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BACKGROUND RESEARCH PAPER

1. The purpose of this document is to provide the Working Group with background information on international and national legal frameworks relevant for the drafting of a Model Law on Warehouse Receipts. More specifically, the document provides an analysis of existing international instruments and guidance documents concerning warehouse receipt legislation. Furthermore, it contains a comparative analysis of national warehouse receipt legislation reflecting major legal traditions and geographical regions, to which the Model Law provisions would ultimately need to be adaptable. That comparative analysis focuses on selected elements suggested in Study 83 – W.G. 1 – Doc. 3 (Issues Paper) for consideration of the Working Group at its first session.

2. Accordingly, the document is divided into three sections. Part I analyses relevant international standards and guidance on warehouse receipts. Part II provides a comparative analysis of national legislation in relation to the elements discussed in the Issues Paper. Focussing on the uses and challenges of new technologies for warehouse receipt systems, Part III then discusses recent developments in 9 States,¹ in particular electronic warehouse receipts platforms and recent blockchain and distributed ledger applications (DLT).

3. The Secretariat is grateful to the Kozolchyk National Law Center (NatLaw) for the preparation of this document. It should be highlighted that this document will be further elaborated as the project progresses.

¹ Ethiopia, India, Mexico, Pakistan, Philippines, South Africa, the United Arab Emirates, the United States of America, and Zambia.

TABLE OF CONTENTS

Ι.	Inter	national Standards and Guidance on Warehouse Receipts	3
	Α.	Documents with a General Scope	3
	В.	Instruments Relevant for Particular Aspects of Warehouse Receipts	5
II.	Com	parative Legal Analysis on Warehouse Receipts	6
	Α.	Common Law and Civil Law Approaches	6
	В.	Sources of Law	6
	C.	Rules on Issuance, Transfer and Enforcement	7
III.	Rece	nt Developments Concerning New Technologies	11
	Α.	Electronic Warehouse Receipts Platforms	11
	В.	Recent Blockchain and Distributed Ledger Applications	14
Anne	exe 1	WRS Initiatives by International and Regional Organisations	
		at a Glance	15
Anne	exe 2	References	18

I. INTERNATIONAL STANDARDS AND GUIDANCE ON WAREHOUSE RECEIPTS

4. Several organisations have published principles, policies and standards applicable to aspects of warehouse receipts systems (WRS), including the European Bank for Reconstruction and Development (EBRD), the Food and Agriculture Organization of the United Nations (FAO), the World Bank Group (WBG), and the Organization of American States (OAS). The United Nations Commission on International Trade Law (UNCITRAL) and the International Organization of Securities Commissions (IOSCO) have promulgated standards and principles applicable to some specific aspects of a WRS such as security rights, electronic transferable records, and the guidelines for storage facilities holding goods for delivery under derivatives.

5. Some of the guides provide a pathway to legislative reform and modernisation of the WRS, while others deal with the use of warehouse receipts in transactions. The legislative reform aspect has been addressed in "Designing Warehouse Receipt Legislation: Regulatory Options and Recent Trends" (FAO/EBRD Guide),² "A Guide to Warehouse Receipt Financing Reform: Legislative Reform" (WBG Guide),³ and OAS "Principles for Electronic Warehouse Receipts for Agricultural Products" of the OAS (OAS Principles).⁴ UNCITRAL adopted the Model Law on Secured Transactions (MLST),⁵ which contains rules specifically applicable to security rights in warehouse receipts issued in paper form. UNCITRAL also adopted the Model Law on Electronic Transferable Records (MLETR), which provides the legal basis for the issuance and transfer of electronic (transferable) documents of title.⁶ The International Finance Corporation (IFC) of the WBG published a guide titled "Warehouse Finance and Warehouse Receipt Systems: a Guide for Financial Institutions in Emerging Economies" (IFC Guide) that focuses primarily on transactional aspects of warehousing, but also highlighting some key legal issues.⁷ IOSCO published a series of reports (IOSCO Reports) on the regulation of commodity markets and relevant storage infrastructure that informs some WRS-related aspects.⁸ All of these documents, to varying degrees, provide for WRS principles, policies and standards in respect respect to private law aspects, but also some regulatory matters. A comparative table of selected guidance documents is provided in Annexe 1.

A. Documents with a General Scope

6. The WBG Guide, IFC Guide, FAO/EBRD Guide and the OAS Principles offer legislative guidance covering all aspects of a WRS, both private law as well as regulatory. In accordance with the scope of the Model Law, the focus here will be on the private law aspects covered by these publications.

² EBRD/FAO, Designing Warehouse Receipt Legislation: Regulatory Options and Recent Trends (2015), available at <u>http://www.fao.org/3/a-i4318e.pdf</u>.

³ WBG, A Guide to Warehouse Receipt Financing Reform: Legislative Reform (2016), p. iii, available at <u>http://documents.worldbank.org/curated/en/885791474533448759/pdf/108450-WP-PUBLIC.pdf</u>.

⁴ OAS, Principles for Electronic Warehouse Receipts for Agricultural Product (2016), available at <u>http://www.oas.org/en/sla/iajc/docs/CJI-doc 505-16 rev2.pdf</u>.

⁵ UNCITRAL Model Law on Secured Transactions (2016), available at <u>https://uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/en/19-08779 e ebook.pdf</u>.

⁶ UNCITRAL Model Law on Electronic Transferable Records (2017), available at <u>http://www.uncitral.org/pdf/english/texts/electcom/MLETR_ebook.pdf</u>.

⁷ IFC, Warehouse Financing and Warehouse Receipts Systems: A Guide for Financial Institutions in Emerging Economies (2013), available at <u>https://collaboration.worldbank.org/content/usergenerated/asi/cloud/attachments/sites/collaboration-for-</u> <u>development/en/groups/agrifin/products/icr:content/content/primary/blog/warehouse_financean-</u>

TOr3/Warehouse%20Finance%20and%20Warehouse%20Receipt%20Systems.pdf.

⁸ See, for example: IOSCO, Commodity Storage and Delivery Infrastructures: Good or Sound Practices, Consultation Report (June 2018), available at <u>https://www.iosco.org/library/pubdocs/pdf/IOSCOPD604.pdf</u>, IOSCO, Principles for the Regulation and Supervision of Commodity Derivatives Markets (Sept 2011), available at http://www.iosco.org/library/pubdocs/pdf/IOSCOPD358.pdf, IOSCO, The Impact of Storage and Delivery Infrastructure on Commodity Derivatives Market Pricing (May 2016), available at https://www.iosco.org/library/pubdocs/pdf/IOSCOPD530.pdf.

