decided that additional technical information, in particular concerning the practical feasibility of the employment of particular criteria, should first be sought from those observers representing the international commercial space, financial and insurance communities.\(^\text{29}\)

26. Without prejudice to the Secretariat's own efforts in this direction, there can be no doubt that the consultations could provide an excellent forum to hear the views of the international commercial space, financial and insurance communities as regards the practical feasibility of the different criteria proposed in Article XXX.

III. ACTION TO BE TAKEN IN RESPECT OF THE OUTCOME OF THE CONSULTATIONS

27. As mentioned above,\(^\text{30}\) the consultations are to be followed by meetings of the Informal Working Group on components and the Informal Working Group on limitations on remedies. The outcome of the consultations will, therefore, be considered by the Informal Working Groups at those meetings.

28. As also mentioned above,\(^\text{31}\) the holding of the consultations was decided upon by the Committee at its fourth session and, as such, their outcome will also be referred to the Committee at its fifth session, to be held in Rome from 21 to 25 February 2011.

\(^\text{24}\) Idem, pp. 7-8.
\(^\text{25}\) Idem, p. 8.
\(^\text{28}\) Idem, § 52.
\(^\text{29}\) Idem, § 53.
\(^\text{30}\) § 3, supra.
\(^\text{31}\) § 2, supra.
COMMENTS

COMMENTS AND PROPOSALS SUBMITTED BY REPRESENTATIVES OF THE INTERNATIONAL COMMERCIAL SPACE AND FINANCIAL COMMUNITIES

SKY Perfect JSAT Corporation

1. RE THE PUBLIC SERVICES EXEMPTION

As shown in our previous comments, in the light of the concerns expressed regarding the public service exemption from default remedies, the issue of limitations on remedies is significant among the key issues outstanding in respect of the revised preliminary draft Protocol as amended.

SKY Perfect JSAT Corporation submits the following comments and hopes that these comments will be favourably considered at the consultations.

I. Framework of the Convention on International Interests in Mobile Equipment (hereinafter referred to as the Convention)

The Convention establishes an international regimen introducing the following new regimen and concepts.

The new regimen and concepts are well accepted, in particular, in the context of aircraft finance and, as a result, the Convention and the Protocol to the Convention on Matters specific to Aircraft Equipment (hereinafter referred to as the Aircraft Protocol) entered into force on 1 March 2006.

(a) Realisation of transparency in the relationship between rights and duties
- Constitution of an international interest (Article 2);
- Establishment of the international registration system (Article 16);
- Priority of competing interests (Article 29)

(b) Realisation of swift default remedies
- Remedies of chargee (Article 8);
- Remedies of conditional seller or lessor (Article 10)

(c) Realisation of effects in insolvency proceedings
- Effects of insolvency (Article 30);
- Jurisdiction in respect of insolvency proceedings (Article 45).

II. Extension of the Convention to space assets

Based upon the broad understanding that it is desirable to implement the Convention as it relates to space assets, in the light of the purposes set out in the Convention, the preliminary draft
Protocol as amended is being discussed intensively with a view to adapting the Convention to meet the particular demand for space assets and to finance their acquisition and use as efficiently as possible.

In this context, the necessary concepts to adapt the Convention have been agreed, through the introduction of new terms such as “debtor’s rights”, “licence” and “rights assignment” and of provisions relating to the recording of rights assignment as part of the registration of an international interest, the priority of recorded rights assignments and the duty of the debtor assignor as to licences.

We understand how the benefits from expanded space-based services which the planned Space Protocol together with the Convention may yield are to be enjoyed by all Contracting States. It is significant to ensure the benefits by carefully avoiding incorporating inconsistent concepts into the revised preliminary draft Protocol as amended.

III. Concerns regarding the public services exemption

As noted in its previous messages of 14 October 2009 and 7 April 2010, SKY Perfect JSAT Corporation shares the concerns expressed at the idea of giving Contracting States a right to limit the exercise of default remedies in respect of public services that did not exist before, as this might negatively affect the benefits to be derived from the revised preliminary draft Protocol as amended.

Article XXVII bis of the revised preliminary draft Protocol as amended, presented as a discussion proposal, might virtually give Contracting States a right to limit the exercise of default remedies in respect of a space asset for the provision or maintenance of a public service. We note that Alternative A stipulates that a Contracting State would have the right to object to the exercise of default remedies in respect of a space asset needed for a public service and that the rights approach of Alternative B would make the transferee bound by the obligations of the lessor under the public service lease. Under the remedies approach of Alternative B, the creditor might not exercise the remedies in respect of a space asset which was used for the provision or maintenance of a public service.

