#### **RESEARCH ARTICLE**





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(Accepted 15 September 2023)

#### Abstract

Given the increasing use of technology and the digitalization of international trade through electronic documents, there is a need for a globally harmonized standard that caters for the legal aspects of digitalization. The Model Law on Electronic Transferable Records (MLETR) is one such law. Yet, it has not been adopted in Nigeria or several other jurisdictions. This article considers the possibility of Nigeria adopting the MLETR. To do this, the article considers the meaning of electronic transferable documents and the legal implications of digitalizing them. The article also examines the barriers and challenges to digitalizing electronic transferable records. It then considers some of the laws in Nigeria that would support electronic and digital trade transactions. Subsequently, the article highlights the benefits, challenges and hindrances to the adoption of the MLETR in Nigeria. It recommends an approach to adopting the MLETR, drawing from jurisdictions that have adopted it.

Keywords: MLETR; digitalization; trade finance; digital provisions; electronic transferable records; ETR

#### Introduction

International trade involves several processes with various documents. These documents enable transactions to be facilitated between importers, exporters, shippers, logistics providers, customs brokers and freight forwarders. However, these documents are heavily paper-based and can be cumbersome and inefficient in the event of a global crisis, thus causing a significant slowdown of global trade. The COVID-19 pandemic demonstrated this and emphasized the importance of digital equivalents of trade documents as businesses struggled to continue transacting with paper-based documents, particularly transferable documents across various jurisdictions. These challenges include lack of legal certainty, a legal requirement that transferable documents must be in paper form and restricted transferability. There are also costs of transitioning from analogue to digital forms of documents.

In July 2017, the UN Commission on International Trade Law (UNCITRAL) adopted the Model Law on Electronic Transferable Records (MLETR), which aims to enable and facilitate the use of electronic transferable records (ETRs) in international trade by harmonizing the rules on the legal recognition of ETRs. Today, the Abu Dhabi Global Market, Bahrain, Singapore, Kiribati,

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Paraguay, Papua New Guinea, Belize and the United Arab Emirates (UAE) have adopted the MLETR. The UK has also recognized its usefulness,<sup>1</sup> and introduced a bill embracing several aspects and principles of the MLETR.<sup>2</sup> However, the benefits of the MLETR seem to be unnoticed, as many other countries such as Nigeria are yet to adopt the model law. In Japan, the Working Group for Commercial Law (Bills of Lading, etc) of the Legislative Council of the Ministry of Justice released on 31 March 2023 its interim Draft Concerning the Proposed Revisions of Provisions Concerning Bill of Lading, etc. The appendix to the supplemental explanatory notes has a table giving comparisons with the MLETR.<sup>3</sup>

This article examines the possibility of Nigeria adopting the MLETR. To do this, it first provides an overview of electronic trade documents and then discusses ETRs more specifically. It also considers the challenges of digitalization. It examines current laws supporting electronic transactions in Nigeria to understand and suggest how the MLETR should be adopted. The article further considers the benefits, challenges, barriers and hindrances to the adoption of the MLETR in Nigeria.

After this introduction the next section of this article provides an overview of the practice of international trade and accompanying documents. The article then examines various types of transferable documents / instruments and considers some of their advantages. It then provides a brief overview of the digital infrastructure that allows for the digitalization of trade documents: distributed ledger technology (DLT) or blockchain technology. The next section analyses the MLETR, specifically considering its purposes and aims. It also provides examples of countries that have adopted the MLETR and how they adopted it. The article then examines Nigerian laws on electronic transactions, the gaps that the MLETR can fill in international trade transactions in Nigeria and how the MLETR can fill those gaps. Given that there is currently a draft bill in the House of Assembly, the article analyses its provisions to determine how it conforms with the UNCITRAL texts on e-commerce. The article concludes with a call for the adoption of the MLETR in Nigeria.

#### The challenges of digitalizing transferable documents

## The law and practice of trade documents

In international trade transactions, there are various modes of payment for goods that come in documentary form. These include negotiable instruments (bills of exchange), bills of lading (BoLs), letters of credit and documentary collections. Parties often use the documentary letter of credit as the mode of payment. Apart from these payment documents, there are other relevant documents in international trade, including transport documents, insurance documents, certificates (of inspection, quality or origin) and commercial invoices. To digitalize trade, both the finance documents and these other documents need to be digitalized to ensure efficiency.