7. WBG Guide: The WBG Guide seeks to provide practical legislative guidance for warehouse receipts reform initiatives. To this end, the WBG Guide provides some general principles about the (private law) framework governing warehouse receipts, such as that warehouse receipts should be recognized as documents of title.⁹ It then moves on to more concrete recommendations in the form of a draft Model Warehouse Receipts Act,¹⁰ which is divided into six parts. For example, Part 1 contains the main definitions and principles underlying the WRS, while Part 4 provides for specific rules (with commentaries) on "Negotiation and Transfer," including security rights. Significantly, the WBF Guide provides rules with respect to transfers of both paper warehouse receipts as well as electronic warehouse receipts.

8. IFC Guide: The IFC Guide aims to provide guidance "to help bankers lend against commodities stored in warehouses in a wide variety of country contexts".¹¹ However, like its WBG counterpart, the IFC Guide covers a broad spectrum of private law issues, including "[h]ow laws recognize security interests in warehouse receipts"¹² and "[n]egotiability and transferability".¹³ Unlike the WBG Guide, which was designed to aid policymakers and legislative drafters, the IFC Guide doesn't contain an equivalent to the Model Warehouse Receipts Act. However, Chapter 5 contains a useful section on "[s]hift from paper-based to electronic systems," and Chapter 10 summarizes warehouse receipt practices in India, Vietnam, Sub-Saharan Africa, Eastern Europe, and the former Soviet Union.

9. FAO/EBRD Guide: Similar to the WBG Guide, the FAO/EBRD Guide aims to assist WRS reformers in drafting legislation. The FAO/EBRD Guide states that it "aims to shed light on the development of warehouse receipt legislation [...] worldwide, and to provide countries with guidance and country-based examples on how to develop enabling legislation."14 Part II of the Guide first highlights the necessary preliminary considerations when introducing of reforming warehouse receipt legislation, and then presents, compares and analyses different options for designing its core elements. This analysis covers several private law aspects, including contractual rights and obligations of the parties as well as negotiation and transfer of warehouse receipts. Part III contains detailed country case studies of legislation in several jurisdictions with citations to relevant laws. The FAO/EBRD Guide does not contain model warehouse receipts legislation similar to the WBG Guide, but rather offers, based on country examples, a broad spectrum of legislative options taking into consideration different contexts and policy objectives for reforms. It should be noted that the FAO/EBRD Guide takes into account many aspects of the civil law tradition, such as the mechanics of transferring "double" warehouse receipts when a pledge bond is issued to accompany the warehouse receipt to facilitate its use as collateral.

10. OAS Principles: The OAS Principles are different from the three guides discussed above in that they present a general program for instituting an electronic WRS among Latin-American countries, including "to pave the way for future development of legal instruments in this subject matter, such as a model law".¹⁵ Accordingly, the OAS Principles do not provide for a model law in the manner of the WBG Guide, but rather the main principles that a WRS reform among OAS member states should adhere to. Furthermore, they are limited to the storage of agricultural commodities. The OAS set forth several principles related to the institution of an electronic WRS (based on the experience of the United States) in which warehouse operators issue and transfer electronic warehouse receipts (EWRs) via platforms set up by government-licensed EWR providers. Under the

⁹ See Module 2, p. 11.

¹⁰ See p. 60.

¹¹ IFC Guide, p. 1.

¹² Id. at Sec. 4.3.

¹³ Id. at Sec. 4.4.

¹⁴ EBRD/FAO Guide, p. ix.

¹⁵ OAS Principles, p. 4.

OAS Principles, electronic platforms would facilitate transfers of EWRs, and those in "control" would acquire rights equivalent to holders of paper warehouse receipts.

B. Instruments Relevant for Particular Aspects of Warehouse Receipts

11. MLST: Virtually all of the guides of a general nature summarised in the preceding Section recognize that, as part of any warehouse receipts reform, attention should be paid to the secured transaction framework currently in place. This is primarily to ensure that transfers of warehouse receipts for purposes of creating security rights are governed by the perfection and priority regime set forth in the relevant secured transaction legislation. For example, the WBG Guide emphasizes the need for warehousing legislation reform to address security rights in a commodity covered by a warehouse receipt.

12. The MLST recognizes a class of assets called "negotiable documents", which encompasses warehouse receipts, that fall under the general regime governing secured transactions. It sets out some specific rules applicable only to negotiable documents, such as achieving third-party effectiveness by taking possession.

13. MLETR: The MLETR aims to "enable the legal use of electronic transferable records [ETRs] both domestically and across borders."¹⁶ The MLETR "applies to [ETRs] that are functionally equivalent to transferable documents or instruments."¹⁷ ETRs are increasingly relevant for developing countries seeking to establish a market for EWRs to facilitate farmers' access to credit.¹⁸ They are a primary feature of a paperless trade environment.¹⁹ Chapter II provides for the "functional equivalence" of paper and electronic transferable records, especially with respect to their issuance and transfer.

14. IOSCO Reports: In June 2018, IOSCO published a report on "good and sound practices" for commodity storage and delivery infrastructure (hereinafter IOSCO Report). The IOSCO Report is based on previous IOSCO reports that generally aimed to develop recommendations "on regulation and supervision of commodity derivatives markets to strengthen transparency and address market abuse." In the context of warehouse receipts and commodity markets, the IOSCO Report provides guidance on storage infrastructure (e.g., warehouses, silos, tanks) and their relevant oversight bodies (e.g., market authority, trading venue, central counterparty). The IOSCO Reports are thus more relevant to the regulatory (as opposed to private law) aspects of a warehouse receipts law. However, because many commodity derivative exchanges and clearing houses act as regulators of warehouses that facilitate settlement of physically-delivered commodity derivatives contracts,²⁰ requirements imposed by exchanges may include the obligation to appropriately store a commodity of a quality specified in a derivatives contract and to deliver the specified quantity by the stipulated deadline.²¹ These obligations are essentially the same regardless of whether the warehouse receipt is issued for exchange trading.

¹⁶ UNCITRAL Model Law on Electronic Transferable Records (2017), available at <u>https://uncitral.un.org/en/texts/ecommerce/modellaw/electronic_transferable_records</u>.

¹⁷ Id. A transferable document or instruments is defined as "a document or instrument issued on paper that entitles the holder to claim the performance of the obligation indicated in the document or instrument and to transfer the right to performance of the obligation indicated in the document or instrument through the transfer of that document or instrument" (MLETR, Art. 2). Transferable documents or instruments typically include bills of lading, bills of exchange, promissory notes and warehouse receipts.

¹⁸ Id.

¹⁹ Id.

²⁰ Id.

²¹ Id.

