

Immovable-Associated Equipment under the Draft Mac Protocol: A *Sui Generis* Challenge for the Cape Town Convention

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UNIDROIT is in the process of adopting a fourth Protocol under the umbrella of the Cape Town Convention, the MAC Protocol, which will cover mining, agricultural and construction equipment. This article addresses a challenge faced by the MAC Protocol that was not encountered in the development of the previous Protocols – the potential for MAC equipment to be associated with immovable property in ways that result in the holder of an interest in the immovable property acquiring an interest in the associated MAC equipment under the law of the State in which the immovable property is located. The article first discusses how civil law and common law jurisdictions traditionally address the situation of security interests in movables that become associated with immovable property. It then explains and evaluates how the three alternatives in Article VII of the current draft of the MAC Protocol deal with this issue. Finally, it sheds some light on the outstanding issues with respect to Alternative A of Article VII of the MAC Protocol that will need to be dealt with in the run up to the diplomatic conference for the adoption of the MAC Protocol, which is expected to go ahead in the near future.

I. Introduction

The Cape Town Convention (CTC, Convention) and its Aircraft Protocol are the most successful secured transactions-related international instruments ever, by virtually any measure.¹ They have demonstrably facilitated the availability and lowered the costs of credit in the aircraft financing sphere. In addition to the Aircraft Protocol, which covers ‘international interests’ in ‘aircraft objects’, two additional Protocols, neither of which is yet in force, also have been completed – the Rail Protocol, covering international interests in ‘railway rolling stock’, and the Space Protocol, covering such

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¹ Convention on International Interests in Mobile Equipment, 2001, 2307 UNTS 285 (Cape Town Convention or CTC); Protocol to the Convention on International Interests in Mobile Equipment on Matters Specific to Aircraft Equipment 2001, 2367 UNTS 517 (Aircraft Protocol). The CTC has been adopted by 73 States and the Aircraft Protocol by 68 States. UNIDROIT, ‘Cape Town Convention – Status’ <<http://www.unidroit.org/status-2001capetown>> accessed 6 November 2017; UNIDROIT, ‘Aircraft Protocol – Status’ <<http://www.unidroit.org/status-2001capetown-aircraft>> accessed 6 November 2017.

interests in ‘space assets’.² UNIDROIT now is in the process of adopting a fourth Protocol, the MAC Protocol, covering ‘mining equipment’, ‘agricultural equipment’, and ‘construction equipment’ (MAC Protocol).³ Following the preliminary work of a Study Group in 2014 to 2016, meetings of the Committee of Governmental Experts for the MAC Protocol (CGE) were held in March (First Session) and October (Second Session) 2017. The next step would be for a UNIDROIT member State to host a diplomatic conference at which the MAC Protocol would be finalized.

The MAC Protocol has faced (and continues to face) unique challenges not implicated by the other three Protocols. One challenge involves the scope of the MAC Protocol. The aspirations of the CTC for future protocols extend to ‘high-value mobile equipment, other than a category referred to in Article 2(3), each member of which is uniquely identifiable.’⁴ MAC equipment, however, includes some items that are low value (eg a shovel or a weed trimmer), that are not mobile (eg some irrigation equipment), and that may not be ‘uniquely identifiable.’ The MAC Protocol has overcome these hurdles by embracing ‘an elegant and unprecedented solution’ for addressing its scope.⁵ The scope of the Protocol is based on the Harmonized Commodity Description and Coding System (HS System).⁶ States use the HS System for the identification of types of goods for the purposes of custom tariffs and trade statistics. The scope of the MAC Protocol is determined by the equipment covered by six-digit HS System codes that are listed in three annexes to the Protocol – covering agricultural equipment, construction equipment, and mining equipment. Equipment covered by the codes listed in an annex is within the scope of the MAC Protocol. This approach allows for the coverage of equipment that generally meets the standards of high value, mobility, and uniqueness. But the codes alone (not a subjective consideration of, eg, high value or the intended use of the equipment) are the determinants of the scope.

MAC equipment also poses another challenge: it must be uniquely identifiable for compatibility with the CTC’s object-based international registry system. Unlike the situation with aircraft objects⁷, the registration of international interests and searching the international registry for MAC equipment based on a serial number plus the manufacturer’s name has proven to be infeasible. Guided in part by a Report of an intersessional working group on registration criteria,⁸ the CGE at the Second Session settled on a ‘serial number only’ registration system. However, registrations would be

² Luxembourg Protocol to the Convention on International Interests in Mobile Equipment on Matters Specific to Railway Rolling Stock 2007, 46 ILM 662; Protocol to the Convention on International Interests in Mobile Equipment on Matters Specific to Space Assets (adopted 9 March 2012).

³ The text of the revised preliminary draft of the MAC Protocol is reproduced in UNIDROIT, *Study 72K – CGE2 – Report* (Report (prepared by the UNIDROIT Secretariat), 2017) Appendix III <<http://www.unidroit.org/english/documents/2017/study72k/cge02/s-72k-cge02-report-e.pdf>> accessed 6 November 2017.

⁴ CTC, Article 2(3) contemplates international interests in ‘airframes, aircraft engines and helicopters’, ‘railway rolling stock’, and ‘space assets’, which are the subjects of the first three CTC Protocols.

⁵ Charles W Mooney Jr, Marek Dubovec and William Brydie-Watson, ‘The Mining, Agricultural and Construction Equipment Protocol to the Cape Town Convention Project: The Current Status’ (2016) 21 *Uniform Law Review* 332, 345.

⁶ The Harmonized Commodity Description and Coding System (HS System) was established pursuant to, and is governed by, the International Convention on the Harmonized System (HS Convention) 1988 <http://www.wcoomd.org/en/topics/nomenclature/instrument-and-tools/hs_convention.aspx> accessed 6 November 2017. For a more detailed description of the HS System and its use in determining the scope of the MAC Protocol, see Mooney and others (n 5) 343-347.

⁷ For convenience, a single piece of equipment covered by any of the Protocols sometimes is referred to herein as an ‘object’.

⁸ UNIDROIT, *Study 72K – CGE2 – Doc. 11* (MAC Protocol Intersessional Working Group on Registration Criteria (IW-GRC), Conclusions Paper (Prepared by the Chair of the IWGRC and approved by the Group), 2017).

supplemented by certain additional information⁹ in order to address, *inter alia*, the possibility of identical serial numbers for different items of MAC equipment.¹⁰

We address here another major challenge for the MAC Protocol that is unique within the CTC family of Protocols. Unlike the CTC objects covered by the Aircraft, Rail, and Space Protocols, MAC equipment may become legally associated with immovable property in ways that result in the holder of an interest in the immovable property acquiring an interest in the associated MAC equipment under the law of the State in which the immovable property is located. An object so associated becomes ‘immovable-associated equipment’ (IAE).¹¹ This neutral term for such equipment includes property that under various legal systems might be referred to as, eg, fixtures, attachments, accessions, accessories, or the like.¹² This appears to be the first example of a commercial, private-law convention coming to grips with accommodating, and to some extent *overriding*, local immovable property laws.