The documents used in international trade largely depend on the mode of transaction employed. One of the types of contracts in international sales is the documentary sale where ocean transport is used. In a documentary sale, possession and ownership of goods are transferred through negotiation and delivery of a negotiable document of title. Here, the buyer must pay upon the seller's presentation of a negotiable document of title. The documentary sale is vital to international trade because it allows the holder of the document of title to trade in the goods while they are still at sea. The documents may be bought and sold many times before the goods reach their final destination. Documentary collection in international sale is where international banks act as intermediaries

<sup>1 &</sup>quot;Digital assets: Electronic trade documents" (30 April 2021, Law Commission consultation paper 254), available at: <a href="https://cloud-platform-e218f50a4812967ba1215eaecede923f.s3.amazonaws.com/uploads/sites/30/2021/04/Electronic-trade-documents-CP.pdf">https://cloud-platform-e218f50a4812967ba1215eaecede923f.s3.amazonaws.com/uploads/sites/30/2021/04/Electronic-trade-documents-CP.pdf</a>> (last accessed 1 June 2024).

<sup>2</sup> The Electronics Trade Documents Act (HL Bill 57) started in the House of Lords and is currently in its third reading: <<u>https://bills.parliament.uk/bills/3344</u>> (last accessed 30 April 2024).

<sup>3 &</sup>quot;Corporation movements for legislation for electronic bills of lading in Japan (2)" (4 April 2023, Abe & Sakata Legal Professional), available at: <a href="https://abesakata.com/archives/419?en">https://abesakata.com/archives/419?en</a> (last accessed 30 April 2024).

between the seller and buyer to handle the exchange of the BoL in return for payment. Some of the documents that enable a documentary sale are negotiable documents of title, including the BoL and other documents such as insurance policies.

#### Bill of lading

A BoL is a document of title issued by an ocean carrier to a shipper upon receipt of goods for transport. The BoL gives the shipper and any subsequent holder contractual rights against the carrier and constructive possession of the goods. The BoL plays a significant role in international trade. Its main roles include: constituting a receipt for goods that have been put on board another person's ship; indicating any apparent damage to the goods; being a transport document, as a contract of carriage between the shipper and the carrier; and being a document of title to the goods described. While there is no statutory definition of a BoL, the court will consider certain characteristics of the document: whether it is titled BoL; whether it contains information ordinarily found in a BoL; and, where issued in a set of three originals, whether it includes the wording "one of which being accomplished, the others to stand void".<sup>4</sup> BoLs can be negotiable or non-negotiable. Non-negotiable bills are contracts of carriage and receipts for depositing goods with a carrier for shipment. Additionally, negotiable BoLs serve as documents of title.

Only negotiable BoLs can be used in a documentary sale. BoLs are important for international trade because of their negotiability. This trait means that, with a BoL, goods can be bought and traded while still afloat. The Hague-Visby rules enumerate the requirements of a BoL, including that it must enable the identification and verification of goods.<sup>5</sup> BoLs, from their evolution in maritime trade transactions, have been linked to paper documents. However, in their paper nature, they cause delays because they require many stakeholders to print, stamp and sign various paper copies before the goods are physically transported from their origin to destination.

#### Cargo insurance certificates

While in a documentary sales transaction the BoL ensures the goods have been loaded onto a ship, insurance covers losses during shipment. Thus, one of the essential elements of international trade is cargo insurance, because there is huge potential for damage and loss to goods during ocean shipments. The document used to evidence that the cargo is insured is the cargo insurance certificate. There are different types of coverage for virtually any type of risk, limited by price or the insurer's willingness to undertake the risk. There can be the perils clause, all risks coverage and war risk.

Usually, marine insurance certificates are issued under open-cover agreements where the insurer covers all cargoes declared by the insured person for a defined period. Certificates usually state the terms of cover and the process for claiming on the insurance. Where a transferee seeks to claim directly against the insurer, the certificate must be signed by the insurer and countersigned by the assured.<sup>6</sup> Certificates are transferable at common law. In practice, this is done through endorsement and delivery of the paper document. Although cargo certificates can be issued electronically, they cannot be transferred electronically. Thus, the legal recognition of electronic cargo insurance would enable it to be transferred electronically.