II. COMPARATIVE LEGAL ANALYSIS ON WAREHOUSE RECEIPTS

A. Common Law and Civil Law Approaches

15. Common law and civil law jurisdictions take a number of similar, but also different approaches in their warehouse receipts legislation. An example would be the requirement to issue a double warehouse receipt for its use as collateral. In 1858, France enacted the Law on Transactions Related to Goods Stored in General Warehouses (General Warehouses Law), with the goal of establishing, among others, a warehouse receipt system comprised of two documents: a warehouse receipt and a warrant. Several civil law jurisdictions followed the French example and implemented a dual WRS, where the warehouse issues a warehouse receipt (also known as a certificate of title) and a warrant (also known as a pledge bond). The warehouse receipt represents ownership rights over the stored goods while the pledge bond is used to secure an obligation, such as a loan to a farmer who deposited crop into a warehouse. In addition, some civil law jurisdictions analogize warehouse receipts to negotiable instruments and securities, applying many rules governing these instruments and securities interchangeably.

16. Common law jurisdictions, other than the United States, were slower to develop specific warehouse receipts acts, instead relying on existing contract law and jurisprudence. The United Kingdom, for example, does not have any specific warehouse receipt legislation.²² Following the model of the United States Uniform Commercial Code (UCC) Article 7, many common law jurisdictions, including Malawi and Pakistan enacted specific warehouse receipts statutes. Unlike a double warehouse receipt, common law jurisdictions have typically adopted a single warehouse receipt with the dual purpose of financing and title transfer.²³

B. Sources of Law

17. The private law framework governing WRS is often found in either a Civil/Commercial Code of general application, or, as is the case in some common law jurisdictions, a standalone statute. Sometimes, a jurisdiction will have specific warehouse receipts statutes dedicated to particular sectors of the economy (e.g. agriculture) or even particular commodities (e.g. grain). This is also true for jurisdictions that have instituted electronic warehouse receipts systems, which are often contained in a law separate from the "paper system".

18. Civil and commercial codes: Most civil law jurisdictions have included their (paper) WRS in a Civil/Commercial Code. These laws typically set forth the requirements for a contract for the storage of goods (bailment contract), the rights and duties of the warehouse operator and the depositor of the good, the rules governing the transfer of warehouse receipts, as well as the rights of holders of each of the two documents comprising the double warehouse receipt.

19. For instance, the French WRS is mainly governed by the *Code de Commerce*.²⁴ This is also true in Spain, whose WRS is provided for in the *Código de Comercio*.²⁵ Bulgaria's WRS is contained in the Commercial Law, which is similar in form to a commercial code typically enacted in a civil-law jurisdiction that contains provisions governing warehouse receipts transactions for all goods. Similarly, the UAE' warehouse receipts framework is included in the Commercial Transactions Law, which provides for generally applicable rules governing paper warehouse receipts, including their issuance and transfer, as well as the rights and duties of holders and warehouses. The main laws

²² Id.

²³ Id.

²⁴ Specifically, warehouses are governed by sections 1-3 of Chapter II, Title II, Book V of the Code de Commerce; and warehouse receipts and commercial warrants are governed by section 4 of Chapter II, Title II, Book V.

²⁵ See Articles 193-198.

affecting the Mexican WRS system include the *Código de Comercio*, as well as some statutes of general application, such as the General Law on Credit Instruments and Operations²⁶ and the General Law on Auxiliary Organizations and Credit Activities.²⁷

20. Standalone laws: Many jurisdictions have also adopted standalone laws governing the WRS. For instance, Malawi's WRS is governed by the Warehouse Receipts Act of 2018, which is based on the U.S. UCC Article 7.²⁸ The main law governing the WRS of the Philippines, moreover, is the Warehouse Receipts Act, which applies generally to all goods.

21. Some jurisdictions have enacted more narrow warehouse receipts laws that may even supplement a general law. Standalone WR laws apply to specific sectors of the economy or to specific commodities, such as in the case of Spain, which enacted a law on agricultural pledge and warrants.²⁹ Similarly, in the Philippines, the National Food Authority Act (1981) is limited to food products/commodities, but mainly applies to grains. Ukraine's Law on Grain and Grain Market governs a (paper) WRS applicable to warehouse operators storing grain, which supplements the general WRS provided for in the Civil Code. Bulgaria has a standalone law governing warehouse receipts transactions for oil and petroleum products.³⁰ Finally, some jurisdictions provide for standalone warehouse receipts, which are separate from the rules pertaining to paper warehouse receipts.

C. Rules on Issuance, Transfer and Enforcement

22. A central component of the private law framework for warehouse receipts is rules governing transfers of warehouse receipts. Transfers of warehouse receipts typically occur either to create security rights over the underlying commodity, or to sell the underlying commodity. It is therefore important to identify how a given jurisdiction classifies warehouse receipts because such classification determines the manner in which a warehouse receipt may be transferred. Equally important is identifying the law relevant to the negotiability of warehouse receipts, particularly where some jurisdictions do not explicitly state whether a warehouse receipt is negotiable or not.

Negotiability of warehouse receipts

23. One way to classify warehouse receipts is according to how they are transferred, in which case a warehouse receipt may be (i) non-negotiable (e.g. the underlying asset may not be transferred by endorsement and/or delivery of the warehouse receipt), or (ii) negotiable (e.g. the underlying asset may be transferred by endorsement and/or delivery of the warehouse receipt).³¹ Many laws recognize both forms. In the Philippines, the Warehouse Receipt Act recognizes negotiable and non-negotiable warehouse receipts. Non-negotiable warehouse receipts must be clearly marked "non-negotiable" or "not negotiable." Also, in Mexico, warehouse receipts can be issued in negotiable or non-negotiable form.

24. An essential feature of virtually all warehouse receipt frameworks is the transfer of rights to the underlying commodity by way of endorsement and/or delivery of the warehouse receipt. Stated otherwise, a transfer of possession of the warehouse receipt (or transfer of control in the case of EWRs) is equivalent to a transfer of the underlying commodity. In many jurisdictions, this feature is

²⁶ Spanish: Ley General de Títulos y Operaciones de Crédito.

²⁷ Spanish: Ley General de Organizaciones y Actividades Auxiliares del Crédito.

²⁸ The WRA is supplemented by other applicable laws, including the PPSA and the common law and equitable principles relating to bailments, agency, fraud and misrepresentation, and sales of goods.

²⁹ Royal Decree 22 September 1917.

³⁰ See Law on the Storage of Crude Oil and Petroleum Products (2013).

³¹ See also UNIDROIT Study 83 – W.G. 1 – Doc. 3 (Issues Paper), Section E (Transfer and negotiation).

conceptualised in terms of "negotiability." Accordingly, a warehouse receipt is a type of "negotiable document."

25. Under French Law, the holder of the warehouse receipt and warrant may transfer them by endorsement, either together or separately. If the holder transfers the warehouse receipt and the warrant together, the transaction is considered a complete sale of the goods stored. However, if the stored goods were pledged before the owner transfers the warehouse receipt, it can only transfer the warehouse receipt – the warrant held by the creditor – and the buyer will take ownership of the stored goods subject to the warrant.