Looking back upon the past, we do not think sufficient and extensive discussion took place for the introduction of such a new right. For example, it should be noted that, after the second session of the Committee, only eight Governments responded to the request from the UNIDROIT Secretariat for information on the treatment of public services in their jurisdictions.

It should also be noted that the Aircraft Protocol carefully avoided a broad public service exemption in view of the possible negative effect. Since space-based financing is more risky, the likely negative effect it would have on the revised preliminary draft Protocol as amended is, therefore, even greater.

Careful consideration should be given to the question of balancing the need of Contracting States to guarantee the continuation of a public service with the rights of creditors. We have to be careful not to introduce a premature international right and obligation.

The question as to how best to arrange this balance is best left to the development of business practice in the coming years. Legislation-based solutions can also, alternatively, be worked out in contracts, on the basis of agreements resulting from intensive negotiations among the parties. It is important to understand the dynamics of the commercial and financial communities and to respect the agreements made by the parties concerned, including Contracting States.
IV. Conclusions

On the basis of the aforementioned considerations, SKY Perfect JSAT Corporation has reached the following conclusions:

1. The proposed Article XXVII bis might create a new right and, as a result, seriously impair the core concepts originally intended to be brought in by the revised preliminary draft Protocol as amended together with the Convention, which are the realisation of transparency in the relationship between rights and duties, the realisation of swift default remedies and the realisation of effects in insolvency proceedings.

2. Concern at the idea of giving Contracting States a right to limit the exercise of default remedies is to be broadly shared, if the intention of the revised preliminary draft Protocol as amended together with the Convention is to meet the particular demand for space assets and to finance their acquisition. We have to be careful in introducing a premature international right and obligation without sufficient and extensive discussion among the parties concerned.

3. The question as to how best to balance the need of Contracting States with the rights of creditors should not be dealt with in the revised preliminary draft Protocol as amended but, instead, be left to the development of business practice, on the understanding that it is important to respect the agreements reached among the parties concerned.

2. Re identification criteria

It is appropriate to have a single set of identification criteria for registration purposes, because use of different criteria to search for the same asset might lead to separate registrations being made over the same asset having the same degree of priority.

In this connection, Article XXX(1) proposes that a description of the space asset that contains the name of its manufacturer, the manufacturer’s serial number and its model designation be employed as the only mandatory identification criteria for the registration of an international interest in an asset prior to launch.

On the basis of the practice of Japanese manufacturers, there is supposedly no concern as to the lack of a uniform system for the generating and assigning of such serial numbers. Such practice is reported to be carried out by Japanese manufacturers regardless of whether or not an international interest is to be constituted.

For the registration of an asset after launch, the proposal is that the same description of the space asset, containing such elements as the manufacturer’s serial number, should be employed as well. For a space asset which could not have received a serial number at the time it was launched into space, certain additional criteria, such as the date and time of its launch, its launch site, the name of its launch provider could also be used to supplement the mandatory criteria. It is, however, important to seek the possibility of such an asset being assigned a serial number so as to avoid the need for two distinct sets of identifying criteria.

In the case of a space asset in respect of which a first international interest had been registered prior to launch and then a second international interest was registered after launch, the same mandatory identification criteria such as the manufacturer’s serial number should also be employed.
APPENDIX VI

COMMENTS

(submitted by Governments and representatives of the international commercial space and financial communities)

COMMENTS AND PROPOSALS SUBMITTED BY GOVERNMENTS

United States of America

1. Issues and Status

I. Overview and timing

The U.S. Government's position from the outset has been and remains that the purpose of the planned draft Protocol is to make financing more available or available on more favourable terms to expand commercial activities in outer space. This requires that the proposed draft, as was the case with the Aircraft and Rail Protocols, recognise applicable industry and financing practices necessary to attract private capital. Any efforts to create further obligations on secured financing parties, greater than exist now absent the planned draft Protocol, will reduce its value and make it unattractive to industry. This is especially the case given the already greater risk for investment and finance in the space sector as compared to commercial airspace. It is for these reasons that the U.S. Government has supported the concerns of key industry interests and will continue to do so.

The U.S. Government at the May 2010 session of governmental experts in Rome raised substantial issues on its behalf and on behalf of the Satellite Industry Association (S.I.A.), noting that, without the support of key space industry sectors, the planned draft Protocol could not achieve its objective. This was accommodated at the May 2010 session of the UNIDROIT Governing Council and the original time schedule, which contemplated a final conference at the end of 2010, was altered so as to allow additional time to seek agreement between participating States and industry.

The next session of governmental experts will now be in February 2011 and, if then approved by the UNIDROIT Governing Council, a diplomatic Conference could take place at the end of 2011 or early in 2012.

Note that the conclusion of a Protocol does not imply acceptance of the text. States would have to ratify the Protocol as a treaty instrument, along with the Cape Town Convention, in order to implement its terms.