#### Certificates of inspection or analysis

These are vital trade documents necessary for importing specific consumer goods. Buyers usually require that an inspection report accompanies a BoL. There are two types of inspection certificates. An official certificate is required by customs authorities in some countries in order to process the clearance of the goods. These reports may certify the quantity, quality or other characteristics of the

<sup>4</sup> JI MacWilliam Co Inc v Mediterranean Shipping Co SA (The Rafaela S) [2005] UKHL 11 2 AC 423, para 5.

<sup>5</sup> AP Moller Maersk A/S trading as Maersk Line v Kyokuyo Ltd [2018] EWCA Civ 778.

<sup>6 &</sup>quot;Digital assets", above at note 1, para 3.63.

goods and ensure that they conform to the sales contract. A commercial inspection certificate reflects the pre-shipment inspection that needs to be done when the goods are presented for loading. Where the presented goods fail to meet the terms of the contract, the inspection will fail and the buyer can use the report to claim.

## Bills of exchange

According to section 3(1) of the English Bills of Exchange Act 1882 (BoE Act), a bill of exchange is: "an unconditional order in writing, addressed by one person to another, signed by the person giving it, requiring the person to whom it is addressed to pay on demand or at a fixed or determinable future time a sum certain in money to or to the order of a specified person, or to bearer". Examples of bills of exchange include cheques, where the bank is the drawee and is ordered to pay a sum of money to the name on the cheque. A bill of exchange is a negotiable instrument and a document of title to money.<sup>7</sup> It has three main characteristics. First, only if it is a bearer bill can it be transferred by delivery alone; this will be the case if it is expressed to be payable to bearer if it has been endorsed in blank. That is, simply handing over the bill will transfer title. Secondly, if the transferee is a "holder in due course",<sup>8</sup> they are able to take the goods free from most defects of title of initial parties.<sup>9</sup> Thirdly, the transfer of a bill of exchange is only valid without consideration if it is transferred to a holder in due course.<sup>10</sup>

In terms of function, a bill of exchange is a means of payment in international trade.<sup>11</sup> Prices can often be unstable as a result of exchange rate fluctuations. Bills of exchange provide assurance of a fixed price. A bill of exchange is also evidence of a payment owed by the drawee to the relevant payer.<sup>12</sup> As a means of financing, where a bill of exchange specifies a future payment date, the drawer can, at a discount, sell the bill of exchange to a third party. Thus, the selling of the bill of exchange or trading is a means of financing.

#### Promissory notes

A promissory note is a document that promises that the bearer or person named in the document will be paid a sum of money.<sup>13</sup> With a promissory note, the maker promises to pay. Historically, promissory notes originated from the mercantile custom, recognized by common law and codified in the BoE Act.<sup>14</sup> Promissory notes are negotiable instruments and documents of title to money.<sup>15</sup> Promissory notes must be an unconditional promise in writing, signed by the maker<sup>16</sup> and delivered.<sup>17</sup> Commercial practice is that promissory notes are paper-based, although this is not explicitly stated. Promissory notes are used in both domestic and international trade. Domestically, promissory notes function as security for a main contract. Thus, where the payor is in arrears, the payee can bring an action enforcing the promissory note. Furthermore, promissory notes can be used to raise finance. Here, the payee sells the note to a financial institution, which then receives the payment when it falls due.<sup>18</sup>

11 H Beale (ed) Chitty on Contracts (33rd ed, 2019, Sweet & Maxwell), para 34-003.

<sup>7</sup> M Bridge et al The Law of Personal Property (2nd ed, 2019, Oxford University Press), para 5-015.

<sup>8</sup> For definition, see BoE Act, sec 29(1).

<sup>9</sup> Id, sec 29(2) provides a non-exhaustive list of defects.

<sup>10</sup> Easton v Pratchett (1835) 1 Cr M 7 R 798 at 808.

<sup>12</sup> G Mihai "Bill of exchange: A modern and efficient instrument of payment within the commercial relations" (2016) 7 *Journal of Euro and Competitiveness* 15.

<sup>13</sup> BoE Act, sec 83(1).

<sup>14</sup> Goodwin v Robarts (1875) LR 10 Exch 337.

<sup>15</sup> BoE Act, secs 8, 31(1) and 89.

<sup>16</sup> Id, sec 83(1).

<sup>17</sup> Id, sec 84.

<sup>18</sup> Id, secs 29-30.