26. Other jurisdictions may not explicitly state that a warehouse receipt is "negotiable," but substantively provide for their negotiability by way of endorsement and/or delivery. This is the case in the Civil Codes of Azerbaijan, Belarus, Georgia, Kyrgyzstan, Russia, Tajikistan, Ukraine and Uzbekistan,³² which functionally provide for both non-negotiable as well as negotiable warehouse receipts. With the exception of Azerbaijan and Georgia, all of these jurisdictions classify negotiable warehouse receipts as types of securities, though in most cases warehouse receipts do not fall under the purview of the securities regulator. Notably, some of these jurisdictions, such as Kyrgyzstan and Ukraine, have also classified negotiable warehouse receipts as "negotiable documents" in standalone warehouse receipts legislation.

27. Laws may also provide for different levels of transferability/negotiation. Malawi's law provides for "due negotiation" of warehouse receipts, which requires the holder to purchase it in good faith and for value, without notice of any defense or claim, provided the negotiation was in the regular course of business and the document was not received or, with respect to EWRs, control taken in settlement or payment of a monetary obligation.

28. Issuance and transfer of warehouse receipts "to a bearer" and/or "to the order of": One way to categorise (negotiable) warehouse receipts is in terms of whom they may be issued and transferred to. Negotiable warehouse receipts made out "to a bearer" may be transferred without an endorsement to a named party, whereas warehouse receipts made out "to the order of" must be endorsed to a named party. In jurisdictions that provide for both "bearer" as well as "to the order of" warehouse receipts, the former is typically used to transfer ownership, whereas the latter is used to create security rights.

29. Under current French law, for example, warehouse receipts are issued as "to the order" documents, such that the warehouse receipt must state the name, occupation, and address of the depositor. In Mexico, no bearer warehouse receipts are allowed. Spain, on the other hand, allows for both the issuance/transfer of warehouse receipts to a named party as well as to a bearer.³³ Similarly, in Malawi, warehouse receipts may be issue and transferred "to the order of" or to a bearer. If, by its original terms, a paper warehouse receipt runs to the order of a named person, it may be negotiated (transferred) by endorsement and delivery. If, by its original terms, the paper warehouse receipt runs to bearer, it can be transferred by delivery alone. These rules mirror those found in UCC Article 7. In the UAE, a warehouse receipt may be issued to a named holder or a bearer.³⁴ In the Philippines, Article 37 of the Warehouse Receipts Act provides that "[a] negotiable receipt may be negotiated by delivery... [w]here, by the terms of the receipt, the warehouseman undertakes to deliver the goods to a bearer." Where the warehouse receipt is issued to a named holder, Article 37 also requires an endorsement. This same framework also applies in many former Soviet Union jurisdictions, which provide for a single warehouse receipt issued to a bearer and a double warehouse receipt issued to order.

³² These jurisdictions passed Civil Codes in the decade following the dissolution of the Soviet Union.

³³ See Article 194 of the Codigo de Commercio.

³⁴ See Article 185(1) of the Commercial Transections Law.

Single and double warehouse receipts

30. Warehouse receipts may also be classified in terms of how many documents they are comprised of. A warehouse receipt may thus either contain a single document (i.e. a single warehouse receipt), or it may be made up of two (separable) documents (i.e. a double warehouse receipt). The applicable law may provide for the use of one or the other, or both. The documents comprising the double warehouse are (i) a document representing legal title to the underlying commodity, and (ii) a document representing a security right over the underlying commodity (e.g. warrant/pledge bond). In jurisdictions that recognize double warehouse receipts, transfer of both documents is used, in theory, to sell the underlying commodity, whereas the transfer of just one of the two documents (e.g., the warrant/pledge bond) is used to create security rights over the underlying commodity. In practice, however, creditors in jurisdictions that provide for double warehouse receipts often take both documents in order to mitigate the risk of the pledgor retaining possession of the document representing legal title to the pledged commodity.

31. The dual nature of warehouse documents comprising a warehouse receipt (*certificado de depósito*)³⁵ and a pledge bond (*bono de prenda*)³⁶ is typical in Latin America. Unlike in Latin America, many former Soviet Union jurisdictions allow for the issuance of a single (negotiable) warehouse receipt (without a pledge bond/warrant). In addition to the single warehouse receipt, these jurisdictions recognize a double warehouse receipt.

32. Finally, some jurisdictions do not recognize the double warehouse receipt at all, and only provide for a single warehouse receipt, which may be issued/transferred either to the order of or to a bearer. These jurisdictions, for example, include Malawi and the Philippines.

Security rights

33. Civil law jurisdictions that provide for double warehouse receipts often set forth a specific mechanism for perfecting security rights. In Mexico, for instance, a security right (pledge) over the goods represented by a warehouse receipt can be perfected either by the endorsement and delivery of the warehouse receipt or by the issuance of the pledge bond.

34. In Malawi, in addition to transfer of possession (or control) to the secured creditor, a security right may be perfected by registration of a notice in the collateral registry. Where the goods are in the possession of the issuer of the warehouse receipt, the security right perfected in the warehouse receipt will also be perfected in the goods. The warehouse receipts law supplements the secured transactions law in that it contains rules on the priority rights of purchasers of negotiable warehouse receipts, granting purchasers priority over perfected security rights in negotiable warehouse receipts where the purchaser: (i) gave value; (ii) acquired the negotiable warehouse receipt without actual knowledge that the transaction breached the security agreement; and (iii) took possession or control of the negotiable warehouse receipt.³⁷

Enforcement

35. Some warehouse receipts legislation also provides for remedies upon default of a debtor that should be coordinated with the rules of secured transactions laws. In many, especially civil-law jurisdictions, warehouse receipts financing has been popular because the relevant laws that generally prohibit extra-judicial enforcement provided for exceptions, including for possessory pledges. Modern secured transactions laws typically allow secured creditors, including those with a security right in a warehouse receipt, to realize the collateral without a court order upon default by the debtor. In the absence of applicable modern secured transactions law, warehouse receipt legislation may provide

³⁵ In Spain: "resguardo de depósito" – Royal Decree July 1917, Art 16.

³⁶ "Resguardo de garantía"— Id.

³⁷ Section 40(1), WRA.

for specific enforcement mechanisms, which present some peculiar features not commonly associated with other types of secured transactions, such as the collateral (warehouse receipt) already being in possession of the secured creditor and the often perishable nature of the underlying commodity. Upon default, the secured creditor may thus appropriate the collateral or sell the warehouse receipt extra-judicially.

36. For example, Kyrgyzstan's pledge law provides the basis for a pledgee holding a warehouse receipt to take possession of the underlying goods and sell them immediately after the pledgor fails to perform its obligations under the pledge agreement. Moreover, the recently enacted warehouse receipts law provides that secured creditors in possession of the pledge certificate (warrant) may take possession of the agricultural products stored in the warehouse and sell them in accordance with the regime governing pledges.