II. Issues

There follows a summary of issues, together with comments on the status of these (i.e. any changes resulting from the May 2010 Rome session of governmental experts), and other issues:
(a) Scope of the revised preliminary draft Protocol as amended - pre-launch financing

Important cross-cutting issue. See point No. 5 of the S.I.A. comments circulated at the May 2010 session of governmental experts.¹

Current status: still an open issue.

The potential economic benefits of developing Protocol provisions which would permit pre-launch financing (which has been emphasised by some delegations) need to be weighed against the potential problems and detriments (outlined in the S.I.A. comments) in developing a workable interface between the planned Protocol and existing national laws governing secured financing. A new revised definition of the term “space assets” might mitigate to some extent these problems.

It is clear that substantially more work needs to be done in this area if the revised preliminary draft Protocol as amended is to cover pre-launch phase interests as Convention interests. Concerns have been expressed about the complex issues that may arise if the planned Protocol applied directly to interests that would simultaneously be subject to national secured financing law.

A workable alternative would be to allow the prospective filing of pre-launch interests, which would ripen into Convention interests once launched or inserted into orbit, but then having effect from the date of the prospective filing. That structure would provide assurance to financing parties that they maintain priority once the space asset is beyond the reach and scope of national laws applicable during the manufacturing and launch phases.

Another structure would be to cover only post-launch interests. Some have supported that approach on the ground of simplicity, i.e. the planned Protocol would take effect at a point where national laws might not apply. Others have said that, in view of the fact that most space development finance is set in place at the manufacturing phase, it would be necessary to recognise such pre-launch interests.

Each position has pros and cons but the prospective filing approach has been adopted in the Aircraft and Rail Protocols. It has worked very effectively in the Aircraft Protocol, which is already in operation. That said, one view is that it may be more productive to defer a decision on this until we have a clearer definition that we can agree to of “space asset” and further consideration of what information would be required for registration.

(b) Non-disturbance or quiet enjoyment provisions

See point No. 2 of the S.I.A. comments circulated at the May 2010 session of governmental experts.²

Current status: still an open issue, nothing resulting from the May 2010 session of governmental experts. The U.S. Government has recommended against any rule that would constrain enforcement of senior rights, subject to the normal limits of secured financing law, and recommended at the outset that the relationship between the various secured parties be left to inter-creditor agreements. Given the preference by some others for a default rule, the focus at the last session was on whether a workable default rule can be agreed to.

This issue involves the non-disturbance or quiet enjoyment rights of owners (and their creditors) of components. Basically, the issue involves the right of an enforcing creditor having an

² Idem, 10.
international interest in a whole, entire space asset to interfere with or disturb the quiet enjoyment of the owner (and its creditors) of component parts.

The initial proposal of another delegation extending this issue to functionally linked assets was dropped at the May 2010 session of governmental experts, which leaves on the table proposals concerning physically linked assets (e.g. components within a particular satellite). The U.S. Government and many industry interests have recommended that, since it is standard in the space sector for inter-creditor agreements to resolve related rights issues before accepting placement into a satellite of any components, the planned Protocol can best achieve its objectives by recognising such agreements. Some delegations, however, are pushing for a default rule to be set forth in the text of the revised preliminary draft Protocol as amended. A default rule may be useful to protect senior creditors but it should be made subject to agreements among the parties.

The U.S. Government will pursue the point that seeking to dilute the value of senior interests would militate against attracting secured finance parties to the planned Protocol, particularly in the light of the general first-to-file priority system of the Cape Town Convention.

Consideration could also be given to a provision (similar to the Aircraft protocol as it relates to aircraft engines) which would displace any national laws that treat a component constituting a separate “space asset” as an accession to another “space asset” to which it is attached or installed.

(c) Salvage and related provisions

See point No. 4 of the S.I.A. comments circulated at the May 2010 session of governmental experts. 3

Current status: the May 2010 session of governmental experts partially recognised the insurer’s subrogation position. The U.S. Government had opposed, citing S.I.A. issues. How the general decision of the body will be worked out within the revised preliminary draft Protocol as amended has yet to be resolved.

Space insurance interests have sought to obtain recognition of salvor’s rights beyond those contained in current U.S. law or the law of some other States, on the ground, amongst others, that they may pay out a total loss claim (which typically occurs after a specified percentage of loss of operational capacity) but fail under the planned Protocol to obtain priority over associated rights and claims as against a secured creditor holding an international interest in the space asset. Insurers have dropped earlier requests for recognition of their pre-launch interests by way of prospective filing. The insurance representatives have had support as to title salvage issues but not as much on other aspects.