#### Documentary letter of credit

Broadly speaking, a letter of credit is an obligation of a bank issued on behalf of its customer with the promise to pay a sum of money to the beneficiary, provided certain events occur.<sup>19</sup> The letter of credit is usually irrevocable and can be domestic or international. It is used in international trade transactions to guarantee or provide security for payment for goods or services. The process of financing international transactions through a letter of credit can be cumbersome and complex. There can be at least 20 participants in one transaction, involving multiple parties and a large volume of documents.

#### Warehouse receipts

In the international trade process, there are certain times when goods are placed in a warehouse for storage. The warehouse keeper issues a document known as a warehouse receipt, which serves as a receipt for goods taken into its possession. In some jurisdictions, this document can confer title but, under common law, it is not a document of title. This means that handing over a warehouse receipt does not transfer constructive possession of the goods.<sup>20</sup> However, the Factors Act 1889<sup>21</sup> and the courts of England<sup>22</sup> construe warehouse receipts as documents of title. Warehouse receipts are issued and signed by the warehouse keeper. They include a description of the goods and the name of the person from whom the goods were received, as well as the conditions of storage. The legal consequences of the possession of a warehouse receipt depend on the terms of the document.<sup>23</sup>

# Transferable documents: An overview

Transferable documents in the ordinary sense are simply documents used in international trade.<sup>24</sup> Article 2 of the MLETR defines "transferable document or instrument" 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". Sometimes, the terms "transferable" and "negotiable" are used interchangeably. However, there are differences. In some ways, the classification of "transferable" and "negotiable" can be considered to indicate different senses of negotiability.<sup>25</sup> Broadly speaking, however, negotiable instruments are documents that have a "value which is much higher than the intrinsic value of the piece of paper itself, because it embodies a personal right which can only be enforced through possession of the document".<sup>26</sup> Thus, a negotiable document of title is a document that evidences the ownership of the goods it represents. Thus, the person with possession of the document is entitled to possession of the goods.

The general rule in commercial law is that a transferor cannot give a better title than they have to a third party. However, when an instrument is negotiable, the transferee, upon certain conditions being met, can obtain better rights. This was established in *Picker v London and County Banking* 

<sup>19</sup> R Schaffer et al International Business Law and Its Environment (9th ed, 2011, Cengage Learning) at 188.

<sup>20</sup> Mercuria Trading Pte Ltd v Citibank NA [2015] EWHC 1481 (Comm) 2015 1 CLC 999.

<sup>21</sup> Factors Act 1889, sec 1(4).

<sup>22</sup> See for instance, *Impala Warehousing and Logistics (Shanghai) Co Ltd v Wanxiang Resources (Singapore) Pte Ltd* [2015] EWHC 811 (Comm), [2015] 2 All ER (Comm) 234, para 55.

<sup>23 &</sup>quot;Digital assets", above at note 1 at 36.

<sup>24</sup> It is interesting to note that the title of a 2016 seminar suggests that UNCITRAL considered transferable documents to be instruments used in international trade: "Electronisation of transferable documents or instruments used in international trade" (seminar, 10–11 March 2016, Singapore, organised by UNCITRAL, Attorney General's Chambers of Singapore and The Association of Banks in Singapore), available at: <a href="https://abs.org.sg/docs/library/seminaretr2c47a29f299c69658b7dff00006ed795.pdf">https://abs.org.sg/docs/library/seminaretr2c47a29f299c69658b7dff00006ed795.pdf</a>> (last accessed 30 April 2024).

<sup>25 &</sup>quot;Digital assets", above at note 1.

<sup>26</sup> C Nagel et al Commercial Law (6th ed, 2019, Lexis Nexis) at 446.