37. Transfers of electronic warehouse receipts: Warehouse receipts issued electronically may not naturally be transferred by delivery of possession. Laws should thus provide for a functional equivalent to the effect achieved by delivery of possession. The WBG Guide states that "[d]elivery of a negotiable electronic document is through voluntary transfer of control. The control concept as applied to negotiable [EWRs] is the substitute for both possession and endorsement as applied to negotiable documents of title." The same concept of control is referenced in the OAS Principles, which provide that "the person in control of [an EWR] ... is entitled to the same rights as the depositor", and is the cornerstone of the MLETR.

38. Several jurisdictions (e.g., Malawi) have recently enacted legislation to enable transfers of EWRs by control.

Comparative Table of Warehouse Receipt Regulation								
Jurisdiction	Definition	Types	Electronic	Negotiability				
Bulgaria	"Security evidencing the stockpiling of [crude oil and petroleum products]."*	Double (paper) warehouse receipt	Paper only	Endorsement to the order of and delivery of possession**				
Kyrgyzstan	"[] security issued in paper or electronic form that is a negotiable document, issued by a commodity warehouse in confirmation that the [commodity] was accepted for bailment pursuant to an agreement of warehouse bailment and will be released to its bearer."***	Single and double warehouse receipts	Recognized	Endorsement and/or delivery (including to a bearer) of possession/control				
Malawi	"Document of title issued [] by a warehouse operator, and includes a warehouse keeper's certificate, a warrant [] and a certificate of deposit or storage agreement []."	Single warehouse receipt	Recognized	Endorsement and/or delivery (including to a bearer) of possession/control				
Mexico	"Evidence of [] ownership of goods deposited in a warehouse that issues it."	Double (paper) warehouse receipt	Paper only	Endorsement to the order of and delivery of possession				

Philippines	"Receipt[s] in which it is	Single (paper)	Paper only	Endorsement
Fimppines		•	raper only	
	stated that the goods received	warehouse		and/or delivery
	will be delivered to the bearer	receipt		(including to a
	or to the order of any person			bearer) of
	named in such receipt."			possession
Ukraine	"Negotiable documents issued	Single and	Paper only	Endorsement
	to a bearer or to the order of,	double (paper)		and/or delivery
	confirming the right of	warehouse		(including to a
	ownership over the goods	receipts		bearer) of
	stored in a [] warehouse."			possession
United Arab	"Paper certificate or electronic	Double	Recognized	Endorsement to
Emirates	document representing and	(paper)	within the	the order of and/or
	evidencing ownership of	warehouse	framework	delivery (including
	goods stored in a facility	receipt	of Dubai	to a bearer) of
	[]."****		Multi	possession/control
			Commodities	
			Centre	

* Definition of a warehouse receipt for petroleum products

** Except warehouse receipts for petroleum products, which cannot be negotiated

*** Definition of single warehouse receipt for agricultural products

**** Definition of warehouse warrant issued within the framework of the Dubai Multi Commodities Centre

III. RECENT DEVELOPMENTS CONCERNING NEW TECHNOLOGIES

A. Electronic Warehouse Receipts Platforms

39. A WRS may be paper-based, electronic, or both. Virtually all of the international standards recognize the advantage of instituting an electronic system. An electronic system, for instance, provides for a speedier and more secure method of transferring warehouse receipts. However, an electronic system often requires establishing a new legal, regulatory and trading infrastructure, which may prove difficult/costly for emerging economies.

40. The IFC Guide identified a trend towards establishing an electronic WRS beginning in the 1990s, either within the framework of commodity exchanges, such as the London Metal Exchange or the Ethiopian Commodity Exchange (ECE), or within the framework of public systems applicable to all warehouses. Warehouse receipts have been issued electronically in the United States since the 1990s for specific types of commodities, such as cotton.³⁸

41. In the context of EWR systems, most jurisdictions have established central registries to record the issuance and transfer of EWRs.³⁹ It is important to distinguish between warehouse receipts registries that (i) merely record the issuance of warehouse receipts, and those that (ii) act as platforms enabling and giving legal effect to the issuance and transfers.⁴⁰ In the case of the former, registration may be a condition of validity designed to protect transferees against fraudulent issuance of warehouse receipts. In the case of the latter, the registry would not only perform these functions, but also give effect to transferring rights embedded in EWRs.

³⁸ See <u>https://www.ewrinc.com/products/cotton-receipts</u>.

³⁹ See also UNIDROIT Study 83 – W.G. 1 – Doc. 3 (Issues Paper), Section D (Registration).

⁴⁰ IFC Guide, p. 31 ("Registries may either be paper-based or electronic; in the latter case, they are an integral part of an e-WR system. Indeed, the move to an electronic system facilitates the establishment of a registry, as the central server provides the data that a registrar will need—i.e., the link between an identified physical inventory and its corresponding WR—and an audit trail of past transactions").

42. The following summarizes the experience of Ethiopia, India, Mexico, Pakistan, Philippines, South Africa, UAE, the United States, and Zambia in instituting EWR systems and accompanying platforms for the registration and transfers of EWRs.

43. Ethiopia: The Ethiopian Commodity Exchange (ECX) has been authorized to introduce warehouse receipt financing in collaboration with the Commercial Bank of Ethiopia (CBE), the largest commercial bank in the country.⁴¹ Almost a decade earlier, CBE had conducted warehouse receipts financing until ECX issued a directive limiting storage of products at ECX warehouses to not more than 45 days. In FY 2018/19, ECX processed commodities trades valued at more than \$1 billion.⁴²

44. In Ethiopia, the primary challenge was to update the legal regime to provide a mechanism for control of EWRs that would enable their use as collateral, i.e., the perfection of security rights by control. Neither the MPSR nor the warehouse receipts proclamation provide how possession of electronic documents is transferred or obtained in an electronic environment. No other laws, including the Electronic Signature (document) Proclamation No. 1072/2018, contain provisions dealing with transfers of electronic documents. The important step of recognizing EWR had already been made in 2003 under Proclamation No. 372/2003 to Provide for a Warehouse Receipts System, which replaced Articles 2806-2824 of the Civil Code. In an EWR system, once a warehouse receipt is marked as "pledged", the depositor cannot take any action with the receipt without the consent of the pledgee. This means that the pledge mark allows the pledgee to exercise full control over the receipt.

