Item No. 5 on the agenda: International Interests in Mobile Equipment

(b) Possible preparation of other Protocols to the Cape Town Convention, in particular on agricultural, mining and construction equipment

(prepared by the Secretariat)

Summary  Update on activities undertaken by the Secretariat

Action to be taken  To consider the activities to be undertaken to develop an additional Protocol to the Cape Town Convention on matters specific to agricultural, mining and construction equipment

Mandate  Work Programme 2014-2016

Priority level  Medium (Agricultural, Mining and Construction Equipment);
Low (Ships)
Low (Off-shore Wind Power Generation and Similar Equipment)

Related documents  C.D. (85) 7(c); C.D. (86) 8(d); C.D. (88) 3(c); C.D. (89) 4(c);
C.D. (90) 4(c); C.D. (91) 4(c); C.D. (92) 5(b); NLCIFT Report on Secured Financing for Mobile Equipment

INTRODUCTION

1. The Convention on International Interests in Mobile Equipment was opened for signature on 16 November 2001. Article 2(3) of the Convention provides that the initial three protocols, adopted respectively in 2001, 2007 and 2012, should cover aircraft, railway rolling stock and space assets. The possibility of adopting additional protocols is left open (see Article 51 of the Convention).

2. During its 92nd session in 2013, the Governing Council considered the potential merits of additional protocols in three areas: ships and maritime transport equipment; off-shore wind power generation and similar equipment; and agricultural, mining and construction equipment. With regard to ships and maritime transport equipment (see document C.D. (92) 5(c)), the Governing Council took note of the Secretariat’s report, but was uncertain whether satisfactory conditions existed to move forward with this work, particularly in the light of potential industry opposition expressed to some members of the Council, as well as continued, although limited, use of the 1993 International Convention on Maritime Liens and Mortgages.
3. With regard to off-shore wind power generation and similar equipment, the Governing Council took note of the Secretariat’s report regarding the potential legal issues in need of unification (C.D. (92) 5(d)). Although there was agreement that significant legal issues needed to be addressed and that there was a growing need for financing of this equipment, opinions varied on whether wind energy equipment was in fact mobile equipment and, if that were the case, whether the Cape Town system could be tailored to provide adequate solutions. As a result, the Governing Council mandated the Secretariat to maintain a potential protocol on off-shore wind power generation and similar equipment on its Work Programme, but at a low level of priority.

4. With regard to agricultural, mining and construction equipment (C.D. (92) 5(b)), a proposal to prepare a fourth protocol on agricultural, mining and construction equipment (subsequently known as the “MAC” Protocol), was first made to the Governing Council in 2005. This proposal was discussed in subsequent years (see the Related documents specified above).

5. At its 91st session (Rome, 7 – 9 May 2012), the Governing Council discussed the possible work on the proposed MAC protocol which had formed the object of a discussion at the forum that the Secretariat had convened on 10 November 2011 on “Possible Benefits of Extending the Cape Town System to Agricultural, Mining and Construction Equipment”. At that same session, the Secretariat informed the Council that, following the forum, it had received an offer from the Center for Economic Analysis of Law (CEAL) (Washington D.C.) to undertake an economic assessment of the proposed protocol on a pro bono basis. The final text of the study, prepared by Mr Heywood Fleisig, Director of Research at the CEAL, was submitted to the Council in 2013.

6. The CEAL study examined the possible economic impact of the proposed protocol on trade in mining, agricultural and construction equipment. According to the CEAL study, the Cape Town Convention had a positive economic impact on equipment financing because it reduced the risk of lending. It permitted mobile equipment to serve as good collateral in jurisdictions where national laws did not. The study concluded that in countries that exported or imported the equipment concerned, in countries that had not yet modernised their secured transactions laws, or had only done so partially, more MAC equipment would be used to produce more mining, agricultural, and construction output. Countries that produced and exported MAC equipment would thus experience an increase in the demand for the machinery they produced, which would have a ripple effect on the economy. Countries where the fourth protocol would ease financing constraints would purchase more MAC equipment and increase their GDP by producing more mining, agricultural, and construction output. Some countries that produced, used, imported, and exported MAC equipment would experience both effects.

7. The study also devoted attention to the concerns of the Governing Council regarding the extent to which financing of MAC equipment was provided by domestic (i.e. in-country) financial institutions or international institutions, and the need for information about the mobility of MAC equipment in practice (i.e. how it moved across borders and with what frequency). Other points included the question of the equipment being “uniquely identifiable”, bearing in mind the number of potential categories/models of equipment within the scope of the protocol, and the absence of (uniform) system(s) of identification and the registration regime.

8. At its 92nd session, the Governing Council took note of the Secretariat’s report and recalled the potential benefits of extending the Cape Town System to MAC equipment. The Council also recalled concerns expressed during its 91st session, that financing for MAC equipment was generally provided in a domestic context and, as a result, a protocol would take aim at an area that perhaps would be better served by reforming domestic law. However, the Council agreed that the information it had requested—concerning whether a MAC Protocol would be economically beneficial and whether industry support existed for its development—could not be a clearer yes on both counts. As a result, the Council agreed to proceed with preliminary work on a potential fourth
protocol to the Cape Town Convention and assigned medium priority to this work. The Council also left open the possibility of increasing the priority to high priority should additional resources become available and invited member States to assist the Secretariat in obtaining external funding for this work.

**THE GENERAL ASSEMBLY**

9. The General Assembly endorsed the recommendation of the Council at its 92nd session in December 2013, with the proviso that the priority of the project should be kept at a medium level, one representative maintaining that agricultural, mining and construction equipment would not be a suitable type of collateral for a Cape Town-based protocol since there was little evidence of its cross-border mobility, but would be more aptly covered by an instrument containing general rules on secured transactions.

**ISSUES DIALOGUES (WASHINGTON D.C.)**

10. As part of the preliminary work aimed at setting the scope of a possible fourth protocol, the UNIDROIT Secretariat participated in two Issues Dialogues organised by the United States Department of State and the International Law Institute. These meetings, attended by experts and stakeholders to provide an overview of the structure and functioning of the Cape Town Convention system and to examine its adaptability to agricultural, mining and construction equipment, were held on 19 November 2013 and 22 January 2014, at ILI headquarters in Washington, D.C.

11. The objective of the first Issues Dialogue was to identify the economic, legal and procedural issues necessary to determine the feasibility of the MAC Protocol (see the Report on the meeting in Annex I to this document). As regarded its potential impact, participants during the first meeting mentioned that the general economic benefits had been well recognised, but agreed that it would be helpful to count with a separate economic analysis for each of the three categories of equipment, as well as economic information by geographic region.

12. As a general rule, as regarded the issue of scope, participants mentioned that Article 51 of the Convention established that equipment should be high-value, that it should cross national borders in its normal operation and that it should be specifically identifiable. Three initial methods were identified for setting the possible scope: 1) a value mobility approach; 2) an economic/legal analysis approach; and 3) an item-by-item examination of the harmonised system of tariffs.

13. The first method compared economic value, on one hand, with mobility, on the other, for the three types of equipment. Although it was agreed that this method could provide guidance in determining scope, participants expressed concern that it would require setting arbitrary cut-offs for both value and mobility. It was also mentioned that reducing the analysis to a determination of value and mobility would ignore important legal issues that must be accounted for, such as whether the equipment was specifically identifiable and/or internationally registrable.

14. The second method combined an analysis of economic criteria (i.e. value), on one hand, and legal criteria (i.e. mobility, identifiability, etc), on the other. This method, it was mentioned, would allow for a more thorough review of category and/or items of equipment and could help measure the interdependency of individual criteria at the various levels of the scoping exercise. As presented, this method would first determine whether a category (or item) of equipment would be considered “internationally mobile.” If yes, the method would examine whether the category (or item) of equipment was above a minimum economic value agreed during the scoping process. If yes, the analysis would examine whether the equipment was specifically identifiable (by make,
model and serial number or other agreed-upon criteria). Categories and items not meeting the criteria, or which could not be subject to registration at the international level, would be excluded from the scope. Others would be included.

15. The third method which was examined used the World Customs Organization’s *Harmonized Commodity Description and Coding System* as an existing and internationally recognised standard by which categories (and in some cases specific items) of equipment could be identified. This method, it was mentioned, would allow a selection of equipment pursuant to the Harmonized System by use of criteria related to mobility, value, identifiability and registrability. Participants mentioned that the numbering system of the harmonised codes could also be used to standardize the first digits of a serial number description in a new collateral registry.

16. Although participants agreed that each scoping method provided advantages and disadvantages, use of the *Harmonized System of Tariffs* was agreed as providing the most comprehensive basis by which initially to undertake the scoping exercise.

17. Finally, after a related discussion on whether the three types of equipment (mining, agricultural and construction) should be separated into potentially separate protocols, participants agreed that keeping them together in one instrument would produce the greatest economic benefit. Participants also mentioned that further consideration would have to be given to mixed pools of collateral -- those in which equipment subject to national law (thus national registration) was included alongside equipment subject to the proposed protocol (thus international registration).