Part II of the paper explains the problems presented by IAE under various local laws in the context of the MAC Protocol. Part III then addresses potential solutions and discusses the three alternatives provided by the revised version of the MAC Protocol that emerged from the Second Session of the CGE. It both explains and evaluates these alternatives. Part IV describes additional refinements to the MAC Protocol’s treatment of IAE that were adopted, proposed, and discussed during the Second Session and provides an overview and evaluation of the relevant text that was produced by the Second Session and that will be presented to a future diplomatic conference.

II. The Problem: Legal Association with Immovable Property And Practically Relevant Scenarios

A. Legal Association with Immovable Property under National Law

Many, perhaps most, jurisdictions have in common that movable objects that are in some fashion firmly *attached* to immovable property lose their separate legal identity.¹³ Henceforth, they are considered essential parts of the immovable property and can no longer be subject to separate legal rights and interests. In spite of this common starting point, the devil is in the details, particularly when it comes to the degree of attachment required. For instance, under German law the principal test is whether separation would destroy, or change the nature of, either the immovable property

⁹ MAC Protocol, Article XVI provides:

A description of equipment that contains its manufacturer’s serial number and such additional information as required to ensure uniqueness is necessary and sufficient to identify the object for the purposes of Article 18(1)(a) of the Convention. The Regulations shall specify the format of the manufacturer’s serial number and provide what additional information is required to ensure uniqueness.

However, the sole search criterion is the manufacturer’s serial number. MAC Protocol, Article XVII(1) provides:

For the purposes of Article 19(6) of the Convention, the search criterion for equipment shall be its manufacturer’s serial number.

¹⁰ The MAC Protocol in this respect did not follow the Rail Protocol (which deferred to regulations for a system under which the Registrar would assign identification numbers) or the Space Protocol (which simply deferred to the regulations the criteria for identification). Rail Protocol, Article XIV; Space Protocol, Article XXX.

¹¹ MAC Protocol, Article 1(2)(h) (defining ‘immovable-associated equipment’ as ‘equipment that is so associated with immovable property that an interest in the immovable property extends to the equipment under the law of the State in which the immovable property is situated’).

¹² Note that the IAE situation is quite different from the installation of an item other than an object on a CTC object, addressed by CTC, Article 29(7)(a) and discussed below in Part III. With IAE, it is a CTC object (the IAE) that is associated in some manner with immovable property.

¹³ We refer in this context to the jurisdictional analysis on association with immovable property that can be found in UNIDROIT, *Study 72K – CGE2 – Doc. 4* (Legal Analysis, 2017) Appendix IV.

or the movable object attached thereto^{14, 15} However, this rule is only the starting point and is expanded in several ways. First, in respect of the association of movables with immovable property,¹⁶ firm attachment may already flow from the sheer weight of a movable asset without the need for any anchoring to the ground.¹⁷ Firm attachment is also assumed if separation were to necessitate unreasonable financial expenditure in proportion to the value of the part to be removed.¹⁸ Finally, movables incorporated in a building (eg heating systems, bathtubs and carpets) are treated as essential parts of the building (and thus in most cases also of the land on which the building is situated) if they have been inserted for the construction of the building.¹⁹ Although physical association remains indispensable, it is immaterial in this context whether the respective parts have been firmly attached to the building or can instead be easily removed therefrom.²⁰

If a movable object is treated as the essential part of immovable property pursuant to any of the legal rules outlined above, all separate *in rem* rights in the movable cease to exist upon its attachment to the immovable property.²¹ The sole exception to this rule applies if the attachment occurs for a

¹⁴ See section 93 of the German Civil Code (*Bürgerliches Gesetzbuch*): ‘Parts of an asset that cannot be separated without one or the other being destroyed or undergoing a change in nature (essential parts) cannot be the subject of separate rights.’ Admittedly, the border between destruction and damage is fluid and the prospect of a more than insignificant damage militates in favor of the assumption of a change in nature, thus satisfying the alternative prong of section 93. A change in nature will be assumed if either the part to be removed or the remaining asset (or both of them) cannot be used in accordance with their intended economic purpose after separation and (if necessary) subsequent combination with other parts (see Heinz-Peter Mansel, in Jauernig, *BGB*, (16th edition, 2015), section 93 reference 1).

¹⁵ This corresponds to the legal situation in most other civil law jurisdictions. For instance, article 334 no 3 of the Spanish Civil Code defines immovable property as follows: ‘Anything which is joined to an immovable property on a fixed basis, so that it cannot be separated therefrom without breaking the material or impairing the object’. Similarly, as per article 524 of the French Civil Code, movables are deemed ‘immovables by destination’ where they have been attached to immovable property so as to remain permanently attached thereto. Article 525 of the French Civil Code deems such permanent attachment to have occurred if removal of the movable would cause breakage or damage either to the movable itself or to the immovable it has been attached to.

¹⁶ This situation is dealt with in section 94(1) of the German Civil Code (*Bürgerliches Gesetzbuch*), which complements section 93 of the German Civil Code:

The essential parts of a plot of land include all parts firmly attached to the land, in particular buildings, and the produce of the plot of land, as long as it is connected with the land. Seed becomes an essential part of the plot of land when it is sown, and a plant when it is planted.

¹⁷ Christina Stresemann, in Jürgen Säcker and others (eds), *Münchener Kommentar zum BGB* (7th edition, 2015) section 94 reference 4 (referring to, *inter alia*, prefabricated garages and the 45-ton boiler of a heating plant).

¹⁸ Christina Stresemann, in Jürgen Säcker and others (eds), *Münchener Kommentar zum BGB* (7th edition, 2015) section 94 reference 4; Jürgen Ellenberger, in Palandt, *BGB* (76th edition, 2017) section 94 reference 2.

¹⁹ See section 94(2) of the German Civil Code (*Bürgerliches Gesetzbuch*): ‘The essential parts of a building include the parts inserted in order to construct the building.’ In essence, the test here is whether, according to general consensus, the building is not complete without the respective part (see Heinz-Peter Mansel, in Jauernig, *BGB* (16th edition, 2015) section 94 reference 3).

²⁰ Christina Stresemann, in Jürgen Säcker and others (eds), *Münchener Kommentar zum BGB* (7th edition, 2015) section 94 reference 22; Jürgen Ellenberger, in Palandt, *BGB* (76th edition, 2017) section 94 reference 6.