45. India: As part of India's efforts to address COVID-19 by decongesting its agricultural markets (*mandis*), the government launched two new software modules for its online National Agriculture Market (e-NAM) trading platform.⁴³ The new warehouse-based trading module will facilitate trading from the premises of warehouses using negotiable electronic warehouse receipts (e-NWR), while the other module will allow farmers to get access to the e-NAM platform from collection centers set up by farmer producer organizations (FPOs).⁴⁴ The e-NAM platform serves a total number of 1000 *mandis* across India.⁴⁵ eNAM has a registered user base of 16.6 million farmers and 131,000 traders, and supports 150 commodities, including food grains, oilseeds, fibers, fruits and vegetables.⁴⁶

46. Mexico: In 2014, Mexico reformed its WRS legal framework to provide for a centralized warehouse receipts (and pledge bonds) registry known as RUCAM administered by the Ministry of Economy. RUCAM's objective is to provide increased legal certainty to lenders when securing obligations with pledge bonds. Warehouses must register issuances, modifications, and cancelations of warehouse receipts and pledge bonds. RUCAM is free of charge and can be searched by the general public.

⁴¹ Id.; and see ECX starts warehouse receipt finance, (Capital Ethiopia, Dec. 30, 2019), https://www.capitalethiopia.com/capital/ecx-starts-warehouse-receipt-finance/; IFC Supported Warehouse System Ethiopia, Receipt Financing Launched in (World Bank, Feb. 2020), https://collaboration.worldbank.org/content/usergenerated/asi/cloud/attachments/sites/collaboration-fordevelopment/en/groups/agrifin/products/jcr:content/content/primary/blog/ifc_supported_warehos4aM/IFC%20Supported%20Warehouse%20Receipt%20Financing%20System%20Launched%20in%20Ethiopia. pdf

⁴² Mhret Kristos, ECX Plans to Construct Four Warehouses This Year, (Ethiopian Monitor Aug. 2, 2019), <u>https://ethiopianmonitor.com/2019/08/02/ecx-plans-to-construct-four-warehouses-this-year/</u>.

 ⁴³ New Features Added to eNAM to Boost Supply Chains, (Financial Express, Apr. 3, 2020), <u>https://www.financialexpress.com/economy/new-features-added-to-enam-to-boost-supply-chains/1917469/</u>.
⁴⁴ Id.

⁴⁵ 38 New Mandis Integrated with eNAM – The Pan-India Electronic Agri-Produce Trading Portal Reaches Milestone of 1000 Mandis Across 18 States & 3 UTs, (Ministry of Agriculture & Farmers Welfare, May 15, 2020), <u>https://www.pib.gov.in/PressReleasePage.aspx?PRID=1624083</u>.

⁴⁶ Id.

13.

Pakistan: The Pakistan Mercantile Exchange Limited (PMEX) was established in 2007 to 47. support trading of locally produced agricultural commodities.⁴⁷ Under an initiative of the Government of Pakistan (GoP) led by the Securities & Exchange Commission of Pakistan (SECP), PMEX is working to integrate its system with Pakistan's first Collateral Management Company (CMC) to offer an endto-end trading facility for Pakistan's farmers using EWRs.⁴⁸ As part of efforts to improve institutional financing to the agricultural sector and rural population, particularly small farmers, the State Bank of Pakistan (SBP) announced, in October 2019, that it had amended its Prudential Regulations of Agriculture Financing, SME Financing, and Corporate & Commercial Banking to allow banks to accept EWRs as collateral for financing.⁴⁹ Pakistan's Financial Institutions (Secured Transactions) Act, 2016 includes warehouse receipts in its definition of documents of title, which however does not include the electronic variety.⁵⁰ Under the new Prudential Regulations for Agriculture Financing, EWRs may be used as proof of title to pledged or hypothecated agricultural produce, which is defined as a form of security.⁵¹ This follows changes on 31 July 2019 by the Securities & Exchange Commission of Pakistan (SECP) to the Collateral Management Companies (CMC) Regulations 2019, under the Companies Act 2017 to promote warehouse receipt financing and electronic trading of agricultural commodities.⁵² Amendments to the Secured Transactions Act (2016) and the 2002 Electronic Transactions Ordinance have been proposed to ensure that they enabled the issuance and transfers of warehouse receipts in electronic form.

48. Philippines: The Philippines has been working towards establishing a central warehouse receipts registry for the issuance and transfer of electronic warehouse receipts.

South Africa: In the 2019-2020 season, around 3 million tons of grain was traded on the 49. South African Futures Exchange (SAFEX), a Johannesburg Stock Exchange (JSE) subsidiary, with most trades backed by electronic silo certificates (ESC).53

50. UAE: The UAE has a WRS that utilizes a modern EWR platform, which facilitates the issuance, transfer and registration of EWRs, including for collateral purposes. Notably, the e-WRS is primarily utilized for transactions involving metals and plastics, rather than agricultural products. Participation in the e-WRS is conditioned on entering into various standard-form contracts with the market authority, which prescribes the terms for accessing the EWR platform and other relevant trade infrastructure, such as the commodity exchange. Although some aspects of the UAE's WRS are provided for in legislation, its main elements are contained in operating agreements and exchange rules, which is a similar framework to South Africa. The operating framework is provided by the Dubai Multi Commodities Centre (DMCC), which is a private trade and finance entity formed by the Dubai Government in 2002 with a mandate to set up an infrastructure capable of supporting a commodities marketplace within its "free zone." To those ends, the DMCC instituted an EWR platform called "Tradeflow" that not only facilitates the transfer of rights to commodities utilizing EWRs, but also records the same transfers into its central registry, including the registration of ownership, its transfers and pledges.

⁴⁷ PMEX Envisions an Ecosystem for Domestic Commodity Trading, (PMEX, Khaleej Times, Mar. 23, 2020), https://www.pmex.com.pk/pmex-envisions-an-ecosystem-for-domestic-commodity-trading/. 48 Id.

⁴⁹ AC&MFD Circular Letter No. 03 of 2019: Prudential Regulations for Agriculture Financing - Electronic Warehouse Receipt, (State Bank of Pakistan, Oct. 18, 2019), http://www.sbp.org.pk/acd/2019/CL3.htm.

⁵⁰ Financial Institutions (Secured Transactions) Act, 2016, art 2(li).

⁵¹ See Id., updating Prudential Regulations For Agriculture Financing (2014), art 20(ii).

⁵² State Bank of Pakistan Allows Electronic Warehouse Receipt as Collateral for Bank Financing, (State Bank of Pakistan - External Relations Department, Oct. 31, 2019), http://www.sbp.org.pk/press/2019/Pr-31-Oct-<u>19.pdf</u>.

⁵³ Jack Thunde and Bob Baulch, Who Uses and Who Benefits From Warehouse Receipt Systems?, 7, (IFPRI Malawi, May 2020), <u>http://massp.ifpri.info/files/2020/05/MaSSP-Working-Paper-35 Who-Uses-and-Who-</u> Benefits-From-WRS May-12-2020.pdf.

51. In the United States, EWRs have been used for over two decades, although there is no single nationwide registry system. The United States Department of Agriculture licenses operators of EWR systems, such as eGrain and EWR, Inc. – the two major providers of EWR systems to warehouse operators. These systems are de facto registries.