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Co.<sup>27</sup> With transferable documents, the transferee acquires the right, through transfer, to claim the performance of the embodied obligation.<sup>28</sup> Under English law, transferable or negotiable documents are classified as documentary intangibles.<sup>29</sup> Documentary intangibles, a term first coined by Roy Goode,<sup>30</sup> has been defined by Bridge as "instruments or documents that are so much identified with the obligation embodied in them that the appropriate way to perform or transfer the obligation is through the medium of the document".<sup>31</sup> Specific classifications of transferable documents depend on the jurisdiction. Typically, however, they include BoLs, bills of exchange, promissory notes and warehouse receipts, but they are not limited to these instruments. Transferable instruments or documentary intangibles are essential for commercial transactions. Where a document is classified as a transferable document, several beneficial consequences follow. These include that delivery will become sufficient to transfer the right to claim performance of the embodied obligation. If the document were merely evidential, a further step would be required. Thus, the fact that a document is considered transferable makes transferring rights within the document more efficient and convenient in commercial transactions.<sup>32</sup> Transferable documents can also be the subject of bailment, ie, a party can have voluntary possession of goods belonging to another party. In such circumstances, the document is held as security.<sup>33</sup> Furthermore, there is more protection for the person who is in possession of a transferable document because the document is treated as a tangible asset in itself. The holder can therefore sue for trespass and conversion as well as negligence. In comparison, a person with any other possession is not covered by property torts.<sup>34</sup> The measure of damages when dealing with such transferable documents is the value of obligation or right embodied in the documents, whereas, with other documents, damages in conversion would just be the nominal value of the paper.<sup>35</sup> For an obligation in the document to be discharged, the person who owes the obligation must perform his obligations to the holder of the document. Thus, where performance is rendered to any other party, it cannot be considered to be discharged.

It can thus be seen that transferable documents play a vital role in international trade transactions. However, these transferable documents have for years been in paper form and, in most jurisdictions, are only recognized in such form. Paper-based transferable documents are fraught with challenges, such as miscommunication, complex documentation flow, lack of transparency and, increasingly, documentary fraud. These documents are cumbersome and generally inefficient, yet trade transactions consume an estimated four billion paper documents per year globally.<sup>36</sup> The slowdown of courier services and movement of paper documents due to COVID-19, advantageously hastened the digitalization of transferable records.

# Electronic transferable records

According to article 2 of the MLETR, ETRs are records that comply with the requirements of article 10. Article 10(1) provides that such records must contain "information that would be required to be contained in a transferable document or instrument and a reliable method is used to identify that electronic record as the electronic transferable record, to render that electronic record capable of

<sup>27 (1887) 18 (</sup>QBD).

<sup>28 &</sup>quot;Digital assets", above at note 1 at 24-25.

<sup>29</sup> Id at 24.

<sup>30</sup> The Crowther Report on Consumer Credit (1971, Department of Trade and Industry), vol 2 at 577.

<sup>31</sup> M Bridge Personal Property Law (4th ed, 2015, Clarendon Law Series) at 19.

<sup>32 &</sup>quot;Digital assets", above at note 1 at 26.

<sup>33</sup> Carter v Wake 4 Ch D 605 (1877); and Bristol and West of England Bank v Midland Rly Co 2 QB 653 (1891).

<sup>34</sup> R Goode and E McKendrick *Goode and McKendrick on Commercial Law* (6th ed, 2020, Penguin Books), para 2.57; "Digital assets", above at note 1 at 26, para 2.57.

<sup>35 &</sup>quot;Digital assets", ibid; OBG v Allan UKHL 21 (2008).

<sup>36 2020</sup> ICC Global Survey on Trade Finance (July 2020, International Chamber of Commerce), available at: <a href="https://library.iccwbo.org/content/tfb/pdf/2020iccglobaltradesurveyvweb.pdf">https://library.iccwbo.org/content/tfb/pdf/2020iccglobaltradesurveyvweb.pdf</a>> (last accessed 30 April 2024).

being subject to control for the lifespan of that record and to retain integrity of that electronic record". Integrity means that the record is complete and unaltered for its lifespan, apart from any change that arises in the normal course of communication, storage and display.

Thus, there are a few key characteristics that make a document an ETR. First, it must contain the same information as the information in a transferable document, so the electronic version must be functionally equivalent to the paper version. For instance, the information normally contained in a paper-based promissory note of any jurisdiction must be included in an electronic promissory note.