²¹ See section 946 of the German Civil Code (*Bürgerliches Gesetzbuch*) with respect to ownership rights: ‘If a movable part is joined to a plot of land in such a way that it becomes an essential part of the plot of land, ownership of the plot of land extends to this movable part.’ In addition, section 949 of the German Civil Code (*Bürgerliches Gesetzbuch*) orders with respect to third party rights that ‘[i]f, under sections 946 to 948, ownership of an asset is extinguished, the other proprietary rights in the asset are also extinguished’. A person who, as a result of the application of sections 946 and 949, suffers a loss of legal rights may claim compensatory payment pursuant to section 951 of the German Civil Code in accordance with the provisions on the return of unjust enrichment from the person to whose benefit the loss of rights occurs.

temporary purpose only.²² Such temporary purpose is assumed under German law if discontinuance of the attachment is either intended right from the outset by the person performing the attachment or certain in light of the nature of the attachment.²³ In this case, German law continues to treat the object as a moveable asset even if in reality it is firmly attached to the immovable property and cannot be removed without causing significant damage.²⁴ As a consequence, security interests in the movable property are not affected by the attachment. Furthermore, third-party proprietary rights and interests may be created in the (legally) movable object despite its firm attachment to the immovable property. Due to the mandatory nature of these legal rules, deviating agreements between the parties will only have an effect *inter partes* but not in relation to third parties.

In addition to the above, in many jurisdictions mere *association* of movables with immovable objects may result in the loss or limitation of individual legal identity on the part of the movable. For instance, German law provides special rules for accessories that, without becoming the part of another item of property (be it movable or immovable), are intended to permanently serve the economic purpose of such – main – item, provided that their serving function is evidenced by maintaining geographical proximity to the main item.²⁵ By way of an example, German law expressly treats both the machinery of a commercial operation and the agricultural equipment of a farm as accessories.²⁶ No physical attachment is required in this context. Likewise, temporary separation of an accessory from the main object does not challenge its legal nature as accessory.²⁷

Under German law, accessories to immovable property retain their legal nature as movables.²⁸ What is more, they remain capable of being encumbered with separate *in rem* rights and thus do

²² See section 95(1) of the German Civil Code (*Bürgerliches Gesetzbuch*): ‘The parts of a plot of land do not include assets that are connected with the land only for a temporary purpose. The same applies to a building or other structure that a person exercising a right *in rem* over the plot of land connects to such land owned by another person.’ Section 95(2) then goes on to order that ‘[a]ssets that are inserted into a building for a temporary purpose only are not parts of the building.’

²³ Federal Court of Justice (*Bundesgerichtshof*), NJW 2017, 2099, 2100; Christina Stresemann, in Jürgen Säcker and others (eds), *Münchener Kommentar zum BGB* (7th edition, 2015) section 95 reference 3; Heinz-Peter Mansel, in Jauernig, *BGB* (16th edition (2015) section 95 reference 2.

²⁴ There are several court decisions in this context that refer to, *inter alia*, a factory hall built by a tenant on the leased plot of land and the underground fuel tanks installed by a petrol station leaseholder (see Christina Stresemann, in Jürgen Säcker and others (eds), *Münchener Kommentar zum BGB* (7th edition, 2015) section 95 reference 3).

²⁵ See section 97(1) of the German Civil Code (*Bürgerliches Gesetzbuch*):

Accessories are movable assets that, without being parts of the main asset, are intended to serve the economic purpose of the main asset and are in a spatial relationship to it that corresponds to this intention. A movable object is not an accessory if it is not regarded as an accessory on the basis of generally accepted standards.

²⁶ See section 98 of the German Civil Code (*Bürgerliches Gesetzbuch*):

The following assets are intended to serve the economic purpose of the main object: 1. in the case of a building that is permanently equipped for commercial operations, in particular a mill, a smithy, a brewery or a factory, the machinery and other equipment intended for the business, 2. in the case of a farm, the equipment and livestock intended for the commercial operations, the agricultural produce necessary to continue the farming until the time when it is expected that the same or similar produce will be obtained, and manure produced on the farm.

²⁷ See section 97(2) of the German Civil Code (*Bürgerliches Gesetzbuch*):

The temporary use of a movable object for the economic purpose of another object does not give it the quality of an accessory. The temporary separation of an accessory from the main object does not deprive it of its quality as an accessory.

²⁸ This is in stark contrast to other civil law jurisdictions that treat such accessories as immovable property. By way of an example, Article 334 no 5 of the Spanish Civil Code defines the following assets as immovable property: ‘Machines, vessels, instruments or utensils dedicated by the owner of the immovable property to the industry or undertaking performed in the building or on the land property, and which are directly dedicated to the satisfaction of the needs of the undertaking itself’. Similarly, article 524 of the French Civil Code treats movables that the owner of a plot of land places thereon for the use or cultivation of the immovable property as ‘immovables by destination’. In this context, article 524 of the French Civil Code makes specific reference to, *inter alia*, farming implements, wine pressers as well as implements necessary for operating ironworks, paper-mills and other factories.

not in all respects share the legal status of the item they serve.²⁹ Nevertheless, a land mortgage will automatically extend to the accessories associated with the encumbered plot of land insofar as the accessories have passed into the ownership of the owner of the plot of land.³⁰ Land ownership and ownership of an accessory must therefore coincide for the mortgagee's interest in the land to capture the accessory. It should also be noted that accessories fall within the scope of a land mortgage irrespective of whether the owner of the encumbered plot of land acquires ownership of the accessories prior to or after granting the land mortgage. Accessories are released from the coverage by a land mortgage if they are disposed of and removed from the encumbered plot of land prior to their seizure for the benefit of the enforcing mortgagee.³¹ Furthermore, even if the accessories are not disposed of and removed from the encumbered plot of land, they will no longer be subject to the mortgage on such land if they cease to be accessories within the limits of proper management³² prior to their seizure for the benefit of the mortgagee.³³

In light of the provisions presented above, complex conflicts may arise under German law between mortgages in immovable property and security interests in the related accessories.³⁴ Broadly speaking, if the security interest in an excavator is created in favor of the financing bank prior to either the excavator being moved to the debtor's business premises or such premises being encumbered with a mortgage, the security interest in the excavator will prevail.³⁵ On the other hand, if a combined harvester is moved to a mortgaged plot of land prior to a security interest in the combined harvester being established in favor of the financier of such accessory, then the land mortgagee's interest in the combined harvester will prevail. The parties involved may vary these legal consequences *inter partes* but, again, such agreement will have no legal effect to the detriment of any third party.

Common-law jurisdictions also address the situation of security interests in movables that become associated with immovable property. For example, Article 9 of the Uniform Commercial Code (UCC, adopted by all states of the United States) deals with security interests in 'fixtures'.³⁶ In general,

²⁹ Christina Stresemann, in Jürgen Säcker and others (eds), *Münchener Kommentar zum BGB* (7th edition, 2015) section 97 reference 42.

³⁰ See section 1120 of the German Civil Code (*Bürgerliches Gesetzbuch*): 'The mortgage extends [...] to the accessories of the plot of land with the exception of accessories that have not passed into the ownership of the owner of the plot of land.'

³¹ See section 1121(1) of the German Civil Code (*Bürgerliches Gesetzbuch*): 'Products and other components of a plot of land as well as accessories are released from liability if they are disposed of and removed from the plot of land before they are seized for the benefit of the creditor.'

³² Eg, if a machine is phased out due to obsolescence but not in the case of its decommissioning due to a shutdown of the entire operation.