52. Zambia: Zambia's commodity exchange, ZAMACE, was launched in 2015 and uses the same ESC software as the JSE for its electronic WRS.⁵⁴ However, quantities traded on ZAMACE remain low (only 4000 tons of maize in 2018).⁵⁵ While ZAMACE has certified at least 8 private sector warehouse operators with more than 300,000 tons of storage, use of their electronic silo receipts system was negligible in 2019.⁵⁶ In February 2020, ZAMACE's ESCs became tradeable on an agricultural commodity platform launched jointly by ZAMACE and the Lusaka Securities Exchange.⁵⁷

B. Recent Blockchain and Distributed Ledger Applications

53. Registries and platforms can be designed and operated as centralized systems, as the abovesummarized national experiences reveal, or adopt a distributed or decentralized model. Initiatives developed in other countries illustrate the implementation of DLT-based models for warehouse receipts systems. These initiatives are driven by the private sector.

54. The Nigerian commodities exchange, Afex, has announced plans to introduce a blockchainbased platform for warehouse receipts as part of efforts to reduce fraud for creditors and increase liquidity for farmers.⁵⁸ Developed by trade finance fintech Trade Finance Market (TFM), the Afex platform will be integrated with Afex's existing e-WRS.⁵⁹ Afex operates 45 warehouses in Nigeria.⁶⁰ In 2018, in a similar initiative to streamline financing of smallholder farmers, Afex partnered with Sterling Bank and blockchain-firm Binkabi to launch a blockchain-based commodity finance platform.61 That platform tokenized EWRs for trading and use as collateral.⁶²

55. On 27 September 2020, China's petrochemical industry successfully implemented its first digital warehouse receipt pledge financing transaction on Sinochem Energy High-Tech's blockchain based Digital Warehouse Receipt Platform.⁶³ The platform uses Internet of Things (IoT) technology to closely monitor the goods recorded on the digital warehouse receipts.⁶⁴ Using the platform, the China Construction Bank issued the loan within one day of issuance of the warehouse receipts at a cost 40% lower than that of typical trade finance market rates.⁶⁵ China's metals sector is also adopting blockchain warehouse receipts.⁶⁶

⁵⁴ Id.

⁵⁵ Id.

⁵⁶ Id.

⁵⁷ Id.

⁵⁸ Felix Thompson, Nigeria's Afex to Roll out Blockchain Solution for Warehouse Receipts, (Global Trade Review, Sep. 30, 2020), <u>https://www.gtreview.com/news/africa/nigerias-afex-to-roll-out-blockchain-solutionfor-warehouse-receipts/</u>; see also, Afex to Introduce Blockchain-Based App for Warehouse Receipt Checks, (The Paypers, Oct. 2, 2020), <u>https://thepaypers.com/digital-identity-security-online-fraud/afex-to-introduceblockchain-based-app-for-warehouse-receipt-checks--1244920</u>.

⁵⁹ Id.

⁶⁰ Id.

⁶¹ Id.

⁶² Id.

⁶³ China's Petrochemical Industry Launches Blockchain Warehouse Receipt Financing Trade, (ACN Newswire, Oct. 15, 2020), <u>https://stockhouse.com/news/press-releases/2020/10/15/china-s-petrochemical-industry-launches-blockchain-warehouse-receipt-financing</u>; see also Sinochem, One of China's Largest Oil Firms Introduces Warehouse Receipt Blockchain, <u>https://www.ledgerinsights.com/sinochem-china-oil-warehouse-receipt-blockchain/</u>.

⁶⁴ Id.

⁶⁵ Id.

⁶⁶ Sinochem, One of China's Largest Oil Firms Introduces Warehouse Receipt Blockchain, <u>https://www.ledgerinsights.com/sinochem-china-oil-warehouse-receipt-blockchain/</u>.

ANNEXE 1

WRS INITIATIVES BY INTERNATIONAL AND REGIONAL ORGANISATIONS AT A GLANCE

	WRS INITIATIVES BY INTERNATIONAL AND REGIONAL ORGANIZATIONS AT A GLANCE ⁶⁷								
	Scope	e-WRS	Transfers	Licensing	Performance guarantees	Registry	Rights of secured creditors	Type of Warehouse Receipts Covered	
WBG ⁶⁸	Not limit the types of movable assets the law applies to (the licensing regime may be limited to certain commodities) (p. 58)	Instituted if deemed appropriat e and practical (p. 57)	Depend on whether the WR is negotiable or non- negotiable (p. 87)	Licensing and registration should be voluntary and failure to obtain a warehouse operator's license or to register a warehouse document should not affect the WRs validity or enforceability as against the warehouse operator or any transferor (p. 18)	Require adequate insurance coverage for the warehouse (p. 18)	To give notice to prospective lenders and to confirm validity and subsequent transfers to purchasers (p. 58)	Not subject to registration and rights should extend to bankruptcy proceedings (p. 54)	Single	
IFC ⁶⁹	Establish the types of commodities and warehouses (p. 34)	More secure and efficient systems possible than in the past (p. vii)	Based on the principle of negotiability, which is a prerequisite to efficient transfer of title (p. 3)	Warehouses may or may not be licensed under a government scheme, or may be accredited in some other way—e.g., by an industry association or a commodity exchange (p. 6)	Need to establish a form of guarantee or indemnity fund to protect depositors and financiers in the event of warehouse failure, nonperformance, or fraud (p. 23)	To minimize the risk of forgery (p. 30)	Protected by acts recognized in the law providing for creation, perfection and priority of a security right (p. 25)	Single and double (p. xii)	

⁶⁷ Table adopted from UNCITRAL/NatLaw, Warehouse receipts: Developing an UNCITRAL Instrument on Warehouse Receipts (2019), available at <u>https://uncitral.un.org/sites/uncitral.un.org/files/warehouse receipts report final.pdf</u>.