18. The second Issues Dialogue, held on 22 January 2014, continued examination of the economic impact of a fourth protocol, analysis of methods for determining the scope, and considered whether the current Protocols to the Cape Town Convention provide viable models to follow for a MAC protocol (see the Report on the second meeting in Annex II to this document).

19. As regarded economic impact and to follow up on potential increases in financed sales of MAC equipment, by types of equipment and by region, discussed in the first meeting, Mr Fleisig supplemented previous figures on the expected utilisation of the protocol and the possible distribution by type of collateral. As regarded the States that would benefit, he mentioned that the greatest beneficiaries would be emerging markets, but would also include several advanced economies in need of reforming their secured transactions laws (of which he mentioned Spain, Italy, Greece and Portugal, among others). He mentioned that the figures were incomplete, but that CEAL expected up to a US$60 billion increase in demand for MAC equipment worldwide.

20. As regards the method for determining the scope, participants continued with an examination of cross-border mobility of collateral under Article 51 of the Convention using several examples of internationality. Participants pointed out, however, that a Study Group would have to be mindful of circumstances in which equipment that was mobile originally, could later be affixed to land or otherwise lose its cross-border mobility.

21. Participants also discussed the importance of coordinating work on a draft protocol with domestic law to ensure that a protocol did not impose additional registration or other requirements beyond those of asset-based financing in general. Participants agreed with the conclusion of the first meeting that the World Customs Organization’s *Harmonized Commodity Description and Coding System* presented the greatest potential for determining the scope of the fourth protocol. On this issue, Mr Paderic Sweeney of the U.S. Department of Commerce presented a specific case study, using combine harvesters as an example of the manner in which the harmonised system could assist in the scoping exercise. The case study described the manner in which the harmonised system established representative internationally-valid values for six product categories relevant to
the protocol. Mr Sweeney also presented a brief paper on the manner in which the harmonised system could be used for determining the scope of the MAC Protocol (see Annex III to the Report on the second meeting).

22. The issues dialogue meetings presented a first opportunity to examine several aspects of a possible MAC Protocol, albeit within the general context of North American market participants, and provided important advances that the Council might take into account in its establishing next steps for this work. With regard to the possible economic benefits of the protocol, participants agreed that significant increases in financing of equipment would take place under a new protocol. With regard to approaches by which to determine the scope, participants agreed that using the harmonized system of tariffs together with a value/mobility matrix approach and/or economic/legal analysis approach would provide a study group with the best methodology to determine the types of equipment to be included in a MAC protocol. With regard to the issue of severability, participants concluded that all three types of equipment should remain in one instrument. And, finally, with regard to the models to follow for the actual drafting, participants concluded that the Luxembourg protocol presented the most similar existing text, which should be used as the initial working draft of a MAC protocol. Participants also concluded that there was further need for consultations with equipment manufacturers (at the WFO meeting in Buenos Aires and subsequent opportunities) on the specific economic benefits, as well as the best-suited structure for operation of a protocol.

BACKGROUND RESEARCH

23. In the course of 2013 the Secretariat continued with background research, by taking a renewed look at the results of the survey conducted by means of a Questionnaire in 2007 (see C.D. (86) 8(d)) and by updating the table annexed to that document comparing the provisions of the three existing Protocols, identifying the provisions that are likely to remain unvaried in a fourth protocol, by comparing the texts adopted by the diplomatic conferences instead of the drafts. This table was also presented at the second issues dialogue meeting in Washington, D.C.

24. In addition, a search was made to identify global companies dealing in the types of equipment concerned, first at universal level, then in Latin America, with a view to invitations to be issued for the meeting of the World Farmers Organization (WFO) in Buenos Aires, Argentina, in March 2014.

25. Dr Marek Dubovec from National Law Center for Inter-American Free Trade (NLCIFT) presented the possibility of a protocol to the Board of the WFO during the Buenos Aires meeting, as well as to several groups of WFO members from various regions, with the objective of informing them about the discussions thus far and to elicit further views on the project. The NLCIFT has also prepared a report on the possible benefits and challenges of the MAC protocol project (see the NLCIFT Report cited in the Related documents, an extract of which is reproduced as Annex IV to this document).

ACTION TO BE TAKEN

26. With the aid of the inputs received in the issues dialogue meetings and additional background research, the Council is requested to consider the activities to be undertaken to develop a fourth Protocol to the Cape Town Convention on matters specific to agricultural, mining and construction equipment, including the possible convening of a Study Group entrusted with preparing a first draft of the MAC Protocol prior to the 95th session of the Council.
I. Procedural Background

1. At its 92nd session (Rome, 8-10 May 2013), the Governing Council of UNIDROIT agreed to proceed with preliminary work on a potential Fourth Protocol to the Cape Town Convention on International Interests on Mobile Equipment. This protocol would potentially cover agricultural, mining and construction equipment. The Council assigned medium priority to high priority to this work, depending on funds available.

2. As an initial step in the possible preparation of the protocol, the State Department, in cooperation with UNIDROIT, organized a meeting hosted by the International Law Institute in Washington D.C with stakeholders and experts to provide an overview of the structure and functioning of the Cape Town Convention system and to examine its potential adaptability to agricultural, mining and construction ("MAC") equipment.

3. The principal objective of the meeting was to identify the legal, economic and procedural issues and questions which must be addressed to determine the feasibility, structure and content of the MAC protocol. Four principal needs were identified and presented in the meeting for further study: 1) to evaluate the specific economic impact a protocol may have, by region and by category of equipment (i.e. mining, agricultural or construction). To the extent possible, this analysis could also examine the economic impact by items of equipment (i.e. tractors, harvesters, irrigation, etc.); 2) to examine different approaches to determine the categories and/or items of equipment to be included within the scope of the protocol; 3) to identify the legal issues which must be addressed in tailoring the Convention for use with MAC equipment; and 4) to provide initial recommendations for continued consultations, to be conducted at further meetings in January and March 2014.

II. Opening

4. The meeting was opened by Prof. Don Wallace, President of the International Law Institute, who highlighted the success of the Cape Town Convention and emphasized the benefits that can accrue from adapting this instrument to new types of equipment. Prof. Wallace welcomed the participants and thanked the Secretariat for continued collaboration with the International Law Institute (for a full list of participants, please see Annex 1).
5. John Wilson of the UNIDROIT Secretariat then walked the participants through the order of business and the objectives of the meeting (see Annex 2). He reiterated that this initial dialogue would not seek to make a proposal for the scope of the protocol or attempt to provide answers or legal analysis. He explained it would merely identify questions that need to be asked and addressed and to begin thinking of the process by which those questions will be answered.

III. Economic Issues

6. Mr Fleisig, of the Center for the Economic Analysis of Law provided a summary of the study prepared by CEAL regarding the potential economic impact of a MAC protocol. Participants thanked Mr Fleisig and agreed that the general economic benefits have been well recognized in the document, but mentioned that it may be helpful to conduct separate economic analysis for each of the three categories of equipment. It was also mentioned that studies of the various items (or types) of equipment could also provide greater understanding of the specific and sectoral impact of a MAC protocol.

7. Participants from industry associations and manufacturers agreed to assist in determining the economic benefits by category, class and item of equipment. Although it was mentioned that it may be difficult in the abstract to measure the impact of reducing or eliminating obstacles to the importation, sale and financing of equipment under a revised legal framework, participants mentioned that individual sales figures for the various regions in which manufacturers and distributors operate should be available, which would complement the CEAL study with additional sectoral and regional information. Together with the CEAL study, this information could help determine the sectoral and regional impact of the proposed instrument in greater detail.

IV. Scope

8. Participants then turned their attention to the scope of the protocol; more specifically, to determine the possible approaches by which to establish the categories (and/or items) of equipment that could be included in the protocol. Three initial approaches were identified: 1) a value mobility approach; 2) a linear economic/legal analysis approach; and 3) an item-by-item examination of the harmonized system of tariffs.

9. **Value/mobility axis graph:** The first approach discussed during the meeting compared two criterion: economic value (X axis) with mobility (Y axis) of mining, agricultural and construction equipment to be potentially included in the scope of the proposed protocol (as represented in the figure 1 below):

![Figure 1: Value/mobility axis graph](image)

10. Participants agreed that this approach could provide guidance in determining the scope of the protocol, if the graphs were separated by category of equipment and provided agreed-upon cut-off thresholds with regard to both value and mobility (represented by the center cross-lines in the figure above). Items of equipment above these thresholds would be considered for inclusion in the proposed protocol. Those below would be excluded.

11. Some limitations to this approach were pointed out by participants, namely that reducing the analysis to a simple value and mobility determination would ignore important legal issues that must be
accounted for as well, such as whether the equipment is specifically identifiable and/or internationally registrable. Participants also noted that putting an explicit value threshold in the protocol would likely be unworkable, as it would require valuation of individual pieces of equipment.