³³ See section 1122(2) of the German Civil Code (*Bürgerliches Gesetzbuch*): 'Accessories are released from liability without disposal if they lose the quality of being accessories, within the limits of proper management, before their seizure.'

³⁴ The legal situation would seem to be very similar in Spain where 'movable and immovable mortgages and non-possessory pledges may concur over the same movable asset' (see UNIDROIT, *Study 72K – CGE2 – Doc. 4* (Legal Analysis, 2017) Appendix IV paras 56 and 57).

³⁵ This follows from an (analogous) application of section 1209 of the German Civil Code (*Bürgerliches Gesetzbuch*): 'The priority of a pledge is determined by the time of its creation, even if it is created for a future or a conditional claim.' However, if the security interest in the excavator is a security transfer of title, there will not even be a conflict between competing interests because the accessory does not pass into the ownership of the owner of the plot of land and thus is not captured by the land mortgage granted by the owner of the plot of land (see section 1120 of the German Civil Code (n 30)).

³⁶ UCC, Article 9 applies to 'a transaction, regardless of its form, that creates a security interest in personal property or fixtures by contract'. See UCC 9-109(a)(1); see also UCC 1-201(b)(35) (defining 'security interest'). 'Fixtures' are defined as 'goods that have become so related to particular real [ie immovable] property that an interest in them arises under real property law'. UCC 9-102(a)(41). For a general overview of security interests in fixtures under the UCC, see Steven L Harris and Charles W Mooney Jr, *Security Interests in Personal Property* (6th edition, Foundation Press 2016) 517-524. The relationship necessary for a movable to become a fixture generally requires some form of physical affixation of a movable to the immovable property. See *ibid* 518. However, 'a security interest does not exist under this article in ordinary building materials incorporated into an improvement on land'. See UCC 9-334(a).

an interest in immovable property has priority over a security interest in fixtures associated with that property.³⁷ However, there are exceptions. For example, a purchase-money (ie acquisition) security interest may obtain priority over an interest in the immovable property if the security interest is made effective against third parties by filing a 'fixture filing' that is associated with the immovable property registry and certain other requirements are met.³⁸

The English law on fixtures might be expressed by the Latin maxim *quicquid plantatur solo, solo cedit* – meaning whatever is affixed to the ground becomes part of the ground.³⁹ The determination of whether an item is a chattel (personal property) or a fixture is of importance under English law because the determination affects the ownership rights of the item itself. '[W]here there is a conveyance of the land the fixtures are transferred, not as fixtures, but as part of the land; and thus, belong to the owner of the land.'⁴⁰ The seminal case on fixtures, *Holland v Hodgson*, established two central tests to distinguish between chattel and fixtures: the 'degree of annexation' test (the extent of the physical attachment to the land) and the 'object of annexation' test (the purpose of the annexation, ie whether the attachment, viewed objectively, is intended to be permanent).⁴¹ Courts relied traditionally on the degree of annexation to determine whether an item is a chattel or a fixture.⁴² Modern cases, however, have placed more emphasis on the purpose of annexation.⁴³ More specifically, an item that is affixed for the better enjoyment of the land is more likely to be a fixture while an item that is attached for the better enjoyment of the item itself is more likely to be a chattel.⁴⁴

Under English law debtors 'can use goods they already own as security for loans or other obligations, while retaining possession of those goods'.⁴⁵ This regime is currently governed by the Bills of Sale Act 1878 and the Bills of Sale Amendment Act 1882.⁴⁶ However, this bill of sale system does not cover '[a]ny fixtures separately assigned or charged'.⁴⁷ The implication is that even goods duly assigned under a bill of sale could not be recovered by creditors once the goods attach to land since such goods are now considered property of the landowner.⁴⁸ This creates a loophole by allowing mortgages to cover after-acquired goods.⁴⁹

B. Practically Relevant Scenarios

In considering how the MAC Protocol might best deal with IAE, it may be useful to consider four scenarios (while recognizing that in real life an infinite variety of scenarios may exist). Each of these, under the applicable non-Convention law, is assumed to constitute a sufficient association to classify the relevant equipment as IAE. The first involves a tractor rolling around on farmland on which it

³⁷ UCC 9-334(c).

³⁸ UCC 9-334(d).

³⁹ Peter Luther, 'Fixtures and Chattels: A Question of More or Less...' (2004) 24 Oxford Journal of Legal Studies 597, 598.

⁴⁰ Sean Thomas, 'Mortgages, Fixtures, Fittings and Security over Personal Property' (2015) 66 Northern Ireland Legal Quarterly 343, 359. There are some exceptions, including: ornamental and domestic fixtures and trade fixtures. See Luther (n 39) 602-611; Ernest C. C. Firth, 'Mortgagees and Trade Fixtures' (1899) 15 Law Quarterly Review 165, 172.

⁴¹ *Holland v Hodgson*, LR 7 CP 328, 335 (1872).

⁴² Thomas (n 40) 347.

⁴³ *ibid* 347-356.

⁴⁴ *ibid* 352 (citing *Elitestone Ltd v. Morris*, 1 WLR 687, 698 (1997)).

⁴⁵ Law Commission, *Replacing Bills of Sale: a New Goods Mortgages Bill Consultation on Draft Clauses* (2017) <<https://s3-eu-west-2.amazonaws.com/lawcom-prod-storage-11jxou24uy7q/uploads/2015/09/July-2017-Consultation-on-draft-clauses.pdf>> accessed 6 November 2017.

⁴⁶ *ibid*.

⁴⁷ Thomas (n 39) 356 (quoting Bills of Sale Act (1878) Amendment Act 1882, s 6(2)).

⁴⁸ *ibid* 358-359 (citing *Longbottom v Berry*, LR 5 QB 123 (1869)).

⁴⁹ *ibid* 363. The UK's Law Commission is currently working to reform the bill of sale legislation. Law Commission (n 45).

is used in the farming operations (the ‘tractor scenario’). The second consists of equipment that is firmly affixed to land or buildings (such as with bolts or even welding), but which after removal or severance from the immovable property would have a value materially exceeding the cost of removal (the ‘affixed’ scenario). That is to say, it would be *economical* to remove the equipment because it would have a positive post-removal value even after taking into account the costs of removal and necessary repairs to the equipment and any legally imposed costs of repairs to the immovable property. The third is a mechanical system installed and imbedded within the walls of a building or so imbedded in the land that it would be *uneconomical* to remove because the cost of removal, replacement, and repair would exceed the value of the removed items, even if the items *could* be removed so as to retain their separate identity and value (the ‘imbedded scenario’). The fourth would be IAE that has ‘physically’ and ‘actually’ lost its identity, has become incorporated into the immovable property, and no longer has value or utility outside of that incorporation even if removed (except, perhaps, as ‘scrap’ metal or building products, etc) (the ‘incorporation scenario’). Based on our layman’s review of the HS Codes currently listed in the Annexes to the MAC Protocol, we are skeptical that a material segment of the potential IAE covered by the MAC Protocol is likely to become the subject of the imbedded scenario or the incorporation scenario (even if theoretically possible). As a practical matter, then, it is IAE that may fall into the tractor scenario or the affixed scenario that warrants particular attention.