The Drafting Committee of the Committee of governmental experts was directed at the May 2010 session of governmental experts to find a way to incorporate salvors into the revised preliminary draft Protocol as amended. A number of members of the Drafting Committee thought that a salvor’s acquisition of title might be made registrable by including this within the revised preliminary draft Protocol as amended’s definition of “sale.” There was considerably less support for allowing salvors to be subrogated to the rights of secured creditors who are paid. U.S. participants argued that a salvor who wished to get a security interest could use the normal revised preliminary draft Protocol as amended’s procedures and did not need special subrogation rights, a position that had some support. This issue will continue to be examined by the Drafting Committee.

3 Idem, 12.
The U.S. Government had raised the S.I.A. concern as to the potential adverse impact on financing that could result from diminishing the rights and priorities currently enjoyed by secured creditors in favour of those of insurers, even if limited. To the extent that insurers obtain subrogation rights greater than they would have otherwise under the Cape Town Convention, it is argued that they improve their position vis-à-vis remaining secured creditors compared to existing law in a number of countries, including the U.S. It was argued that this could also result in additional costs incurred by the need to resolve these issues at the early manufacturing stage when inter-creditor agreement negotiations generally are necessary for space asset financing.

A possible alternative approach might be considered of an optional declaration that would allow a ratifying State to elect to recognise certain salvage interests, which would apply when the law of that State, including the planned Protocol, was being applied.

(d) Limitation of remedies, including the public service exemption

See point No. 3 of the S.I.A. comments circulated at the May 2010 session of governmental experts.  

Current status: nothing resulted from the May 2010 session of governmental experts. A wide gap remains between the U.S. Government and supporters, including S.I.A., who have sought deletion of this provision, and those seeking maintenance of an as yet unspecified scope of public service obligations for user-contract countries. Proponents of the previous step-in rights proposal have withdrawn support for that but new alternatives have been tabled that are aimed at an enforcing creditor’s obligation to continue certain undefined public services for user countries not in default, possibly for a limited time.

There is as yet no evidence that space financing interests would accept these or other modified proposals. Absent that, we expect to restate our initial position, i.e. the effort to constrain enforcement of remedies by regulating the provision of services beyond what may be required by a licensing authority is unworkable. Further compromise proposals may emerge with more narrow service obligations but willingness of financing interests to support such an approach would appear necessary for any agreement.

To place this in context, unlike the Aircraft and Rail Protocols, the revised preliminary draft Protocol as amended will already condition the exercise of remedies by enforcing creditors by recognising the primacy of national regulatory and licensing requirements. The U.S. Government has supported that limitation (Article 27(2)) based on regulators' concerns in countries participating in the sessions of governmental experts.

However, from the outset, the U.S. Government and like-minded States have not supported a further and additional limitation on the exercise of remedies resulting from a proposed public service exemption and have argued that such an exemption should be subsumed in the exemption for national licensing and regulation. This position has gathered a certain amount of support from other delegations but not enough so far to prevail. An earlier approach that attempted to limit any public service exemption to safety, navigation and similar matters has failed so far to gain substantial support but may resurface as a compromise. Proponents of a public service obligation have objected to leaving decisions as to the maintenance of public services in third countries which have contracted for such services with the initial licensing State. No agreement has been reached.

The initial public services draft proposal appears to be effectively off the table because step-in rights for third countries met significant opposition. Counter-proposals have now been
made by the Canadian and German delegations that would provide a public service exemption to the extent of existing leases or contracts that are not in default and possibly for a limited period of time, to be determined. Essentially, this proposal would provide for a limited non-disturbance right in favour of such performing leases or contracts. However, it is important to distinguish between a provision that amounts to a stay of a creditor's enforcement rights, which could be relevant to the scope of the revised preliminary draft Protocol as amended, and a guarantee of services, which would be outside the reach of the revised preliminary draft Protocol as amended. The acceptability of this scaled down compromise has yet to be determined. An alternative approach might be to allow a ratifying State to elect a public service exemption as an optional declaration.

The related issue of the definition of "critical public services" remains. Absent agreement on a definition, it is not clear what options there are for a State contracting for public services itself determining whether the services qualify for the exemption.

(e) Debtor's rights and assignments

See point No. 6 of the S.I.A. comments circulated at the May 2010 session of governmental experts.  

Current status: at the May 2010 session of governmental experts it was agreed, in line with earlier proposals of the industry working group and with the support of the U.S. Government and others, to include provisions which would expand the scope of the revised preliminary draft Protocol as amended to cover contract rights, receivables and certain other intangibles (excluding licences and similar authorisations) associated with space assets.

This recognises the importance of associated contract rights and receivables and other intangibles in space asset financing, as compared to aircraft and rail financings, where this type of expansion was not included or included minimally in the relevant Protocols. The U.S. Government's position has been in support of a broader scope of the planned Protocol along these lines. However, as noted in the S.I.A. comments, there are important technical and drafting issues associated with the provisions of the revised preliminary draft Protocol as amended and they need to be addressed and reasonably resolved.