12. Economic/legal line graph: A second approach discussed during the meeting recommended separate analysis of economic criteria (i.e. value) and legal criteria (i.e. mobility, identifiability, etc). Such method, it was mentioned, would allow for a more thorough review of the category and/or items of equipment to be included in the scope of the protocol:

![Figure 2: Economic/legal line graph]

13. In addition, participants mentioned that this type of review could also serve to measure the interdependency of individual criteria at the various levels of the scoping exercise, commenting that moving forward from examination of one criterion to the next criterion, could fulfill the required minimums mentioned in the previous approach. Together in succession, the criteria would allow participants to determine whether a category or item of collateral should be included (or not included) in the scope. This analysis may be represented in different ways, with figure 3 (below) presented at the meeting as one possible example.

14. Using this approach, the scoping exercise would initially determine whether the category (or item) of equipment would be considered “mobile,” under the Convention’s definition of “international interest.” If yes, then the analysis for inclusion of that category or item of equipment, would move to the next level of analysis. If not, that category or item would be excluded. The second level of analysis would then examine whether the category (or item) of equipment is above a minimum cut-off value, agreed to during this mapping process. If yes, the analysis would move on to the next level of analysis. If not, that category (or item) of equipment would be excluded from the scope. The third level of analysis would examine whether the category (or item) of equipment is specifically identifiable, by make, model and serial number or other agreed upon criteria. Categories and items that cannot be identified in that manner would be excluded; those that can be described in such fashion, and which are also subject to a registration at the international level under the Convention, would be included within the scope of proposed protocol.

15. Harmonized System of Tariffs: A third approach discussed during the meeting was to examine the possible use of the World Customs Organization’s Harmonized Commodity Description and Coding System. Based on a Convention with 148 contracting States, the Harmonized System provides an international nomenclature and number for the classification of products (see, http://www.wcoomd.org/en/topics/nomenclature/instrument-and-tools.aspx).

16. Although the objective of the Harmonized System is to classify goods for customs purposes, participants at the meeting mentioned it could help provide an existing and internationally recognized
standard by which categories of equipment could be identified. It was also mentioned that, in some cases, the Harmonized System provides specific description of individual items of equipment.

17. Once all applicable categories or goods from the Harmonized System are identified, they could be examined under the criteria of mobility, value, identifiability, and registrability to provide a detailed picture of what should be included within the scope of a MAC protocol. An added advantage, it was observed, would be that the agreed to nomenclature and numbering could also provide an initial description criterion for international registration purposes.

18. It was agreed that each of the three approaches has advantages and disadvantages. Participants agreed to continue examining the issue to provide a more detailed preference and rationale for the method by which to undertake the scoping exercise during the meeting scheduled for January 2014.

V. Legal Issues

19. A number of participants mentioned that further consideration must be given to the severability of the three types of equipment (mining, agricultural and construction), possibly into three potentially separate protocols. Other participants mentioned that it may be advisable to begin with only one category of equipment. Taken as a whole, however, it was mentioned that the broader the scope of protocol, the greater the economic benefit would be. In this respect, there was significant discussion of the manner in which to establish as broad a scope as possible within the operation of the Convention. This could be done, it was mentioned, if the requirement of specific identification of the collateral was eliminated. Participants observed that this step would increase the potential economic impact of the protocol, but would require the establishment of a debtor-based (rather than asset-based) registration system. It was also observed that such a move would pose additional challenges to the adaptability of the Cape Town Convention system.

20. In this context, there was also some discussion as to the manner in which a proposed protocol would coordinate with national law and national registration systems. It was mentioned that this was principally a question of priority -- with national registries typically creating interests (in general items of collateral), which are subordinate to international registries (for specialized items of collateral). Three questions were raised on this issue. The first was regarding priorities, and whether the traditional notion of special priority for specialized collateral would be preserved if international registries were to cover both general and specialized items of collateral. The second question concerned the manner in which to cross-reference between a debtor-based and an asset-based registry. The third was whether searching parties would be required to consult both asset-based and debtor-based registry systems, in both the national and international framework.

21. In this respect, several participants mentioned that the limited application of Article 51 of the Convention should be preserved and used to determine whether an additional protocol could or should be prepared, in particular, on agricultural equipment. It was stated that, under Article 51, equipment should be high-value equipment, cross national borders in its normal operation and be specifically identifiable. It was also observed that, if equipment was of low value, did not cross national borders or could not be specifically identified, it should not be taken out of national secured transactions law and the existing general security rights registry, or the secured transactions and registry systems currently being developed and/or implemented by States on the basis of the recommendations based on the UNCITRAL Legislative Guide on Secured Transactions and draft Model Law on secured transactions, as well as the OAS Model Inter-American Law on Secured Transactions and Model Registry Regulation.

22. With respect to the identification of equipment, representatives from industry mentioned that many types of machinery have unique serial numbers (in some cases, 17 digits). In some cases, it was mentioned, manufacturers use a consistent numbering scheme for the first three or four digits to indicate the category of equipment. It was also agreed that the National Association of Manufacturers in the United States could circulate a list of questions to its members to gain greater understanding with regard to the manner in which equipment can be described for registration purposes. Participants underscored the need to make use of existing industry practices, in terms of identifying equipment.
23. Several participants also mentioned that a significant benefit the Cape Town Convention system provides to contracting States, is access to an international registration system – a system which, was said, could easily replace a local registry. On this matter, it was also stated that many national registration systems are plagued with inefficiencies and often serve as revenue collection points for State governments – problems which some participants mentioned could be avoided by creating international registries.

24. It was mentioned that, if the traditional registry under the Convention were expanded under the protocol to include a debtor-name option, a State could choose to use the international registry as its national registry. This would have the added benefit, it was said, that local governments would not have to build a registry from scratch. It was also stated that using an international registry for general items of collateral could enhance the volume of registrations, thus increasing the economic viability of the international registry. Everyone was reminded, however, of the need to make legal requirements clear at the local and international level, and answer additional questions, including whether a creditor must register twice and, in particular, whether a searching or third party would be subject to priorities set by national and international registrations systems.

25. There was also brief mention of the matter of mixed collateral: pools of assets that could include equipment subject to national law (thus national registration), and assets subject to the Convention (thus international registration). It was agreed that discussion of this issue would continue at the following meeting, along with other issues for follow-up discussion.

26. Other participants mentioned the need to explore whether service exceptions for the enforcement of security interests would be needed in certain farming situations and whether such exceptions would make a protocol unworkable; the need to include provisions in the protocol for the separate financing and taking of security in engines attached to MAC equipment; and the need to examine the extent to which registrars in various countries may resist the creation of a protocol that covers MAC equipment.

VI. Issues for discussion at follow-up meeting(s)

27. The following issues were identified for continued discussion at the meeting on 22 January 2014:

- consideration of possible analysis to determine economic benefits of the protocol, by category (and possibly by item) of equipment, as well as by geographic region;
- consideration of the possible approaches by which to determine the scope of the protocol;
- need for industry participants to provide guidance on the categories (and/or items) of equipment to which they would like the protocol to cover;
- consideration of the separation of the categories of equipment into more than one protocol;
- consideration of the description for categories and items of mining, agricultural and mining equipment;
- consideration of the specific legal adaptability of the Convention to mining, agricultural and construction equipment;
- need to analyze the manner in which different jurisdictions currently handle creation, notice, priority and enforcement of security interests in MAC equipment and how these laws and practices must be accounted for in a protocol.

28. An additional meeting is currently in the initial planning stages to coincide with the World Farmers Organization General Assembly, to take place in Buenos Aires, Argentina (25-29 March 2014). Such meeting would provide opportunity to take advantage of the gathering of important regional and international stakeholders on MAC equipment. Ideally, participants in the present meeting can help identify their affiliates, counterparties and competitors in the region to invite them to provide additional reflections the potential scope of MAC protocol and on the legal and economic impact it may have on the financing of equipment in the region.
LIST OF PARTICIPANTS

Lauren AIREY
National Association of Manufacturers
LAirey@nam.org

Spyridon BAZINAS
UN Commission on International Trade Law
Spiros.Bazinas@uncitral.org

Daryl BOUKAMP
Vermeer Corporation
dbouwkamp@vermeer.com

Eugenio BRIALES
Organization of American States
ebriales@oas.org

Amy DIGGS
US Department of State
DiggsAK@state.gov

Bob DOWNEY
Caterpillar Financial Services Corporation
bob.downey@cat.com

Marek DUBOVEC
National Law Center for Inter-American Free Trade
mdubovec@natlaw.com

Philip DURHAM
Holland & Knight
philip.durham@hklaw.com

Andrew FISHBURN
Equipment Leasing & Finance Association
afishburn@elfaonline.org

Heywood FLEISIG
Center for the Economic Analysis of Law
hfleisig@ceal.org

Henry GABRIEL
Elon University School of Law
hgabriel@elon.edu

Alejandro GARRO
Columbia University School of Law
garro@law.columbia.edu

Steven HARRIS
Chicago-Kent College of Law
sharris@kentlaw.edu

Stacey JOHNSON
John Deere Financial
JohnsonStaceyL@JohnDeere.com

Philip de LEON
AGCO Corporation
philip.deleon@AGCOcorp.com
At its 92nd session (Rome, 8-10 May 2013), the Governing Council of UNIDROIT agreed to proceed with preliminary work on a potential Fourth Protocol on agricultural, mining and construction equipment, to the Cape Town Convention on International Interests on Mobile Equipment. The Council assigned medium priority to high priority, depending on funds available.