One plausible approach to IAE under the MAC Protocol would be to provide no special treatment – that is essentially the approach of Alternative C, discussed below in Part III. As under current law in the absence of the MAC Protocol, this approach would leave it to any agreement between a creditor and holders of interests in the relevant immovable property to agree as to the priorities in IAE *inter partes* and as to other pertinent details. In the view of the Study Group and the CGE, however, the MAC Protocol should make provision for the possibility of enhanced certainty concerning IAE while affording considerable flexibility and deference to the tastes and preferences of Contracting States.

III. Immovable-Associated Equipment Under the Draft MAC Protocol

Before addressing the MAC Protocol’s treatment of IAE, consider the situation in which a movable other than an object is installed on an object that is subject to an international interest (ie a movable is installed on another movable). Article 29(7)(a) of the Convention provides that the CTC ‘does not affect the rights of a person’ if under the applicable law the pre-installation rights of the person ‘continue to exist after the installation.’ If the movable becomes a part of the object, however, the international interest will thereby attach to the movable, albeit without ‘affect[ing]’ the person’s pre-installation rights.⁵⁰ Thus, for movables that become installed on an object subject to an international interest Article 29(7)(a) of the Convention provides a focal point for guidance and analysis of the relationship between an international interest in the object and an interest in the installed movable. For an *object* that becomes associated with *immovable property* so that the object becomes IAE, however, the CTC provides no such focus or guidance. This is chiefly due to the fact that the objects originally envisaged for coverage by the Cape Town regime would not in general become associated with immovable property.⁵¹

⁵⁰ The definition of ‘agricultural equipment’, for example, extends not only to the ‘object’ but to ‘all installed, incorporated or attached accessories, components and parts which do not fall within a separate Harmonised System code listed in [the relevant] Annex, and all data, manuals and records relating thereto.’ For an extensive review and analysis of CTC, Article 29(7)(a), see Marek Dubovec, ‘Accessions and Non-Accessions Under the Cape Town Convention: Special Focus on MAC Equipment’ (2017) 6 Cape Town Convention Journal [this issue] 52.

⁵¹ cf CTC, Article 2(3), which refers to airframes, aircraft engines, helicopters, railway rolling stock and space assets.

The MAC Protocol directly confronts the potential for MAC equipment to become IAE. It imposes on Contracting States a mandatory declaration for the selection of one of three alternative provisions dealing with IAE.⁵² This ‘bold and innovative approach’ is an unprecedented step not only for the CTC but also for any international commercial law convention – the regulation (albeit limited) of the substantive rights of holders of interests in immovable property.⁵³ The alternatives seek to accommodate and balance, to varying degrees, (i) the interests of Contracting States in protecting the rights of holders of interests in immovable property under the applicable immovable property law, (ii) the goal of facilitating and lowering the cost of credit by ensuring the effectiveness of international interests in IAE, and (iii) the attractiveness of the MAC Protocol to potential Contracting States.

Alternative A of Article VII offers a ‘strong’ pro-international interest text, with the goal of enhancing the utility of an international interest even in the face of local immovable property law that otherwise could eliminate or substantially impair the value of the international interest in IAE. It is the alternative that offers greatest potential benefits from the MAC Protocol for facilitating and lowering the costs of financing.⁵⁴ Alternative A provides: ‘If immovable-associated equipment is removable ... , the association of the equipment with the immovable property does not affect its status as equipment under this Protocol.’⁵⁵ The intended goal of Alternative A is to permit the creation of an international interest in IAE and to protect the existence and priority of an international interest even if, under the otherwise controlling local immovable property law, an international interest could not be created or would be extinguished or subordinated. By providing that the association of IAE with the immovable property does not affect its status as equipment under the MAC Protocol, Alternative A allows the equipment to be fully subject to the provisions of the Protocol. The association should not impair the power to dispose for purposes of Article 7 of the CTC or the existence and priority of an international interest. It is important to note that Alternative A does not call off entirely the role of the local immovable property law. It addresses only the status of IAE ‘as equipment *under this Protocol*.’⁵⁶ It does not extinguish or otherwise impair interests in IAE that arise under national immovable property law. Of course, even though by its terms Alternative A protects an international interest from impairment resulting from association of equipment with immovable property, the practical realization of the value of the IAE might be rendered impossible or impracticable in the imbedded scenario or the incorporation scenario. In part for this reason, Alternative A contemplates a limitation on its scope, which is discussed below in Part IV.

Potentially, depending on the nature of applicable local law, Alternative C would provide the weakest respect for an international interest in IAE as among the three alternatives. Alternative C is essentially the mirror image of Alternative A. Under Alternative C, the MAC Protocol would

⁵² The focus here is on the MAC Protocol’s substantive provisions that address IAE located in a Contracting State. However, Article VII(1) of the current draft of the MAC Protocol concerns IAE that is located in a *non*-contracting State. It provides that the MAC Protocol:

does not affect the application of any [domestic law] that determines whether an international interest in immovable-associated equipment ceases to exist, is subordinated to any other rights or interests in the immovable-associated equipment, or is otherwise affected by the association of the equipment with immovable property.

This provision avoids the problematic potential for an international interest in IAE to take priority over a domestic interest arising from the association of IAE with immovable property located in a non-Contracting State. As pointed out elsewhere, ‘[i]n the view of the Study Group, not only was Article 29 [of the CTC] not drafted with such a priority contest in mind, but such a result would also likely attract considerable controversy and opposition.’ Mooney and others (n 5) 352.

⁵³ *ibid.*

⁵⁴ In this respect Alternative A is reminiscent of the MAC Protocol’s Article X Alternative A on insolvency remedies and the corresponding provisions in the other CTC Protocols. See Rail Protocol, Article IX, Alternative A; Space Protocol, Article XXI, Alternative A.

⁵⁵ MAC Protocol, Article VII, Alternative A(3).

⁵⁶ MAC Protocol, Article VII, Alternative A (emphasis added).

not affect the determination, under the law of the State where the immovable property is situated, of whether the international interest would cease to exist, be subordinated to other interests in the IAE, or otherwise be affected by its association with the immovable property. In reality, Alternative C is wholly agnostic as to the protection to be afforded to an international interest in IAE. If local law were to provide considerable respect for an international interest in IAE, a Contracting State's choice of Alternative C would permit the continued application of that local law. In other situations, deference to local law under Alternative C could weaken the benefits of an international interest in IAE when compared to Alternatives A and B. But even in that case Alternative C could nonetheless provide an inducement for adoption of the MAC Protocol by a Contracting State that wishes to avoid any impairment of its laws on immovable property. In other respects the benefits of the MAC Protocol for financing equipment other than IAE would be made available to a Contracting State. Alternative C would relieve a Contracting State from the Hobson's Choice of having the MAC Protocol override its local immovable property law or eschewing adoption of the MAC Protocol altogether.