(f) Scope of the revised preliminary draft Protocol as amended - component financing

See points Nos 1 and 5 of the S.I.A. comments circulated at the May 2010 session of governmental experts.  

Current status: the inclusion of component financing is unresolved, with no change at the May 2010 session of governmental experts. The U.S. Government has supported inclusion to ensure flexibility to cover future financing developments. Some countries oppose the possibility of allowing for registration against a "whole" (e.g. the entire satellite) as well as against components of the whole (e.g. one or more transponders, a hosted payload, etc.). Efforts to meet these objections, while accommodating a more flexible registration system, continue.

The U.S. Government has been working towards a structure that would accommodate the financing of both whole space assets and also of substantial components on a stand-alone basis. However, some Civil law countries have pushed for agreement on definitions and rules which would preclude interests in both the whole and the components at the same time, i.e. the definitions of components, if such financing takes place, should, added together, equal the whole. Industry comments at that time favoured component financing as well as the more common financing to-
day of the whole asset, so as to ensure that the revised preliminary draft Protocol as amended could accommodate changes in financing practices in this sector. The U.S. Government also raised the S.I.A. concerns concerning the practicality of defining components in terms of their independent ownership, use or control characteristics and these concerns had a fair amount of support.

(g) Additional issues

There follows a non-exclusive listing of additional issues, as to which preliminary positions need to be developed in the near future.

Current status: only minimal discussion of these took place at the May 2010 session of governmental experts. These are expected to be discussed at the October 2010 intersessional meeting and at the February 2011 session of governmental experts.

The first three are recurring issues in commercial law treaties but they raise important issues for each treaty. The goal is to be prepared to put on the table proposals at the informal meeting scheduled for October 2010.

(i) Transition provisions

This issue mainly concerns the treatment of rights and interests that exist prior to the date of effectiveness of the planned Protocol in a given country, including the issue of the protection of pre-existing priorities. One option is to recognise pre-existing interests which, whilst avoiding some issues, leaves uncertain for a period of time whether Convention interests are secure. Another is to allow refiling within a specified period of time to maintain priority positions.

The Aircraft Protocol allows both, depending on the choice made by a ratifying State, by providing for an optional declaration whereby a country may elect to specify a date, not later than three years after the Protocol becomes effective in that country, for the priority rules of the Protocol to become effective with regard to pre-existing rights and interests.

It is likely that the options with regard to transition provisions will be discussed at the October 2010 meeting.

(ii) Jurisdictional provisions

This issue under the Cape Town Convention and the existing Protocols concerns rules as to jurisdiction with respect to party choice of forum, the granting of interim relief and claims against the Registrar. The principal provisions involved are Article 1(3) of the revised preliminary draft Protocol, concerning the location of space assets, and Articles 42 (choice of forum), 43 (interim relief) and 44 (claims against the registrar) of the Cape Town Convention.

In the Cape Town Convention, except for the grant of interim relief (Article 43) or the making of an order against the registrar (Article 44), exclusive jurisdiction for any claim brought under the Convention is given to the courts of the jurisdiction chosen by the parties unless they agree on non-exclusive jurisdiction and the chosen forum need not have a connection with the parties or with the transaction. Absent party choice of forum and except for rules pertaining to the Registry and interim relief, the Convention has no rule and, given the wide range of potential issues, attempting to negotiate a general rule has not been seen as necessary or achievable. As to the Registrar, the Convention gives exclusive jurisdiction to the courts of the State in which the Registrar of the International Registry has its centre of administration to make orders against or recover damages from the Registrar. As these provisions appear unlikely to be differently resolved in the planned Protocol, it is expected that the focus of discussions on jurisdictional matters will be
on Article 43 of the Convention, which concerns the granting of interim relief under Article 13 of the Convention.

Generally, the assumption has been that the credit value of the revised preliminary draft Protocol as amended would be enhanced if more jurisdictional options were reasonably offered to creditors, especially for interim relief, and the prior Protocols have taken this approach. The first proposed text with respect to interim relief for the revised preliminary draft Protocol as amended was contained in the text distributed for the May 2010 session of governmental experts (see Article XXI of the revised preliminary draft Protocol as amended), which would modify the substantive rules in Article 13 of the Convention. As to jurisdiction to grant interim relief, a new provision was proposed in the text for the May 2010 session of governmental experts in Article I(3). That text was generally agreed to be insufficient and further discussions are expected at the October 2010 meeting. Proposals range from references to launching or registration States to States with ground control capacity, “central mission control” and others.