Hosted by the International Law Institute in Washington D.C., the State Department in cooperation with the UNIDROIT Secretariat is organizing an initial meeting with experts and stakeholders to provide an overview of the structure and functioning of the Cape Town Convention system and to examine its adaptability to agricultural, mining and construction (“MAC”) equipment.

After a brief introduction to the Cape Town Convention system, the meeting will discuss the potential economic impact of a MAC protocol, propose guidelines for setting the initial scope of this work, propose a methodology for determining the type (or types) of MAC equipment to be covered by the protocol, and identify the legal issues and challenges to be addressed in the drafting of the instrument. The meeting will conclude with initial recommendations for continued consultations, to be conducted at further meetings in January and March of 2014.
First Meeting Issues Dialogue - Report

International Interests in Mobile Equipment:
Possible preparation of other Protocols to the Cape Town Convention
Agricultural, Mining and Construction Equipment

International Law Institute
Washington, D.C.
9:30am–12:30pm – 19 November 2013

-- Order of business --

I. Opening of meeting and introductory remarks

II. Overview of the Cape Town Convention system

III. Economic Analysis

• Economic benefits of a MAC protocol: impact on industry sectors and local economies

IV. Potential Scope of the Protocol

• Types of equipment best suited to the Convention’s characteristics
• Severability of MAC equipment into different protocols

V. Legal Analysis

• Cape Town Convention format and operation
• Identification of equipment: asset-based vs. debtor-based registration
• National Law: Coordination between liens under national law with security interests under the Convention
• Registration: coordination between national registration system and offices with international Convention-based registry
• Merged collateral: coordination between pools of collateral which include assets subject to national law and assets subject to the Convention

VI. Initial comments and recommendations on scope and adaptation for the MAC protocol

VII. Issues for discussion at follow-up meeting(s): January 2014

VIII. Closing of meeting
ANNEX II

International Interests in Mobile Equipment
Preparation of a Protocol on Agricultural, Mining and Construction Equipment

Issues Dialogue, Second Meeting
International Law Institute
(Washington, D.C., 22 January 2014)

REPORT

Background

1. The Governing Council of UNIDROIT, at its 92nd session held 8-10 May 2013, requested the Secretariat to proceed with an initial analysis for potential work on a Fourth Protocol to the Cape Town Convention on International Interests on Mobile Equipment on agricultural, mining and construction equipment. To assist in bringing the discussion forward, the State Department of the United States of American, with the assistance of UNIDROIT, organized two meetings (issues-dialogues) hosted by the International Law Institute in Washington D.C., the objective of which was to receive feedback and recommendations from experts, stakeholders and international organizations regarding the adaptability of the Cape Town Convention system to agricultural, mining and construction (“MAC”) equipment.

2. The first meeting was held on 19 November 2013 to identify the legal, economic and procedural issues and questions which must be addressed to determine the feasibility of the MAC protocol (see the Report on the meeting). The second meeting was held on 22 January 2014 to continue examination of the potential economic benefits of an additional protocol, the possible approaches for determining the scope of the protocol, and to consider whether the current protocols to the Cape Town Convention provide viable models to follow for a MAC Protocol.

Opening of meeting and introductory remarks

3. The second meeting was opened by the President of the International Law Institute, Mr Don Wallace, and the Secretary-General of UNIDROIT, Mr Angelo Estrella-Faria. After welcoming remarks, Mr Faria mentioned that the main purpose of the meeting was to continue with the scope analysis started in the first meeting and to decide whether additional research is required to determine the most suitable methodology for setting the scope of a potential protocol.

4. The Secretary-General also provided background on the origin and evolution of the project for a potential fourth protocol, including mandates stemming from the 92nd session of the Governing Council. It was mentioned that presenting a feasible and realistic scope, agreed to during the two issues-dialogue meetings, could assist the Council to determine the need and timing for a study group to prepare a first draft of the Protocol, possibly at its upcoming 93rd session in May 2014. Given the level of expertise and recent experience with drafting Protocols to the Cape Town Convention, as well as the lack of industry opposition to the Protocol, it was
mentioned the Council could remit a Study Group’s first draft to a Committee of Governmental Experts sometime after its 94th session in 2015.

**Economic Analysis**

5. As agreed to during the first meeting, a follow-up discussion continued regarding the potential economic benefits of a MAC protocol by category (and item) of equipment, as well as the benefits it can provide by geographic region. Participants in the first meeting also committed to provide statistical figures of potential increases in financed sales using MAC equipment as collateral. Mr Heywood Fleisig, President of the Center for the Economic Analysis of Law, supplemented figures presented during the initial meeting on the expected utilization of the Protocol and the possible distribution of the benefits by type of equipment. As regards States that would benefit, he mentioned that the greatest beneficiaries would be emerging markets, but would also include several advanced economies in need of reforming their secured transactions laws (of which he mentioned Spain, Italy, Greece, Portugal, among others). Although he mentioned that figures are incomplete at this early stage — for which additional clarification and information is required by equipment manufacturers — the Center for Economic Analysis of Law expects up to a US$60 billion increase in demand for MAC equipment worldwide. Of the current US$100 billion in MAC equipment exports, Mr Fleisig mentioned, approximately 30 percent is mining and 20 percent is tractors. He requested the assistance of participating manufacturers to help determine the additional types of equipment exports, as well as refinements in the potential increases under a MAC Protocol.

6. A question was raised with regard to the application of the OECD discount for financing of MAC equipment and the role it could potentially play in increasing access and demand for exports. Mr Fleisig explained that, although the OECD discount is important to aircraft financing, MAC equipment is more market driven. He explained that dealers in developing countries are more concerned with whether their financing agencies can offer credit terms to local buyers, than whether they qualify for export credits. Consequently, he mentioned that the OECD discount would play a smaller role with the proposed protocol. Additional factors likely to play a role in improving equipment financing sales and exports, with participants highlighting the importance of an effective repossession system, included the need for self-help or extrajudicial repossession.

**Potential Scope of the Protocol**

7. The meeting continued with a discussion of the possible methods for determining the scope of the Protocol. The methods considered during the first meeting included: a high-value cut-off approach; a value/mobility matrix approach; and an economic/legal analysis approach.

8. A cross-cutting issue related to scope, discussed by participants, was the need to examine the internationality (or cross-border mobility) of collateral. That is, to determine whether equipment is purely local or international in nature when determining whether such equipment should be included in the Protocol. Several examples of internationality were given, including security interests in cranes used for construction in one country, later transported for construction projects in another country. Another was agricultural equipment used in Mexico part of the year and transported to the United States later in the year, to take advantage of different harvest seasons.

9. Participants agreed that using the World Customs Organization’s Harmonized Commodity Description and Coding System presents the greatest potential for delineating the scope of the fourth Protocol. Based on a Convention with almost universal accession, the Harmonized System provides a number for the classification of all equipment, including the equipment that could
eventually be selected for coverage under the Protocol. On the issue, Mr. Paderic Sweeney of the U.S. Department of Commerce made a detailed presentation on how the harmonized system can be used as the foundation for identifying products suitable for inclusion. Mr. Sweeney also presented a paper (attached hereto as Annex 3) which describes the harmonized system and demonstrates how it can be used to establish representative internationally-valid values for six product categories relevant to the proposed Protocol. In his presentation, Mr. Sweeney also provided a specific case study, using combine harvesters, on the manner in which the harmonized system can be used as the basis for the Protocol. This case study is further detailed in the attached paper, which describes combine harvesters and compares manufacturers’ suggested list prices currently available in the United States with five leading global manufacturers.

10. Participants also discussed the importance of a number of countries ratifying the Protocol and, as an example of the need to coordinate the instrument with national law, examined the manner in which the Protocol would work under Article 9 of the Uniform Commercial Code. In general, participants agreed that the Protocol should not impose additional registration or other requirements beyond those of asset-based financing in general. It was also mentioned that special attention would have to be given to mixed pools of assets — i.e., pools of assets containing both security interests requiring registration under national law and those requiring registration under the international Protocol.