Finally, Alternative B offers a balanced middle ground by distinguishing between different types of IAE.⁵⁷ It respects the operation of local immovable property law, as under Alternative C, when IAE has lost 'its individual legal identity' under the applicable local law. When such legal identity is *not* lost, Alternative B affords priority to the holder of an interest in the immovable property in appropriate, but limited, circumstances. First, the interest in the immovable property must be registered (and remain effectively registered) under domestic law prior to the registration of the international interest in the IAE. Second, the IAE must have become associated with the immovable property prior to the registration of the international interest. The rationale of this priority rule is very accurately explained elsewhere:

In situations in which . . . a holder [of an interest in immovable property] would obtain priority [over an international interest in IAE], . . . a creditor who registers an international interest would be in a position to determine the association and to search the domestic immovable property registry. It then could either decline to move forward with the transaction or negotiate an acceptable arrangement with the holder of the interest in the immovable property.⁵⁸

Alternative B offers a plausible choice for Contracting States that wish to recognize the loss of legal identity for IAE under their domestic immovable property law but also wish to provide priority to an international interest in appropriate situations that do not unreasonably impair the rights of holders of interests in the relevant immovable property.

The Article VII alternatives should be coherent and easily applied in the context of a State's immovable property law, whether applied by a forum court sitting in the State of the location of the immovable property or sitting in another State applying its rules of private international law. The alternatives also should provide *ex ante* certainty as to the status or potential status of an international interest in IAE.⁵⁹ Finally, the alternatives provided should accommodate the respective major policy objectives that each alternative contemplates. In order to meet these objectives, the alternatives should be relatively simple, clearly defined and few in number. They should not impose unnecessary complexity and each alternative should adopt a 'one size fits all' approach. In our view the three al-

⁵⁷ Alternative B rests upon a proposal introduced by the German Federal Ministry of Justice and Consumer Protection in 2015 which, in turn, was drafted in consultation with, and supported by, German Financing and Manufacturers' Circles (see UNIDROIT, Study 72K – CGE2 – Doc. 4 (Legal Analysis, 2017) para 88 and Annex III).

⁵⁸ Mooney and others (n 5) 354.

⁵⁹ Of course, to the extent that Alternatives B and C depend on the substance of local law, that law may not meet these tests of coherence, ease of application, and *ex ante* certainty. But the application of the text of the MAC Protocol itself should meet these aspirations.

ternatives included in the current version of the MAC Protocol generally satisfy these criteria. Moreover, a Contracting State that desires additional flexibility could make further adjustments through revisions of its local law of immovable property in relation to IAE. For example, a State could opt for Alternative C while revising its local law to adopt a variation of Alternative A. The adoption of Alternative C in conjunction with a Contracting State's adjustments of its relevant local law affords maximum flexibility.

Whichever alternative a Contracting State might adopt, it is a reasonable assumption that the State's non-Convention law would make adequate provision for the protection of holders of interests in the immovable property by imposing on a creditor (and a debtor, in suitable circumstances) an appropriate responsibility for loss or damage arising out of the removal of the IAE from the immovable property. Such legal protection would be particularly significant in the case of Alternative A, which would override otherwise applicable local immovable property law. In our view, however, it would be unwise and impractical for an international instrument such as the MAC Protocol to specify the dimensions and extent of such responsibility and liability.⁶⁰ But the future Official Commentary for the MAC Protocol could provide useful guidance.⁶¹

IV. Refinements of and Commentary on MAC Protocol's Approaches to Immovable Associated Equipment

A. Article VII of the MAC Protocol prior to the Second Session of the CGE

In advance of the First Session of the CGE some delegations expressed uncertainty and skepticism about the three alternative approaches to IAE presented in the Draft MAC Protocol laid before the CGE in that Session.⁶² Others generally supported the alternative approaches.⁶³ During both the First and Second Sessions the CGE supported the retention of all three alternatives. In our view there is a strong case for retaining these alternatives in Article VII, as originally proposed by the Study Group and as retained by the CGE. Moreover, including the three alternatives offers important practical benefits beyond the obvious flexibility that Contracting States would enjoy in connection with the actual adoption of the completed MAC Protocol. In particular, the existence of the alternatives may have materially facilitated reaching a consensus on the MAC Protocol's text during the process of ne-

⁶⁰ See, eg, UNIDROIT, *Convention On Substantive Rules For Intermediated Securities* (2009), Article 28(3) <<http://www.unidroit.org/instruments/capital-markets/geneva-convention>> accessed 6 November 2017 (deference to non-Convention law as to liability of intermediary for noncompliance with Convention obligations).

⁶¹ It is to be expected that the diplomatic conference for the adoption of the MAC Protocol will request the preparation of such commentary as an aid for those called upon to work with the new legal instrument. This was also the case in relation to the CTC and its previous Protocols. See, eg, in the context of the Rail Protocol Resolution No 4 adopted by the Diplomatic Conference in relation to the Official Commentary on the Luxembourg Protocol.

⁶² UNIDROIT, *Study 72K – CGE1 – Doc. 9* (Comments submitted by the Government of the United Kingdom, 2017):

We think it important to articulate the reasons for having the various alternatives [to Article VII] instead of simply leaving everything to be determined by the *lex situs* as provided by what is currently Alternative C. ... It has generally been accepted that the concept of mobile equipment is an autonomous concept of the Convention and is not to be determined by the *lex situs*; ... But the case needs to be made and as stated earlier it should be expressly acknowledged in the travaux that it is an exception to the general principle.

UNIDROIT, *Study 72K – CGE1 – Doc. 7* (Comments submitted by the Government of the United States of America, 2017):

We also suggest that the Committee of Governmental Experts consider whether Articles VII and X could be simplified. Article VII(1) may not be necessary. Moreover, it is unclear whether Articles VII(2) and X each need to include three Alternatives. We look forward to a thorough discussion of these questions.

⁶³ UNIDROIT, *Study 72K – CGE1 – Doc. 11* (Comments submitted by the Government of Japan, 2017); UNIDROIT, *Study 72K – CGE1 – Doc. 12* (Comments submitted by the Government of South Africa, 2017).

negotiation at the GGE stage and may well have the same effect at a future diplomatic conference. The inclusion in the text of an alternative that a State favors may make it more willing to accept the inclusion of another alternative that it does not favor (but which another State does favor). For example, a delegation that might otherwise be philosophically or politically compelled to advocate or resist any one of the alternatives might nonetheless accept in the Protocol text an alternative that it opposes so long as the text also includes its preferred alternative.⁶⁴

As will be demonstrated later in this Part IV, considerable progress toward a consensus on the treatment of IAE under the MAC Protocol was made during the Second Session of the CGE. In this respect some background will be useful. Alternative A, as it was proposed by the Study Group and as it emerged from the First Session of the CGE provided: ‘An international interest in agricultural, construction or mining equipment is not affected by the association of the equipment with the immovable property and continues to exist and retain its priority as against any rights or interests in the immovable-associated equipment.’⁶⁵ That version implied but failed to provide explicitly that Alternative A would apply even if the relevant IAE has lost ‘its individual legal identity’ under the local immovable property law or otherwise has ceased to be a movable asset under the local law.