⁶⁸ WBG, A Guide to Warehouse Receipt Financing Reform: Legislative Reform (2016), available at <u>http://documents.worldbank.org/curated/en/885791474533448759/pdf/108450-WP-PUBLIC.pdf</u> (last accessed 22 November 2020)

⁶⁹ IFC, Warehouse Financing and Warehouse Receipts Systems: A Guide for Financial Institutions in Emerging Economies (2013), available at <u>https://www.mongolbank.mn/conference/books/01.pdf.</u>

EBRD/ FAO ⁷⁰	Determine the set of goods or commodities that warehouse receipts can be issued for (p. 4) Provides guidance for general as well as sector/commodity- specific WR laws	Functional equivalents to paper WRs, which facilitate commerce and reduce transfer costs (p. 4)	Governed by principle of negotiability (p. 35)	May be required for warehouses to operate and issue receipts. Legislation assigns a competent institution to license and inspect warehouses, and determines this institution's mandate (p. 4)	Include mandatory insurance, performance bonds, letters of credit, and/or an indemnity fund (p. 4)	Legislation may establish a government registration system for warehouse receipts and determine the responsibilities of the registration office (p. 5)	Have the right to seize and liquidate the underlying stored goods and recover the debt (p. 5)	Single and double (p. 366)
OAS ⁷¹	Encompass electronic warehouse receipts used for agricultural products (p. 4)	Encourage d as an alternative to paper WRs (p. 2)	Transferee acquires rights equivalent to those transferred by negotiation of paper WRs (p. 7)	Carried out by an appropriate, independent governmental authority or private entity (p. 9)	Require warehouses to carry insurance or other forms of coverage to indemnify the depositor and/or any third parties (p. 9)	Recording of transactions involving EWRs as collateral (p. 6)	Rights provided for under a modern secured transactions regime applicable to WRs (p. 9)	Single and double (p. 6)
IOSCO ⁷²	Could be determined by an exchange's rules used to describe the regulatory framework for the operation of trading venues and of central counterparties (2018, p. 4)	Encompass es "electronic entitlemen ts" such as a warrant or electronic warehouse receipt (2016, p. iv)	May be facilitated using an exchange's electronic trading platform (2011, p. 9)	Could be carried out by market authority, an exchange, central counterparty, or a self- regulatory organization 2018, p. 4)	N/A	N/A	N/A	N/A

⁷⁰ EBRD/FAO, Designing Warehouse Receipt Legislation: Regulatory Options and Recent Trends (2014), available at <u>http://www.fao.org/3/a-i4318e.pdf.</u>

⁷¹ OAS, Principles for Electronic Warehouse Receipts for Agricultural Product (2016), available at <u>http://www.oas.org/en/sla/iajc/docs/CJI-doc 505-16 rev2.pdf</u>.

⁷² See, for example: IOSCO, Commodity Storage and Delivery Infrastructures: Good or Sound Practices, Consultation Report (June 2018), available at https://www.iosco.org/library/pubdocs/pdf/IOSCOPD604.pdf; IOSCO, Principles for the Regulation and Supervision of Commodity Derivatives Markets (Sept 2011), available at https://www.iosco.org/library/pubdocs/pdf/IOSCOPD604.pdf; IOSCO, Principles for the Regulation and Supervision of Commodity Derivatives Markets (Sept 2011), available at https://www.iosco.org/library/pubdocs/pdf/IOSCOPD358.pdf; IOSCO, The Impact of Storage and Delivery Infrastructure on Commodity Derivatives Market Pricing (May 2016), available at https://www.iosco.org/library/pubdocs/pdf/IOSCOPD358.pdf; IOSCO, The Impact of Storage and Delivery Infrastructure on Commodity Derivatives Market Pricing (May 2016), available at https://www.iosco.org/library/pubdocs/pdf/IOSCOPD530.pdf.

UNCITRAL 73	Applies to "electronic transferable records," which generally include warehouse receipts, but not securities and financial instruments (§ 1)	Electronic warehouse receipts may be classified as electronic transferabl e records, which are functionall y equivalent to paper warehouse receipts (§§ 2 and 10)	May be done in electronic form, including the endorsement and the delivery of possession, which is facilitated by the "control" concept (§§ 10-11)	N/A	N/A	N/A	N/A	N/A
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⁷³ UNCITRAL Model Law on Electronic Transferable Records (2017), available at <u>http://www.uncitral.org/pdf/english/texts/electcom/MLETR_ebook.pdf</u>.

ANNEXE 2

REFERENCES

UNCITRAL Instruments

UNCITRAL, UNCITRAL Legislative Guide on Secured Transactions (2007) <u>https://www.uncitral.org/pdf/english/texts/security-lg/e/09-82670 Ebook-Guide 09-04-10English.pdf</u>

UNCITRAL, UNCITRAL Guide on the Implementation of a Security Rights Registry (2013) <u>https://uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/en/security-rights-registry-guide-e.pdf</u>

UNCITRAL, UNCITRAL Model Law on Secured Transactions (2016) <u>https://uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/en/19-</u>08779 e ebook.pdf

UNCITRAL, UNCITRAL Model Law on Secured Transactions: Guide to Enactment (2017) <u>https://uncitral.un.org/sites/uncitral.un.org/files/media-</u><u>documents/uncitral/en/mlst_guide_to_enactment_e.pdf</u>

UNCITRAL, UNCITRAL Practice Guide to the Model Law on Secured Transactions (2019) <u>https://uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/en/19-10910 e.pdf</u>

Other Instruments

OAS, Principles for Electronic Warehouse Receipts for Agricultural Products (2016) <u>http://www.oas.org/en/sla/iajc/docs/CJI-doc_505-16_rev2.pdf</u>

OAS, Model Inter-American Law on Secured Transactions (2002) https://www.oas.org/dil/Model Law on Secured Transactions.pdf

Global SCF Forum, Standard Definitions for Techniques of Supply Chain Finance (2016) <u>https://iccwbo.org/content/uploads/sites/3/2017/01/ICC-Standard-Definitions-for-Techniques-of-Supply-Chain-Finance-Global-SCF-Forum-2016.pdf</u>

Guides and Publications

FAO, The Use of Warehouse Receipt Finance in Agriculture in Transition Countries (2013) <u>http://www.fao.org/3/a-i3339e.pdf</u>

FAO/EBRD, Designing Warehouse Receipt Legislation: Regulatory Options and Recent Trends (2015) <u>http://www.fao.org/3/a-i4318e.pdf</u>

IFC, Warehouse Finance and Warehouse Receipt Systems - A Guide for Financial Institutions in Emerging Economies (2013)

https://collaboration.worldbank.org/content/usergenerated/asi/cloud/ attachments/sites/collaboration-for-development/en/groups/agrifin/products/jcr:content /content/primary/blog/warehouse_financean-TQr3/Warehouse%20Finance%20and% 20Warehouse%20Receipt%20Systems.pdf IOSCO, Commodity Storage and Delivery Infrastructures: Good or Sound Practices, Consultation Report (2018)

https://www.iosco.org/library/pubdocs/pdf/IOSCOPD604.pdf

IOSCO, Principles for the Regulation and Supervision of Commodity Derivatives Markets (2011) http://www.iosco.org/library/pubdocs/pdf/IOSCOPD358.pdf

IOSCO, The Impact of Storage and Delivery Infrastructure on Commodity Derivatives Market Pricing (2016)

https://www.iosco.org/library/pubdocs/pdf/IOSCOPD530.pdf

WBG, A Guide to Warehouse Receipt Financing Reform: Legislative Reform (2016) <u>http://documents1.worldbank.org/curated/en/885791474533448759/pdf/108450-WP-PUBLIC.pdf</u>