11. Regarding the issue of severability — whether mining equipment, agricultural equipment, and construction equipment should be separated into different protocols — participants agreed with the inclination expressed in the first meeting to keep all three together. However, it was mentioned that mining equipment is typically subject to more licensing and concession arrangements than agricultural or construction equipment, which could require further analysis by a Study Group, especially with regard to public service exceptions and other issues in enforcement. Participants also mentioned that mining equipment is typically less movable than others, with some types of equipment being incorporated into the mine itself. With regard to agricultural equipment, other participants mentioned the example of irrigation equipment, which would bring up the same issues. Participants agreed that the Protocol would have to address circumstances in which equipment that is mobile originally, is later affixed to land, but did not feel the issue would require separating the types of equipment into different protocols.

Drafting Models

12. Participants then turned their attention to the table provided by the Secretariat comparing the substantive provisions of the three current Protocols to the Cape Town Convention. The purpose of the table was to identify the provisions which remain constant in all three Protocols, as well as the provisions which would require specific tailoring for MAC equipment.

13. The Secretary-General mentioned that it would be difficult to have this discussion in the abstract (i.e. without a draft protocol to examine), but invited participants to consider the text of the Luxembourg Protocol on matters specific to railway rolling stock, which he explained is the most similar type of equipment to that considered for the MAC Protocol. He did mention, however, that there will be issues with regard to MAC equipment that are new, and would require new rules added to the Protocol. One new issue mentioned by some participants was security interests in land. A real estate mortgage in some countries, it was mentioned, can attach by operation of law to movable property located on the land, independently of whether or not the goods are affixed to the land. This was not an issue covered the previous Protocols to the Convention. Other participants mentioned that the Protocol would have to address the issue of buyers in the ordinary course and other good faith purchasers, and the issue of assets held in inventory.
LIST OF PARTICIPANTS

Eugenio BRIALES
Organization of American States
ebriales@oas.org

Bob DOWNEY
Caterpillar Financial Services Corporation
bob.downey@cat.com

Marek DUBOVEC
National Law Center for Inter-American Free Trade
mdubovec@natlaw.com

Philip DURHAM
Holland & Knight
philip.durham@hklaw.com

Jose Angelo ESTRELLA FARIA
UNIDROIT
ja.estrella-faria@unidroit.org

Heywood FLEISIG
Center for the Economic Analysis of Law
hfleisig@ceal.org

Steve HARRIS
ITT Chicago-Kent College of Law
sharris@kentlaw.iit.edu

Henry GABRIEL
Elon University School of Law
hgabriel@elon.edu

Charles MOONEY
University of Pennsylvania Law School
cmooney@law.upenn.edu

Anku NATH (John Deere)
NathAnku@JohnDeere.com

Alexander RUSS (AEM)
aruss@aem.org

Tim SCHNABEL
US Department of State
SchnabelTR@state.gov

Padraic SWEENEY
US Department of Commerce
Padraic.Sweeney@trade.gov
Don WALLACE
International Law Institute
wallace@ili.org

John WILSON
IFC
jwilson4@ifc.org

Peter WINSHIP
Southern Methodist University School of Law
pwinship@mail.smu.edu
ANNEX 2

International Interests in Mobile Equipment
Preparation of a Protocol on Agricultural, Mining and Construction Equipment

ISSUES DIALOGUE, SECOND MEETING
International Law Institute
(Washington, D.C. 22 January 2014)

Order of Business

At its 92nd session (Rome, 8-10 May 2013), the Governing Council of UNIDROIT agreed to proceed with preliminary work on a potential Fourth Protocol on agricultural, mining and construction equipment, to the Cape Town Convention on International Interests in Mobile Equipment.

In collaboration with the UNIDROIT Secretariat, the International Law Institute in Washington D.C. is hosting two meetings with experts and stakeholders to provide an overview of the structure and functioning of the Cape Town Convention system and to examine its adaptability to agricultural, mining and construction (“MAC”) equipment.

The first meeting, held on 19 November 2013, provided a brief introduction to the Cape Town Convention system, discussed the economic impact of a MAC protocol, discussed methods for establishing the initial scope of this work, and identified preliminary legal issues and challenges to be addressed in the drafting of the instrument (see the Report on the meeting).

The second meeting, to be held on 22 January 2014, will continue to examine the potential economic benefits of a MAC protocol, to examine the possible approaches for determining the scope of the protocol, and to begin examining the current protocols to the Cape Town Convention, as models for drafting a MAC Protocol. The meeting set issues for follow-up discussion with agricultural stakeholders at possible meeting in March 2014.
**International Interests in Mobile Equipment:**
Possible preparation of other Protocols to the Cape Town Convention
Agricultural, Mining and Construction Equipment

*International Law Instituthe*
*Washington, D.C.*
*9:30am – 4:00pm*
*22 January 2014*

---

**Order of business**

---

**MORNING SESSION (9:30am-12:00pm)**

I. Opening of meeting and introductory remarks

II. Economic Analysis

- Economic benefits of MAC protocol by category (and item) of equipment
- Economic benefits of MAC protocol by geographic region

III. Potential Scope of the Protocol

- Possible approaches to determine the scope:
  - High-value cut-off approach
  - Value/mobility matrix approach
  - Economic/legal analysis approach
  - Harmonized system of tariffs approach
- Initial issues for an industry questionnaire to determine the categories (and/or items) of equipment to be included in a MAC protocol
- Severability of MAC equipment into different protocols

**AFTERNOON SESSION (1:00-4:00pm)**

IV. Drafting of the Protocol

- Initial examination of the Cape Town Convention’s current protocols as models for drafting a MAC Protocol
  - Identification of the provisions which remain constant in a MAC protocol
  - Identification of the provisions which would require specific tailoring for MAC equipment
- Methods for the identification of MAC collateral
- Mixed collateral: coordination between pools of collateral which include assets subject to national law and assets subject to the Convention

V. Issues for follow-up with agricultural stakeholders at possible meeting in March 2014

VI. Closing of meeting
BACKGROUND PAPER:

USING THE INTERNATIONAL HARMONIZED SYSTEM TO
IDENTIFY AGRICULTURAL, CONSTRUCTION, AND MINING MACHINERY

INTRODUCTION

This paper has been prepared to demonstrate how the international Harmonized System (HS) for classifying internationally traded commodities can be used to provide an empirical foundation for identifying products suitable for inclusion in the proposed 4th Protocol to the Cape Town Convention on International Interests in Mobile Equipment. The paper consists of two sections. The first describes in accessible terms the Harmonized System and demonstrates how it can be used to establish representative internationally-valid values for six product categories relevant to the proposed 4th Protocol. While the question of unit pricing is addressed in this section from the U.S. exporter perspective, its methodology could easily be applied to trade statistics for other countries or products.

The second section examines one product category—combine harvesters—in greater depth. It describes combine harvesters, including their character as highly-mobile, internationally-traded equipment. This section then compares manufacturers’ suggested list prices for a specific class of combine harvesters currently available in the United States from five leading global manufacturers.

1. USING EXPORT DATA TO ESTIMATE PRODUCT PRICES

Background on the International Harmonized System and U.S. Goods Export Statistics:

The Harmonized System (HS) is a global system developed by the World Customs Organization to achieve uniform classification of commodities or merchandise in international trade. Covering approximately 5,000 commodity groups, this classification system is standardized between countries at a basic six-digit level of detail. Each country may designate additional subdivisions, which result in codes of up to ten (10) digits. Amended every five or six years, the Harmonized System is the standard classification used in more than 200 countries and territories worldwide for trade negotiations, rules of origin, customs tariffs, and the collection of international trade statistics. It is considered a universal language or code for goods.

In the United States, official trade statistics are estimated and released by the U.S. Department of Commerce utilizing information collected by Customs and Border Patrol. These statistics, which are categorized according to the Harmonized System, reflect both government and non-government shipments of merchandise between foreign countries and the U.S. Customs Territory, U.S. Foreign Trade Zones, and the U.S. Virgin Islands. Using exporters’ Electronic Export Information (EEI) as submitted to the U.S. Automated Export System (AES), the Census Bureau tabulates merchandise or goods export statistics.

Methodology and Results:

The tables on the following page calculate unit prices for specific types of machinery, as classified by U.S. 10-digit HS codes. Using this classification allows for a high level of detail as well as consistency. Census Bureau data provide the overall value of U.S. exports to other nations as well as the number of units exported. Dividing the overall export value by the quantity, the result is a unit value per product code. (Table 1. World Export Values and Unit Values)
The values shown in *Table 1* are largely consistent with private industry estimates. It must be noted, however, that despite the high level of detail, use of a standard classification will still result in products of varying models and quality being grouped together. In order to test whether these prices are consistent and robust across countries, unit values by country were calculated using the same formula with summary statistics from these findings presented in *Table 2. Country-Specific Unit Value Summary*.