The original version of Alternative A also failed to provide that Alternative A would be applicable to the creation (or purported creation) of an international interest in IAE *after* the association of equipment with the relevant immovable property, ie, after it has become IAE – a post-association interest. By providing that an international interest ‘*continues* to exist and *retain* its priority’,⁶⁶ Alternative A clearly implied that its application would be limited to an international interest created *prior* to the association of the equipment with the immovable property – a pre-association interest.⁶⁷ This in turn conflicted with the underlying goal of Alternative A to facilitate financing under the MAC Protocol, which militates in favor of its applicability to both pre- and post-association interests. Consequently, in our view Alternative A should apply to post-association interests, consistent with this underlying policy.⁶⁸ Application of Alternative A to a post-association interest in our view will not unduly interfere with the expectations and reliance interests of conflicting holders of interests in the immovable property. Legitimate expectations and interests of immovable property interest holders should be adequately protected by the transition provisions of the Convention and the MAC Protocol, inasmuch as the interest of any such holders would constitute a ‘pre-existing right

⁶⁴ This is what occurred in connection with the adoption of Alternatives A and B of Article XI, on insolvency remedies, of the Aircraft Protocol. Ultimately, of all the Contracting States that opted for the application of the insolvency remedies under the Aircraft Protocol only one State (Mexico) made a declaration adopting Alternative B, the ‘weak’ version, with all other Contracting States opting in favor of the ‘strong’ version, Alternative A. See Aircraft Protocol, Status, <<http://www.unidroit.org/status-2001capetown-aircraft>> accessed 6 November 2017. But the inclusion of Alternative B in the text of the Protocol effectively blunted, during the negotiation process, the opposition of States to the inclusion of Alternative A.

⁶⁵ UNIDROIT, *Study 72K – CGE1 – Report* (Report prepared by the UNIDROIT Secretariat, 2017) Appendix IV.

⁶⁶ *ibid* (emphasis added).

⁶⁷ Notwithstanding the clear implication of the draft text, the Explanatory Report to the version of the MAC Protocol submitted to the First Session of the CGE indicated that the timing of the association of the equipment with the immovable property is *not* relevant to the priority conflicts addressed by Article VII. See UNIDROIT, *Study 72K – CGE1 – Doc. 3 corr.* (Explanatory Report to the Preliminary Draft Protocol to the Convention on International Interests in Mobile Equipment on Matters Specific to Agricultural, Construction and Mining Equipment, 2017) para 33.

⁶⁸ The applicability of Alternative A to post-association interests could have particular importance in the context of refinancing transactions. Moreover, affording the same treatment to pre- and post-association interests also would avoid unnecessary complexity. The Legal Analysis prepared by the Secretariat and submitted to the Governing Council noted that the MAC Study Group supported this approach and also explained: ‘This approach was taken because it would give more flexibility to creditors to finance equipment already in use and associated with immovable property, which reflects existing practice in the finance industry.’ See UNIDROIT, *Study 72K – CGE1 – Doc. 4* (Legal Analysis, 2016) Appendix III para 13(ii).

or interest.⁶⁹

In addition to these examples of the arguable failure of the original version of Alternative A to be sufficiently protective of the creation, existence, and priority of an international interest, the original version also arguably was too expansive. Due to the absence of any limiting language, it would have protected an international interest, for example, not only in the tractor and affixed scenarios but also in the imbedded and incorporation scenarios. Alternative A thus turned a blind eye to the fact that particularly in the incorporation scenario IAE will have lost its character as equipment to an extent that an international interest in it would not have any meaningful and practical value as security for an obligation. Admittedly, it was pointed out in Part II of this paper that the imbedded and incorporation scenarios are not likely to occur in the context of MAC equipment. Nevertheless, the absence of language excluding IAE from the application of Alternative A in these scenarios must be regarded as a shortcoming of the original text.

B. Refinements of Article VII of the MAC Protocol during the Second Session of the CGE and Outstanding Issues

In advance of the Second Session of the CGE the United States proposed detailed and specific revisions to Alternative A that addressed the issues of under- and over-inclusion described above.⁷⁰ Subject to several clarifications in the text and submission to the CGE's drafting committee, the CGE approved the substance of the United States proposal.⁷¹ In the view of the drafting committee and the CGE, the concise and truncated version of Alternative A that was proposed and approved in the Second Session achieves precisely the goals and effects of the more detailed version that the CGE approved in principle and submitted to the drafting committee.⁷² However, in our view it will be important for the Official Commentary regarding the MAC Protocol to spell out and explain with specificity that the revised version of Alternative A protects the creation, existence, and priority of international interests to the same extent as would have the earlier, more detailed version. In addition, it will be necessary for a diplomatic conference to review the text of Alternatives B and C to ensure consistency and to avoid any unintended implications when these provisions are read alongside Alternative A.

The drafting committee and the CGE also agreed with the United States proposal to limit the applicability of Alternative A, but the proposal that Alternative A apply only to IAE that could be removed from the immovable property 'without any irreparable physical damage to the immovable

⁶⁹ Convention, Articles 1(v) (defining 'pre-existing right or interest') and 60 (transitional provisions); MAC Protocol, Article XXV (transitional provisions).

⁷⁰ The United States Department of State proposed the following revised version of Alternative A:

3. If immovable-associated equipment is removable without any irreparable physical damage to the immovable property, the association of the equipment with the immovable property does not affect
 - (a) any person's power to dispose of the immovable-associated equipment, or
 - (b) the creation, continued existence, or priority as against any rights or interests of an international interest in the immovable-associated equipment, regardless of whether otherwise-applicable domestic law would have determined that the equipment lost its legal identity or otherwise ceased to be a movable asset or that an interest in the equipment was subordinated to a right or interest in the immovable property.

4. This Protocol does not affect the application of any law of the State where the immovable property is situated that determines whether an international interest in immovable-associated equipment ceases to exist, is subordinated to any other rights or interests in the immovable associated equipment, or is otherwise affected by the association of the equipment with immovable property, if removal of the equipment would cause irreparable physical damage to the immovable property. See UNIDROIT, *Study 72K – CGE2 – Doc. 10* (2017) para 8.

⁷¹ UNIDROIT, *Study 72K – CGE2 – W.P. 6* (Daily Report for 3 October 2017, 2017) para 59; UNIDROIT, *Study 72K – CGE2 – W.P. 11* (Daily Report for 4 October 2017, 2017) para 9.