Secondly, a reliable method is necessary to identify the record as an electronic record. This means that the system used to render the electronic record capable of being subject to control must be reliable. While there is a general reliability standard in article 12 of the MLETR, the assessment of reliability for each method used is relative.<sup>37</sup> Thirdly, the ETR must retain integrity. Under article 10(b)(ii), integrity is retained when any set of information related to authorized changes remains purely complete and unaltered from the time the document is created to when it ceases to have effect or validity.<sup>38</sup>

Article 10 takes a functional equivalence approach. It does not aim to affect the principle that the substantive law of a jurisdiction should determine the rights of the person in control. As such, when all the above requirements are met, one has an ETR, which is essentially a replication of a paper transferable document.<sup>39</sup>

Using ETRs that are functionally equivalent to their paper version can make commercial transactions efficient, enhance trade connections, provide access for previously remote parties, and promote trade and economic development domestically and internationally. The benefits of better technology with respect to trade finance documents are well captured in the International Trade and Forfaiting Association statement that "the need for more and better technology has never been clearer. The fragility of supply chains, small and medium enterprise (SME) finance, and world trade has never been more exposed. The World Trade Organization (WTO) estimates that 80–90% of world trade depends on trade finance".<sup>40</sup>

## Challenges of ETRs

With these benefits, it only seems natural for commercial parties to seek the electronic version of paper documents to maximize efficiency in international trade. However, digitalizing trade finance documents has not been easy, and the process has not met with as much enthusiasm in the industry as its potential demands. One major obstacle is the regulatory aspect. Many jurisdictions only recognise paper-based negotiable instruments and legislators seem hesitant to create sustainable frameworks to facilitate the use of digital trade finance documents. In developing countries, such reluctance is traceable to lack of knowledge, digital infrastructure and policy capacity. There are three main challenges of digitalizing trade finance documents: lack of an enabling legal environment; lack of standardization of regulation and interoperability of technology and complexity; and costs of implementing digital solutions.

#### Lack of an enabling legal environment

Few jurisdictions recognize electronic trade documents as having the same qualities as their paper counterparts. The USA has achieved such recognition through amendments to the Uniform Commercial Code, which have been widely adopted in individual states. Legislation has also appeared in other jurisdictions, including Australia, Germany and South Korea. More recently,

<sup>37 &</sup>quot;MLETR explanatory notes" (2017), para 99.

<sup>38</sup> Id, para 101.

<sup>39</sup> Id, para 86.

<sup>40 &</sup>quot;Bringing negotiable instruments into the digital world" (June 2021, International Trade and Forfaiting Association), available at: <a href="https://itfa.org/bringing-negotiable-instruments-into-the-digital-world/">https://itfa.org/bringing-negotiable-instruments-into-the-digital-world/</a>> (last accessed 30 April 2024).

Belize, Bahrain, the UAE, Singapore, Kiribati, Paraguay and the Abu Dhabi Global Market have adopted legislation based on the MLETR.

For other countries, certain challenges remain. Electronic versions of paper documents did not replicate many of the fundamental properties of paper documents needed for legal applicability. For example, there are some issues with centralized digital solutions employed in trade finance, such as double spending and universal acceptability. Without transferability, these transferable instruments lose their benefit. The fact that a PDF file, which is an embodiment of rights worth millions of dollars, can be digitally copied multiple times, with no way to distinguish the original, and yet remains editable, can result in a lack of digital accountability.<sup>41</sup> The potential consequences of the unauthorized duplication of documents required a more rigorous solution, combining legal, technological and business solutions.<sup>42</sup> Furthermore, digitally signed documents did not incorporate document-ownership attributes and specific functions that negotiable instruments require. One could consider the UK to be a relevant example of a jurisdiction whose laws, while popular among commercial parties, are not equipped to recognize electronic trade documents. In English law, this is the problem of possession. Possession captures a legally significant relationship between a person and an item of property. Yet, it is distinct from ownership because one can be in possession of an object owned by somebody else.<sup>43</sup> Delivery under the BoE Act means the transfer of possession. However, legal precedent states that documentary intangibles are incapable of being possessed.<sup>44</sup> In this case, the House of Lords scarcely considered any argument that an intangible asset could be a thing in possession because the case was about a bare contractual right, although the court held that an action for wrongful interference with possession, where the relevant property was intangible, was unfounded.45

More recently and of significance is the decision in *Your Response Ltd v Datateam Business Media Ltd.*<sup>46</sup> Here, the relevant question was whether a possessory lien could be exercised over a database. Lord Justice Moore-Bick in the Court of Appeal argued that a database was a form of intangible property, not a physical object. Referring to *OBG v Allan*, the judge found that it could not be held that property of that kind is amenable to possession and, fundamentally, common law could hardly recognize the existence of intangible property other than things in action.<sup>47</sup> Therefore, under English law, electronic documents cannot be possessed and so are not legally recognized. The consultation by the Law Commission is positive but includes several considerations on amending the current state of the law.<sup>48</sup> In the consultation document is a draft bill (the Electronic Trade Documents Bill), which aims to make provision for trade documents in electronic form to have the same effect as trade documents, is particularly useful because it recognizes that a transfer can take effect when the transferee gains control.<sup>49</sup>

Apart from lack of recognition, there is also the uncertainty surrounding the recognition of electronic signatures and electronic documents. Currently, only about 60 countries have established laws and standards regarding electronic signatures and digital transactions.<sup>50</sup>

<sup>41</sup> Id at 7.