While there is some variation among country-level unit values, the top-level unit values presented in *Table 1* are mostly similar to the median of country-level unit values. Statistically, median calculations are more stable and less likely to be affected by extreme values or outliers in the data, so a comparison to this particular calculation is useful in determining that the overall unit price calculated using world export values and quantities are largely robust. The final column in *Table 2* lists the standard deviation for each type of machinery, which estimates the general variation from the average or mean exists in the country-level data.

Overall, using trade statistics and international classification standards result in a useful and consistent baseline for estimating product prices. While this analysis looks at the issue from the U.S. exporter perspective, it could easily be replicated using trade statistics for other countries or products.

### Table 1. World Exports and Unit Values

<table>
<thead>
<tr>
<th>HS Code and Description</th>
<th>2012 Export Value</th>
<th>2012 Export Quantity</th>
<th>2012 Unit Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>8429200000—Graders and Levelers, Self-Propelled</td>
<td>$964,652,617</td>
<td>6,782</td>
<td>$142,237</td>
</tr>
<tr>
<td>8429300040—Scrapers, Self-Propelled, Exceeding 13.7 M3, New</td>
<td>$56,986,761</td>
<td>103</td>
<td>$553,270</td>
</tr>
<tr>
<td>8429511055—Integral Tractor Shovel Loaders, Rear Engine Mounted, 4 Wheel Drive with a Bucket Capacity of 11.4 M3 and Over</td>
<td>$589,673,471</td>
<td>765</td>
<td>$770,815</td>
</tr>
<tr>
<td>8429591030—Backhoes, New, Except 360 Degree Revolving Superstructure</td>
<td>$342,072,296</td>
<td>6,275</td>
<td>$54,514</td>
</tr>
<tr>
<td>8433510010—Combine Harvester-threshers, Self-Propelled</td>
<td>$1,684,735,559</td>
<td>9,410</td>
<td>$179,037</td>
</tr>
<tr>
<td>8701901065—Tractors for Agricultural Use, New, Power Take-Off (PTO) Type, with a PTO of 134.3 Kw or More</td>
<td>$1,732,581,567</td>
<td>12,685</td>
<td>$136,585</td>
</tr>
</tbody>
</table>

### Table 2. Country-Specific Unit Value Summary

<table>
<thead>
<tr>
<th>HS Code and Description</th>
<th>Minimum Unit Value</th>
<th>Maximum Unit Value</th>
<th>Median Unit Value</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>8429200000—Graders and Levelers, Self-Propelled</td>
<td>$21,125</td>
<td>$350,500</td>
<td>$106,927</td>
<td>$62,376</td>
</tr>
<tr>
<td>8429300040—Scrapers, Self-Propelled, Exceeding 13.7 M3, New</td>
<td>$76,500</td>
<td>$647,413</td>
<td>$542,772</td>
<td>$172,653</td>
</tr>
<tr>
<td>8429511055—Integral Tractor Shovel Loaders, Rear Engine Mounted, 4 Wheel Drive with a Bucket Capacity of 11.4 M3 and Over</td>
<td>$48,500</td>
<td>$111,102,922</td>
<td>$1,394,137</td>
<td>$1,916,817</td>
</tr>
<tr>
<td>8429591030—Backhoes, New, Except 360 Degree Revolving Superstructure</td>
<td>$23,000</td>
<td>$82,500</td>
<td>$54,048</td>
<td>$12,401</td>
</tr>
<tr>
<td>8433510010—Combine Harvester-threshers, Self-Propelled</td>
<td>$7,100</td>
<td>$304,791</td>
<td>$156,000</td>
<td>$86,149</td>
</tr>
<tr>
<td>8701901065—Tractors for Agricultural Use, New, Power Take-Off (PTO) Type, with a PTO of 134.3 Kw or More</td>
<td>$74,133</td>
<td>$228,404</td>
<td>$134,324</td>
<td>$24,738</td>
</tr>
</tbody>
</table>

2. **EXAMPLE: COMBINE HARVESTERS**

What is a Combine Harvester?
A combine harvester is a widely-used type of agricultural equipment employed in the final stages of producing small grains (for example, wheat or rice), coarse grains (corn, soy beans, sorghum), and other crops (rapeseed/canola, flax/linseed, sunflower). The modern combine harvester, as the name suggests, combines three related functions into one machine:
• **Reaping** – Cutting and gathering into the harvester the kernel- or seed-bearing portion of the crop being harvested.

• **Threshing** – Releasing the kernel or seed from the surrounding plant material or chaff.

• **Winnowing** – Separating the kernel or seed from the chaff and retaining the former for transfer to storage or processing.

The chaff is discharged back onto the field during harvesting operations.

These functions are performed while the harvester is underway in the field, powered by the same engine that propels the machine. When the on-board grain-storage bin (or “clean grain tank”) is full, modern combine harvesters can transfer harvested grain to a separate wagon while underway in the field. Harvesting, threshing, and winnowing can continue during this transfer.

Modern combine harvesters are operated by a single driver seated in an enclosed cab, although many models also include an observer seat next to the operator position. Combine harvesters used in capital-intensive, high-technology commercial agriculture are commonly equipped with an array of satellite-navigation, remote-sensing, wireless-telecommunications, and other technologies to optimize the machines’ performance and relate yield at the harvest to the various inputs (seed, water, agricultural chemicals) and techniques used throughout the growing season.

Many other types of harvesting equipment—for forage crops, cotton, sugar cane, coffee, fruits and vegetables, grapes, olives, tree nuts, etc.—are manufactured by many companies around the world. Although they are also relevant to the proposed 4th Protocol to the Cape Town Convention, these products are not to be confused with combine harvesters. Major manufacturers such as John Deere, CNH Industrial, the AGCO Corporation, the Claas Group, and Rostselmash also manufacture forage harvesters; some of these companies also produce cotton, sugar cane, and coffee harvesters. Numerous smaller companies supply farmers in many countries with highly specialized equipment for fruits, vegetables, grapes, olives, tree nuts, and other crops.

**Origins**

Combine harvesters were first developed in the nineteenth century in the United States and Australia. Early versions were drawn by teams of mules or horses. Although they were far more efficient than traditional harvesting methods, these early machines were still quite labor intensive compared to modern equipment. Steam-powered harvesters soon followed. As agricultural tractors became widely available in the twentieth century, towed or “pull-type” harvesters were developed for use with them.

In the twenty-first century, virtually all new combine harvesters are self-propelled.

**Today**

A number of companies manufacture combine harvesters in 2014. The leading producers are based in the United States, Italy, Germany, and Russia, although most of them have manufacturing operations in other countries. Competition among these manufacturers is intense.

The leading global manufacturers of combine harvesters produce numerous models under a variety of brands (see “Top Global Manufacturers,” below). Harvesting capacity, engine power, and special features vary widely. The size of the fields being harvested, the road network in rural areas, and the level of agricultural mechanization, all influence the selection of models on sale in a specific market.
There is an extensive international trade in combine harvesters. Combine harvesters are also highly mobile. All are capable of traveling over the road for short distances and can be—and are—transported long distances by truck or rail.

Headers
The header is an essential component of any combine harvester. The harvesting function is performed by the header. There are various types of headers; some major types include headers for small grains, corn, swaths or windrows, and headers for use on uneven terrain. Sizes also vary; for example, corn headers used in North America are commonly designed to harvest 12 to 18 rows of corn at a time. In China, three-to-six-row corn headers are far more common. Headers are detachable and more than one type can be used on the same combine, with appropriate adjustments to the harvester’s grain-processing systems. The harvesting capacity of a header must be matched to the threshing and winnowing capacity of the harvester to which it is attached.

Headers may be sold with the combine or separately. Most major combine manufacturers also produce headers. A number of smaller, independent firms also produce headers, often for specialized applications or conditions.

Top Global Manufacturers
- AGCO Corporation (United States)
- CNH Industrial (Italy)
- Claas Group (Germany)
- Deere & Company (United States)
- Rostselmash (Russia)

North American Pricing
The Association of Equipment Manufacturers (AEM) maintains a classification system for combine harvesters. This system is based on engine power and expressed in either horse power or kilowatts. The chart below identifies the leading global manufacturers’ 2014 North American prices for either new harvesters (the manufacturer’s suggested list price) or late-model used harvesters. When available, the list price is derived from the manufacturer’s U.S. or North America website. When a list price is not available, a range of prices for comparable models of used machinery is provided based on listing from specialized used equipment websites.

Combine harvesters rated as Class VIII are those in the highest AEM classification in which all the major global manufacturers are represented in North America. The engine power range for Class VIII is 375hp/280kW to 410hp/300kW.