⁷² UNIDROIT, *Study 72K – CGE2 – W.P. 13* (Daily Report for 5 October 2017, 2017) paras 50-53 (which refers to the version of Article VII proposed by the drafting committee in UNIDROIT, *Study 72K – CGE2 – W.P. 7* (2017)).

property' was not approved and no consensus was reached as to the appropriate standard for a limitation.⁷³ The drafting committee proposed that the UNIDROIT Secretariat undertake intersessional work in advance of a diplomatic conference to develop an appropriate standard and to prepare an initial draft of the MAC Official Commentary that might explain such a standard.⁷⁴ As an indicative approach, the drafting committee suggested consideration of a standard based on the 'economic viability' of an international interest in IAE.⁷⁵ For example, if the reasonable costs of removal of IAE from the immovable property, including the costs of reasonable repairs to the immovable property and the IAE (regardless of the legal liability of a creditor for such costs) would exceed the anticipated value of the removed and disassociated IAE, then Alternative A should not apply.⁷⁶

In such a case, the local law would (implicitly) determine the effects on an international interest of the association of IAE with the immovable property (in effect, the Alternative C approach would apply). In our view such a standard would in general capture, and disqualify for application of Alternative A, IAE that would fall within the imbedded and incorporation scenarios. The goal should be to exclude from the application of Alternative A IAE that has so physically lost its character as equipment that an international interest in it would not constitute meaningful and practical value as security for an obligation. This exclusion from the scope of Alternative A would be based on a physical test, unlike the legal criterion of loss of legal identity that applies under Alternative B.

Whichever standard might be adopted for limiting the applicability of Alternative A, we believe that it should be an autonomous *MAC Protocol* standard based on a functional analysis – not a standard that is determined by reference to non-Convention legal concepts. This is fully consistent with the approach approved by the CGE. Such a Protocol standard would support the goal of uniformity and harmonization. By way of contrast, the relevant domestic law might be hard to find, inconsistent among States, and over- or under-inclusive for the specific purpose of the application of Alternative A. Once again, the Official Commentary for the MAC Protocol could usefully elaborate the relevant functional standard and provide guidance for its interpretation and application.

One obvious worry about such a limitation on the operation of Alternative A is that a standard might be so indeterminate that a creditor would lack sufficient *ex ante* certainty as to the status of its international interest. This uncertainty might make the transaction unattractive and unacceptable to the creditor. Obviously, a lack of *ex ante* certainty could defeat the purpose of the Alternative A safe harbor. But in many cases the uncertainty might make a negotiated arrangement with holders of interests in the immovable property a necessary condition for financing the IAE, which could be an entirely satisfactory result. In many situations such agreements will be a prudent step for all concerned. Moreover, even with such uncertainty with respect to *some* IAE, Alternative A nonetheless would provide necessary certainty in the tractor scenario and, hopefully, in the affixed scenario. Moreover, the tractor scenario arguably is the *chief* problem for financing IAE under the MAC Protocol – IAE that has no physical attachment or affixation to the relevant immovable property. For the affixed scenario and situations that may be progressively closer to the imbedded and incorporation

⁷³ UNIDROIT, *Study 72K – CGE2 – Report* (Report (prepared by the UNIDROIT Secretariat), 2017) paras 77-83; see also UNIDROIT, *Study 72K – CGE2 – W.P. 6* (Daily Report for 3 October 2017, 2017) para 59; UNIDROIT, *Study 72K – CGE2 – W.P. 11* (Daily Report for 4 October 2017, 2017) para 9; UNIDROIT, *Study 72K – CGE2 – W.P. 13* (Daily Report for 5 October 2017, 2017) para 53.

⁷⁴ For example, standards mentioned in CGE deliberations included 'economically unfeasible', 'constructive loss', and 'without deterioration', and one delegation suggested that the exclusion might be replaced with an obligation to repair.

⁷⁵ UNIDROIT, *Study 72K – CGE2 – W.P. 13* (Daily Report for 5 October 2017, 2017) para 50.

⁷⁶ This test is similar to the 'commercially reasonable test' proposed by Professor Ronald Cuming for determining, under Canadian provincial law, when goods have been 'united' with land in a manner that would require a specific agreement between an owner of goods and an owner of land so as to permit severance of the goods from the land. See Ronald C.C. Cuming, 'The Law of Fixtures: The Need for a Different Approach' (2017) Canadian Business Law Journal 13 (forthcoming, unpublished manuscript cited with permission).

scenarios, the financing creditor under Alternative A would face a situation no worse than is currently the case in the absence of the MAC Protocol. And in many cases the creditor's situation would be considerably more certain than under current law, even though any plausible standard necessarily would harbor some degree of uncertainty.

The Alternative A limitation posited here would be tied in some fashion to the physical damage to the immovable property that would be caused by the removal of IAE from its physical connection to the immovable property.⁷⁷ But the applicable non-Convention law easily could permit a creditor to achieve the economic benefits of its international interest even if the IAE is *never* actually removed. For example, the value of the IAE in place might be allocated to the secured claim of the creditor in an insolvency proceeding of the debtor. This would be possible not only in the tractor scenario but also in the affixed scenario. Presumably a State adopting the MAC Protocol would be motivated by a desire to facilitate extensions of credit by enhancing the position of creditors holding international interests. So it is quite understandable that an adopting State also might wish to adopt local enabling legislation providing a friendly legal penumbra of protection under the non-Convention law. The Official Commentary for the MAC Protocol could provide useful guidance to Contracting States concerning any desired law reforms in this respect. In addition, potential Contracting States also could be provided with model legislative text, perhaps developed by the MAC Working Group.⁷⁸

In considering Alternative A of Article VII of the MAC Protocol, including the possible refinements such as the limitation discussed here, one should keep in mind that the goal is not a perfect solution that resolves all potential doubt under the MAC Protocol text and the IAE-related non-Convention law. Such a goal would be unrealistic. Instead, the goal should be to achieve a meaningful level of certainty beyond that available under current law and to provide a useful framework for negotiations on contractual solutions among interested persons.

V. Conclusion

The MAC Protocol has faced a challenge not encountered in the development of the other CTC Protocols – the potential for equipment to be associated with immovable property so as to become IAE. The MAC Study Group and more recently the CGE have developed a set of three alternative provisions in Article VII of the current draft for addressing IAE which would provide a balance between flexibility and certainty for adopting States. While further work remains on a standard for limiting the scope of Alternative A, we are confident in the success of intersessional work under the auspices of the UNIDROIT Secretariat. We anticipate that this work will result in a promising approach involving a viable textual formulation for Alternative A accompanied by indicative draft commentary for consideration by a future diplomatic conference.

⁷⁷ Consequently, the contemplated limitation of Alternative A would *not* capture a purely economic injury to an interest holder, such as the loss of use of a tractor in the tractor scenario resulting from its removal from the immovable property.

⁷⁸ The MAC Working Group was established to provide the private sector with the opportunity to play an active part in the MAC Protocol project. Its member organizations represent more than 10,000 companies around the world doing business in the mining, agricultural and construction equipment sectors. See Philipp L. Durham and Marek Dubovec, 'More Good News From Cape Town: How the New MAC Protocol Will Benefit the Mining, Agriculture and Construction Industries' (2017) 35 (issue 1) *Journal of Equipment Lease Financing* 1, 2.