(iii) Insolvency

The revised preliminary draft Protocol as amended parallels the Aircraft Protocol in offering countries options, by means of alternative declarations which contain different insolvency rules or an option to apply the relevant national insolvency law, since, if no declaration is made, existing national insolvency law provisions would apply.

Alternative A draws upon U.S. bankruptcy law provisions applicable to aircraft and railroad rolling stock, which grant an enforcing secured creditor or lessor a right to take possession or control of a space asset after a waiting period, notwithstanding the pendency of a bankruptcy or insolvency proceeding, unless the relevant contract is being performed and paid in full on a current basis and the debtor or insolvency administrator, as the case may be, has agreed to perform all future obligations under the contract.

Another Alternative is more limited and in substance requires the insolvency administrator or the debtor, as applicable, upon the creditor’s request, to state whether it will cure all defaults and perform all future obligations under the contract or give the creditor the opportunity to take possession or control of the space asset in accordance with the applicable law. If the insolvency administrator does not give the required statement or give up possession or control after stating it will do so, the court may permit the creditor to take possession or control of the space asset.

Alternative A, however modified to reflect particular issues relevant to space assets, is generally considered to have significantly greater credit potential than the others as drafted.

Consideration needs to be given to the appropriateness of these alternatives, taken largely from the Aircraft Protocol (the Rail Protocol has an additional alternative), for space asset financing. That should take into account the fact that no analogue to the U.S. bankruptcy law provisions applicable to aircraft and railroad rolling stock referred to above exists for space assets.

(iv) Economic enhancement provisions

In view of the substantial limitation on the exercise of remedies deriving from the revised preliminary draft Protocol as amended’s exception for limitations imposed by national licensing and regulatory regimes, which is not contained in the Aircraft or Rail Protocols, consideration should be given to additional mechanisms for enhancing the credit value of the planned Protocol beyond those contained in the Aircraft and Rail Protocols. To be considered, any such proposals should be tabled at the October 2010 meeting.
One suggestion by the U.S. Government has been for a provision protecting an enforcing creditor’s income stream interests, pending its ability to obtain rights to transfer operations or substitute operators.

Another suggestion has been for optional provisions for a process for pre-approval and substitution of operators in a default or termination scenario. These might be contained in optional declarations of ratifying States and would not be mandatory. Input as to whether these provisions add credit value is needed.
APPENDIX VII

COMMENTS
(submitted by Governments and representatives of the international commercial space and financial communities)

COMMENTS AND PROPOSALS SUBMITTED BY REPRESENTATIVES OF THE INTERNATIONAL COMMERCIAL SPACE AND FINANCIAL COMMUNITIES

Arianespace, EADS Astrium, Eutelsat Communications and Thales Alenia Space

Proposal for a new definition of "space asset"

"Space asset" means any type of spacecraft or human built satellite, intended or not to carry passengers, to be launched or already launched into space, including any of its two sub-assemblies, namely:

(i) the infrastructure on which the payload will be assembled, often called "platform" or "service module", which supplies all means necessary for the payload to perform its mission in terms of transport, positioning and supply of energy;

(ii) the payload, i.e. all equipment necessary for the spacecraft or satellite to carry out its mission.

The Supervisory Authority shall describe the technical details of a space asset in the regulations.”
COMMENTS

(submitted by Governments and representatives of the international commercial space and financial communities)

COMMENTS AND PROPOSALS SUBMITTED BY REPRESENTATIVES OF THE INTERNATIONAL COMMERCIAL SPACE AND FINANCIAL COMMUNITIES

Satellite Industry Association of the United States of America

The Satellite Industry Association (S.I.A.) is a consensus-based trade association that serves as the unified voice of the U.S. satellite industry on policy, regulatory and legislative issues affecting the satellite business. The S.I.A. represents leading global satellite operators, service providers, manufacturers, launch services providers, integrators, ground equipment suppliers and satellite radio and television providers.¹

In many prior instances, the S.I.A. and its members have stated their concerns that the revised preliminary draft Protocol as amended ² is not an effective instrument for increasing capital flow to commercial space projects. The S.I.A. considers that the revised preliminary draft Protocol as amended adds an unnecessary supra-national layer of law at a time when neither the S.I.A. nor the financial community that supports its members believes a new legal regime is needed to expand space-based services or facilitate asset-based financing.

The S.I.A. opposes the continuation of a drafting process seeking to resolve identified deficiencies when the rationale for the establishment of a structure intended to promote legal certainty and increased availability of capital for the space industry requires reconsideration. Moreover, there is no evidence that financings have failed or could have attracted more favourable pricing due to uncertainty over the granting and perfection of security interests in the satellites being financed. No compelling need for the revised preliminary draft Protocol as amended has been demonstrated, which explains why most of the space industry does not want it.