<table>
<thead>
<tr>
<th>Manufacturer/Brand*</th>
<th>Model</th>
<th>Engine -- hp/kW**</th>
<th>Grain Tank Capacity -- Bushels</th>
<th>Class</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGCO/Challenger</td>
<td>540C (2014 Model Year)</td>
<td>460/343</td>
<td>350</td>
<td>VIII+</td>
<td>$393,591.00</td>
</tr>
<tr>
<td>AGCO/Massey-Ferguson</td>
<td>9560 (2014 Model Year)</td>
<td>460/343</td>
<td>350</td>
<td>VIII+</td>
<td>$412,644.00</td>
</tr>
<tr>
<td>CNH-Industrial/Case IH</td>
<td>AF 8230</td>
<td>450/336</td>
<td>350</td>
<td>VIII</td>
<td>$430,335.00</td>
</tr>
<tr>
<td>CNH-Industrial/New Holland</td>
<td>CR 8090 (2013 Model Year-Used)</td>
<td>449/330</td>
<td>350</td>
<td>VIII</td>
<td>$261,000.00 – $305,000.00 (range)</td>
</tr>
<tr>
<td>Claas/Lexion</td>
<td>750 (2012 Model Year-Used)</td>
<td>425</td>
<td>360</td>
<td>VIII</td>
<td>$260,000.00 – $330,000.00 (range)</td>
</tr>
<tr>
<td>John Deere/John Deere</td>
<td>S680 (2014 Model Year)</td>
<td>473/353</td>
<td>480</td>
<td>VIII</td>
<td>$436,319.00</td>
</tr>
<tr>
<td>Rostselmash/Versatile</td>
<td>RT490</td>
<td></td>
<td></td>
<td>VIII</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**SAE rated horse-power.**

This paper was prepared by Natalie Soroka and Padraic Sweeney of the International Trade Administration of the U.S. Department of Commerce for the purpose of advancing the work of the UNIDROIT Secretariat, member states, and other parties with an interest in creation of a 4th Protocol to the Cape Town Convention. For more information, please contact Natalie Soroka (202-482-5839; Natalie.soroka@trade.gov) or Padraic Sweeney (202-482-5024; padraic.sweeney@trade.gov).

---

1 Export values are calculated using the Free Alongside Ship (FAS) value. The FAS value is the transaction price of the merchandise including inland freight, insurance, and other charges incurred in placing the merchandise alongside the carrier at the U.S. port of exportation. This value excludes any loading, transportation, or insurance costs beyond the port of exportation.

2 This data uses the total exports measure, which includes both domestic exports and foreign exports (or "re-exports"). Domestic exports includes commodities manufactured in the United States, including those that have been imported from foreign countries and significantly changed or enhanced in value in the United States or a Foreign Trade Zone. Foreign exports ("re-exports") include commodities of foreign origin that have entered the United States but are "re-exported" in substantially the same condition as when imported.

3 Export values and unit values are presented in current U.S. dollars.
SECURED FINANCING FOR
MOBILE EQUIPMENT

The Proposed Protocol on Mining, Agricultural
and Construction Equipment

March 5, 2014

(EXTRACT)

Prepared by

National Law Center
for Inter-American Free Trade

440 N. Bonita Ave. Tucson,
Arizona, 85745, USA
www.natlaw.com
IV. THE PROTOCOL ON MINING, AGRICULTURAL AND CONSTRUCTION EQUIPMENT

B. PROJECTED ECONOMIC BENEFITS

[...] when the cost of credit for agricultural machinery is reduced, farmers may be able to acquire new and more items, allowing them to increase the food production, leading to lower prices and positively impacting the hunger problem. However, many developing countries lack adequate infrastructure that prevents, for instance, producers, growers and manufacturers to market their products better and more effectively, as a result of which they are unable to increase production and/or sell for an adequate price.

[...]

2. Impact on manufacturers, dealers and end-users

[...]

Increased investment in MAC equipment is needed in all developing countries. Most economies that rely on agricultural production as the main contributor to growth are plagued by low rates of mechanization that reduces efficiency and output. For instance, in 2010 the International Food and Policy Research Institute published its “Policy Note No. 22,” which found that in the late 1990s, only 8% of farmland in West Africa was cultivated with a tractor, a level significantly lower than in other regions. 118 The report, specifically focusing on Nigeria, concluded that the low level of agricultural mechanization is caused primarily by a lack of i) access of credit, ii) manufacturing and repair services, iii) necessary infrastructure, and iv) legal and regulatory capacity to protect the rights of the owners of the machinery. 119 The Report found that Nigerian farmers had limited access


119 Id., at 4.
Mechanization of agricultural production has also been a growing trend elsewhere. For instance, in India, the number of tractors grew from 9,500 in 1970 to 2.6 million in 2000, [...] One of the primary reasons for this increase in mechanization was the creation of credit facilities to allow farmers to purchase equipment. 122

V. SCOPE OF THE MAC PROTOCOL

A. HIGH VALUE

Undoubtedly, the value of some MAC equipment, primarily those involved in agricultural production will be significantly lower than the value of aircraft and space objects. However, this can be also said of some railway assets. [...] It is important to solicit input from the end-users of MAC equipment as to what items are economically significant to them and with respect to which items they have been experiencing difficulties in gaining access to financing. [...] The main argument supporting a value criterion is to exclude low-cost farming and construction equipment. The argument against the extension of the MAC Protocol to those kinds of items of equipment is that it might unduly interfere with the operations of the local secured transactions law or even create an obstacle to the reform and modernization of that law. This concern may be ameliorated by a careful selection of the categories of equipment to be covered by the MAC Protocol. [...] B. MOBILITY

The assets covered by the previous three Protocols are highly mobile in that they may and do in fact cross borders on a daily basis. A concern has been raised with respect to the mobility of MAC equipment.

120 Id. at 1. The report explains:
For smallholder farmers, modern tools – even if renter or shared among users – are too costly. Many farmers prepare their farms at the same time of the year, thereby raising rental fees for tools such as tractors. Sharing tools with other farmers often brings in risks of mismanagement and breakdown. Smallholder farmers are particularly averse to these types of risks...Consequently, very few Nigerian farmers own, share, or rent modern agricultural machinery.

MAC equipment does move across the borders although not with such high velocity as, for instance, aircrafts. The frequency of movement also varies depending on the type of MAC equipment and the business activity in which it is utilized.

1. Mobility under Sales

The CEAL study found that MAC equipment moves across the borders in a number of contexts, but primarily when i) it is sold and exported by the manufacturer to a foreign buyer or dealer and ii) when it is sold to a foreign buyer in a foreclosure sale.\textsuperscript{134}

2. Mobility in Use

Several decades ago, the service of custom harvesting developed in the agricultural sector of the United States. Custom harvesting involves the hire of a combine or similar equipment to harvest the farmer’s crop at a fee. This service allows the farmer to reduce its business costs by not having to purchase a combine, and it is utilized particularly by smaller-size farmers.\textsuperscript{138} Custom harvesters that own such equipment at times provide their services internationally.

For instance, in one such documented instance of cross-border custom harvesting the crop of some ranchers in the U.S. state of Montana was harvested by a Canadian forage harvester. Canadian custom harvesters frequently took a three-day trip to travel to farms in Nebraska. An Alberta (Canada) based custom harvester began his season in June and July in Montana where he chopped alfalfa and barley. In August, he brought his equipment to Alberta to harvest cereal crops and in September took it back to Montana to chop corn.\textsuperscript{139}

Construction equipment also moves internationally other than when it is sold. For instance, Martifer Group is a multinational company based in Portugal that completes large scale projects in the metallic construction and renewable energy sectors.

\textsuperscript{134} CEAL, at 21-23.
\textsuperscript{138} See Joel Parcell, Owning a Combine versus Custom Harvesting, available at \url{http://agebb.missouri.edu/mgt/mgtnews/00-12/combine.pdf} (last accessed Feb. 10, 2014).
\textsuperscript{139} John Dietz, Border Crossing, HAY & FORAGE GROWER (May 1, 2003).
One of the types of construction equipment the company owns is a large crane that it has utilized for a number of projects.\textsuperscript{142} The crane weights over 500 tones and originally cost over 20 million Euros. There are only about 15 cranes of this kind in all of Europe. The crane was initially purchased in Portugal and used by the company to lift wind turbines on a two-year project. Currently, the crane is being used on a number of projects in Brazil, moving between various construction sites. Depending on the size of the project, the crane may be used on a site for a couple of weeks or as many as three years before being moved elsewhere.

In addition to the crane, the company frequently moves support towers transnationally. Martifer Group used support towers to construct a soccer stadium in Gdansk for the European Championship in 2012. After the stadium was built, the towers were then relocated to Saudi Arabia to construct a different soccer stadium.

[...] Felbermayer leases cranes, working platforms and lift trucks throughout Europe. [...]
Once finalized, the list of HTS codes attached as an Annex to the MAC Protocol should be regularly updated so as to keep it current.

[...] The nomenclature for the existing HTS codes has been developed by the World Customs Organization (WCO). The nomenclature includes approximately 5,000 commodity groups and each of these groups are identified by a six digit code. The system is currently used as a basis for custom tariffs and the collection of international trade statistics by more than 200 countries and is governed by the International Convention on the Harmonized Commodity Description and Coding System.