The specific issues the S.I.A. has identified below to support its position that the revised preliminary draft Protocol as amended will jeopardise or disadvantage space asset financing have not been presented as problems to solve or provisions to be refined but as examples of why the revised preliminary draft Protocol as amended must be reassessed.


² Reference to the preliminary draft Protocol is as revised by the Drafting Committee established by the Committee of governmental experts for the preparation of a draft Protocol to the Convention on International Interests in Mobile Equipment on Matters specific to Space Assets on 3 May 2010.
1. **Sphere of Application/Definition of Space Assets**

   The proposed definition of “space assets” (Article I(2)(l) of the revised preliminary draft Protocol as amended), which delineates the sphere of application of the revised preliminary draft Protocol as amended, raises many concerns. As defined, the same asset (and its subparts) may be independently owned, used or controlled by different debtors and buyers at different times. At what point in time is an asset that is “intended to be launched into space” identifiable as such “in course of manufacture or assembly”? And how can an international interest or a prospective interest in pre-launch assets clearly interact with the secured financing regime under applicable national law from the commencement of production and assembly, through storage, transportation and launch without losing its priority? Finally, how can pre-launch financing be within the sphere of the revised preliminary draft Protocol as amended if the principal value in a space asset (which cannot be individually identified until ready for delivery and launch) lies in the contract for its manufacture whereas the revised preliminary draft Protocol as amended requires that a rights assignment be recorded as part of the registration of an international interest in a space asset?

2. **Components**

   The inability of the Informal Working Group on default remedies in relation to components to reach a solution regarding enforcement against a space asset physically linked to another space asset in which another creditor has an interest (Article XVIII(3)) reflects a fundamental deficiency in the revised preliminary draft Protocol as amended. A clash in legal systems jeopardises the utility of the revised preliminary draft Protocol as amended. A clash in legal systems jeopardises the utility of the revised preliminary draft Protocol as amended, as the financing of hosted payloads, condosats and transponders will continue to expand as a cost-effective means of deploying satellites.

   We are also concerned by the statement made by the Informal Working Group that it was not desirable for it to become locked into a particular system for the determination of those assets that should qualify for registration in the future International Registry for space assets. In connection with this, the Informal Working Group saw the regulations to be prepared by the Supervisory Authority as being able to play a part in providing flexibility in the establishment of identification criteria for the registration of international interests in assets that might become valuable to creditors in the future. Such an approach would allow the Supervisory Authority unfettered discretion to alter and introduce criteria having an adverse impact on clarity and uniformity of what would constitute a space asset. This proposed approach to addressing component financing is all the more perplexing when the matter currently is adequately addressed through inter-creditor arrangements.

3. **Public Service Exemption from Default Remedies**

   Perhaps the most controversial issue from the S.I.A.’s perspective is the limitation of default remedies against a space asset performing a “public” service. This became even more worrisome by the proposed introduction of Article XXVII(3). The ambiguity inherent in the term “service which is in the vital interest of that State” will discourage financing since it will not be possible to provide any legal assurance as to the scope of the language not only as to the nature of the service but also as to which States could be affected within the footprint coverage of any particular satellite.

   In addition, the new proposal advanced by the Informal Working Group on limitations on remedies for “space assets needed for the public service which is in the vital interest of that State”, added as Alternative B to the previously proposed Article XXVII bis, coupled with an elaborate cure mechanism involving any affected State, is cumbersome and time-consuming. As has been

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stressed on many previous occasions, this limitation on remedies will sharply undercut the level of predictability needed to foster asset-based satellite financing.

4. **Salvage Interest in Space Assets**

   We reiterate our concern that creating and elevating insurers’ rights to salvage will result in significant impediments to satellite financing and a lack of clarity in the relative rights of creditors. Recognition of insurers’ rights to salvage is wholly unnecessary to facilitate satellite financing and would be an unprecedented right that is currently unavailable in aircraft or rolling stock financing, where salvage rights are and should be subject and subordinate to rights of secured lenders. The Committee is not equipped to appreciate the consequences of acceding to the position of the proponents of salvage interests and its possible permutations, including partial and constructive total losses, security extending to more than one identifiable space asset, the multiplicity of insurers each having proportional interests in the salvage value of a space asset (each seeking to register its interests at different times) and the timing of insurance placement versus financing of a space asset. Persisting in extending the revised preliminary draft Protocol as amended to insurer salvage interests will compel satellite operators to require their insurers to forgo the registration of their salvage rights so as not to impede the financing of their satellites.