[...]

As such, the HTS codes should not be used as the main indexing criterion to identify assets in the International Registry. In other words, registration forms should not be organized in the registry record and made available to searchers by the HTS codes because searches would most likely retrieve multiple results. Another indexing/searching criterion such as the serial number of the asset should be selected to assure retrieval of only those registrations that relate to that particular asset.

VI. ISSUES SPECIFIC TO MAC EQUIPMENT

[...]

A. ACCESSIONS

[...] MAC equipment also comes with engines that may have to be replaced, although it is unlikely that the practice of sharing engines that has developed in the airline industry also exist or will ever develop in the MAC industry. Accordingly, there does not appear to be a practical need for allowing the financing of engines separately from the MAC equipment.

[...]

B. FIXTURES

[...] the nature of some MAC equipment may require its physical affixation to real property. [...] Some issues may arise when MAC equipment gets affixed to real property subject to a mortgage, whether pre-existing or created and recorded while the equipment remains a fixture.


145 Id.
 [...] The Cape Town regime does not address any issues that arise in connection with fixtures, thus the domestic law would seem to be applicable. [...] Extension of the MAC Protocol to assets that may become fixtures could potentially derail the project due to the complexity of the rules that will need to be drafted as well as the acceptability of the rules by contracting states in light of the potential need to modify their real property laws.

 [...]  

C. INVENTORY

 [...] Assets that potentially fall under the scope of the MAC Protocol are typically sold by dealers and leased by other intermediaries. [...]  

 [...] intermediaries hold a stock of equipment that they rent to users. These leasing companies may also need financing to purchase new equipment. [...]  

D. POOLS OF ASSETS AS COLLATERAL

 [...] the financing package may include new MAC equipment and some other assets of the debtor that may or may not be MAC equipment. [...]  

E. IDENTIFICATION OF MAC EQUIPMENT IN A REGISTRATION

For an international interest to become effective between the parties as well as against third parties, both the agreement creating an interest and a registration form must sufficiently describe the asset taken as collateral. [...]  

Generic descriptions would not allow such asset-based indexing and searching, and would necessitate establishment of a debtor-based registry. The idea of a debtor-based registry under the MAC Protocol has been considered but for a variety of reasons did not find sufficient support. [...]  

The Rail Working Group (RWG) has prepared a number of documents assessing the merits of various approaches to unique identification of rail equipment in a registration.170 RWG has devised the Unique Rail Vehicle Identification System (URVIS) that identifies railway assets uniquely and permanently, irrespective of the number of sales, location and modifications made to the asset.171 URVIS identifiers differ from the running and operating numbers

---

171 Id. at 5.
that may also identify railway assets. Such specific identification was necessary because items of rolling stock, and particularly wagons were not uniquely identifiable.

[...]

Even though it seems that a significant majority of MAC equipment is already uniquely identifiable, consideration might be given to developing an URVIS-like system for MAC equipment. As a starting point for discussion, the HTS codes could become a part of the unique number supplemented with a unique designator for individual assets.

F. OTHER ISSUES NEEDING FURTHER CONSIDERATION

One of the issues that interested stakeholders should consider is the public service exception. Many assets covered by the Cape Town regime serve not only important economic functions but are also part of the social fabric. For this reason, the enforcement of creditors’ remedies may have to be temporarily suspended until completion of a public project or similarly important service. While the creditor may temporarily lose access to the collateral, it may want to be compensated by the government.

[...]

Issues such as the one under the Railway Assets Protocol that seeks to protect the uninterrupted provision of passenger service are unlikely to arise under the MAC Protocol.

[...]

Another issue that deserves attention is access to the international registry. For most MAC equipment types, there are no domestic registries that could be designated as the sole entry points to the international registry. For access to the MAC international registry, Article XIX(2) of the Aircraft Protocol and Section 12.2 of the Regulations may be a model to follow. An access system with multiple or open entry points to the MAC international registry may be considered as an alternative to the controlled exclusive-type of access.

[...]

172 The URVIS designation will not be applicable to “...rolling stock used or to be used solely for personal purposes, used on heritage railways or used on railways with a gauge of less than 500mm...but may comply with it on a voluntary basis.” Id.

173 Rosen, at 33.


181 The public sector exception may also have some relevance in the freight sector with respect to trains that may carry hazardous, nuclear and similarly dangerous materials. Bodungen & Schott, at 579.

185 Cuming, International Registry, at 34.
VII. INTERACTION OF THE MAC PROTOCOL WITH SECURED TRANSACTIONS REGIMES

The assets covered by the three other Protocols are typically excluded from general domestic secured transactions regimes because countries have adopted special laws governing various issues related to sales of such assets and their use in secured transactions. The exclusions fall into two categories: i) assets are excluded for all purposes and ii) they are excluded only from the perfection requirements.

A. TYPES OF EXCLUSIONS AND SPECIAL LAWS

The laws that belong to the first category model their exclusion on the basis of Recommendation 4 of the UNCITRAL Legislative Guide on Secured Transactions, which provides that “the law should not apply to: (a) aircraft, railway rolling stock, space objects and ships, as well as other categories of mobile equipment in so far as such asset is covered by a national law or an international agreement...” [...] An example of the second category of laws is the U.S. Uniform Commercial Code (U.C.C.) Article 9. Section 9-311(a)(1) provides that “...the filing of a financing statement is not necessary or effective to perfect a security interest in property subject to: (1) a statute, regulation, or treaty...” [...] The MAC Protocol is expected to operate similarly and complement domestic secured transactions laws. It will clearly define the types of equipment that it covers, thus excluding the other types that will remain covered by domestic laws.

[...] Exclusions from the general secured transactions laws may [...] have the unfortunate effect that the law does not have a specific financing device for an asset. \(^{200}\) Alternatively, the only available financing tool may be the traditional concept of pledge, which requires dispossession of the debtor. As a result, the market players may be forced to resort to alternative financing devices, such as trusts, which the law might not recognize or its enforcement might be complicated.\(^{201}\) In these countries, the MAC Protocol would be filling a significant gap in fostering predictability and certainty to creditors.

B. INTERACTIONS IN TERMS OF PRIORITY OF COMPETING INTERESTS

The second level of interaction between the Cape Town regime and domestic secured transactions laws relates to priorities. [...]
Domestic secured transactions regimes should interact similarly with the MAC Protocol and result in registration in both the applicable national registry as well as in the international registry. [...] 

C. EXCLUSION OF INTERNAL TRANSACTIONS

[...] even if an interest satisfies the requirements of an internal transaction, and the creditor has perfected its domestic interest under the local law, another creditor may still obtain priority by registering a notice of its interest in the International Registry. Contracting States thus may not rely on this Article to protect the priority of interests created in internal transactions.

B. INTERACTIONS WITH THE RECEIVABLES CONVENTION

The Cape Town Convention as a whole has a limited impact on the operation of the United Nations Convention on the Assignment of Receivables in International Trade (Receivables Convention).206 [...] This possible interaction remains hypothetical since the Receivables Convention has not yet entered into force.

D. ALTERNATIVE PROPOSALS

Some experts have suggested that UNIDROIT should contemplate the establishment of a debtor-based registry that would index all registration forms according to the name or other identifier of the debtor. This would be a departure from the other three Protocols and would a number of issues such as: i) how to define the unique identifier for debtors, ii) the authorization to describe the assets generically in a registration, iii) the difficulty for third parties to protect themselves if they were buying assets from someone who had bought it from the original debtor but subject to a security interest, etc. [...] 

The second alternative proposal would establish an international registry that would not be limited to the MAC Protocol equipment, but instead made available to contracting states to use as the registry for their own domestic secured transactions laws. [...] this proposal would require significant modifications to the registration regime under the Cape Town Convention, including the authorization of the debtor to sue an international registrar in a local court to compel a discharge of a registration that the debtor is entitled to. [...] 

FINAL REMARKS

[...]

The proposed MAC Protocol has been on the UNIDROIT agenda for a number of years, and is finally getting some traction. The progress has been slow due a number of factors, such as the yet undefined scope of the Protocol, the types of assets it should apply to, the questions about their mobility, value and identification, etc. A concern has also been raised about the interaction of the future MAC Protocol with domestic secured transactions regimes. [...]

A number of issues still need to be resolved; some of which are substantive while others are rather technical. [...]

The technical issues relate primarily to the operations of the international registry. Should it allow access similar to the International Registry under the Aircraft Protocol, which is rather controlled and conditional on consent of the interested parties, or should it be more open (e.g., providing direct access without having to obtain an authorization to register from a domestically-appointed entity) and not require the debtor’s consent other than its authorization to register? Several proposals are on the table that would modify the functions of this registry from those envisaged in the Cape Town Convention. These and a number of other issues flagged in the Report should and will be given due consideration.