5. **Identification of Space Assets for the Purposes of Registration**

   Uncertainty continues as to appropriate identification criteria for space assets for purposes of registration. Many of the core identification criteria enumerated in Article XXX are meaningless in providing certainty or uniformity of identification both during manufacture and after launch. Moreover, our previously expressed concern regarding the need to satisfy “requirements as may be established in the regulations” merely postpones the inevitable quandary of establishing suitable criteria. The inability of the Sub-committee to examine certain aspects of the future international registration system for space assets to establish identification criteria for space assets is a telling indicator of the inherent impediments in promoting uniform and predictable rules governing the taking of security over indeterminate, evolving and disparate assets that all happen to be located in a particular, undefined medium.

   Another issue of concern is the application of Article XXX to space assets in respect of which a first international interest is registered before launch and then a second international interest is registered after launch. The possibility of different search criteria against the same asset could lead to separate registrations against the same asset, each with the same priority ranking.

6. **Debtor’s Rights, Assignments and Reassignment Rights**

   While the thoughtful effort and intricate drafting undertaken to accommodate the prevalence in satellite financing of intangible rights appurtenant to space assets is impressive, the resulting complexity is extraordinary. The benefits of introducing rights assignments, rights reassignments, rights to payment or other performance including debtor’s rights, registration of contracts of sale and contracts of prospective sale in Articles IV, V and IX to XV can no longer be viewed as outweighing the requisite complexity of the added concepts.

7. **Other Issues of Concern**

   In addition to these major issues of outstanding concern, there are additional aspects raised by other commentators, such as jurisdiction, transition provisions, insolvency and economic enhancement provisions, that are also problematic for the S.I.A.
Conclusion

The revised preliminary draft Protocol as amended fails to achieve its expressed goal of facilitating the financing of space assets through a uniform and predictable legal regime governing the taking of security over space assets. The S.I.A. is not alone in its opposition to the substance and direction of the revised preliminary draft Protocol as amended. Other industry participants representing a significant proportion of the space business in the U.S., Europe and Asia have all voiced their concerns. This is not an environment that is conducive to the promulgation of a complex international treaty intended to foster the development of the global commercial space industry.

A Protocol that has no meaningful support or input from its principal stakeholders is counterproductive. Until UNIDROIT’s members and the satellite industry can align their interests, endeavouring to conclude the drafting of an instrument that ignores fundamental concerns jeopardises its adoption by those States attuned to the needs and interests of their space industry. The S.I.A. again urges reconsideration of the need for the Protocol and expresses its serious concerns over its adverse consequences on the financing of space assets the world over.

4 The European Satellite Operators Association (E.S.O.A.) (on behalf of its 10 members and 10 supporting members), the Asia-Pacific Satellite Communications Council (A.P.S.C.C.) (representing over 100 members from Asia, Europe and North America), Global VSAT Forum (comprising more than 200 companies from 100 countries in every major region of the world and from all sectors of the satellite industry), ING, Barclays Capital, ManSat, QuetzSat, Ciel Satellite, O3b Networks, Elseco, Marsh, Aon-ISB, SES, Intelsat, Eutelsat and Avanti Communications, among others, have each expressed their concerns about the revised preliminary draft Protocol as amended and its effect on space commerce.
COMMENTS

(submitted by Governments and representatives of the international commercial space and financial communities)

COMMENTS AND PROPOSALS SUBMITTED BY REPRESENTATIVES OF THE INTERNATIONAL COMMERCIAL SPACE AND FINANCIAL COMMUNITIES

Japan Aerospace Exploration Agency (J.A.X.A.)

Taking note of the fact that technical information concerning the feasibility of the employment of particular criteria for the identification of space assets is being sought (C.G.E./Space Pr./4/Report, § 54), I am pleased to provide you with my view as an expert in space engineering.

In practice, each component of spacecrafts has a stencil marking with the serial number or manufacturing number of the manufacturer inscribed on it in non-erasable ink, which is affixed on the component before launch. Thus, functional equipment, such as a transponder, can be identified by the manufacturer’s serial number.

After the space asset is launched, it might appear that identification by reference to the serial number will no longer be possible, because the stencil cannot be physically seen when the space asset is in outer space. However, there is in fact no difficulty, because the launched space assets are tracked and controlled continuously by tracking facilities on the ground and the serial number of the components incorporated in the space asset can be traced by the relevant documents such as manufacturing drawings and parts lists. There is a possibility that, when the life of the space asset is expired or it goes out of operation due to an accident, the signal from the space asset stops and the ground tracking facility ceases to track the space asset. In such a case, the object will still be under continuous monitoring by other facilities in terms of space debris tracking.

In conclusion, it is my view, based on my experience, that space assets can be identified solely by the serial number of the manufacturer. I hope the consultations will consider this view favourably.

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1 Comments submitted by Dr Yasushi Horikawa, Technical Counsellor to J.A.X.A. and Chairman-elect of the United Nations Committee on the Peaceful Uses of Outer Space.