<sup>42 &</sup>quot;MLETR explanatory notes", above at note 37 at 17.

<sup>43 &</sup>quot;Digital assets", above at note 1 at 10.

<sup>44</sup> OBG Ltd v Allan, above at note 35.

<sup>45 &</sup>quot;Digital assets", above at note 1 at 12.

<sup>46</sup> QB 41 23 (2015).

<sup>47</sup> Ibid, generally. Colonial Bank v Whinney 30 Ch D 261 (1885).

<sup>48 &</sup>quot;Digital assets", above at note 1.

<sup>49</sup> Ibid.

<sup>50</sup> D Patel and E Ganne "Accelerating trade digitalization to support MSME financing" (March 2021), available at: <a href="https://www.wto.org/english/res\_e/booksp\_e/tradedigitaltomsmes\_e.pdf">https://www.wto.org/english/res\_e/booksp\_e/tradedigitaltomsmes\_e.pdf</a>> (last accessed 30 April 2024).

Nevertheless, there seems to be increasing legal certainty in digital trade transactions. For example, in October 2021, the International Chamber of Commerce (ICC) published the Uniform Rules for Digital Trade Transactions, which aim to serve as an overarching framework for a future fully digital trade environment under which other rulebooks may coexist.<sup>51</sup> This framework addresses the uncertainty associated with digital trade transactions, such as how parties can present electronic records to evidence a sale or payment obligation.<sup>52</sup> Interestingly, in Nigeria, various UNCITRAL-based electronic transactions have been proposed in the past decade, but none has been adopted.

## Lack of standardization: Regulation and interoperability of technology

While there are ongoing technology projects and initiatives related to trade finance, especially DLT technology, a continual challenge relates to the different systems and applications, which has limited the scalability of electronic documents. Furthermore, there is hardly any consensus on definitions, implementation and management. For example, cross-chain interoperability (the ability for one blockchain network to interact with another) is one of the challenges that prevents the widespread adoption of blockchain application in trade finance. The current cross-chain interoperability solutions are centralized and require re-engineering of the core blockchain stack to enable inter-communication and data-sharing among heterogeneous blockchain networks.<sup>53</sup>

The World Economic Forum identified business models, platforms and infrastructure as the three key layers to DLT interoperability.<sup>54</sup> It has been suggested that, in order to ensure industry-wide value maximization, firms and groups developing DLT solutions need to ensure that their solutions are designed from a standpoint that puts interoperability first and establishes connectivity across each of these three layers.<sup>55</sup>

Regulations in many countries are taking a variety of forms, with little standardization. To deal with this, efforts need to be made to develop global standards. Various organizations are currently creating standards for employing DLT in trade. Such standards include the general, such as the ICC's Digital Standards Initiative, and the specific, such as the Bankers Association for Finance and Trade (BAFT) distributed ledger payment commitments.<sup>56</sup>

#### Complexity and costs of implementing digital solutions

Businesses have been reluctant to adopt digital solutions, citing cost as the reason. In addition, it requires time and effort to implement digital solutions in trade finance. "Digitising a complex ecosystem involving myriad actors, rules and regulations sprawled across both physical and financial supply chains in multiple countries and industries is a challenge".<sup>57</sup> The International Data Corporation predicted that global spending on the necessary technologies and services for digital transformation would reach USD 2.3 trillion by 2023, with the financial services sector seeing the fastest growth with new investments.<sup>58</sup> Costs of transition could include, for instance,

<sup>51</sup> J Bidwell et al "Uniform Rules for Digital Trade Transactions (URDTT)" (version 1.0, 1 October 2021), available at: <a href="https://2go.iccwbo.org/uniform-rules-for-digital-trade-transactions-urdtt-version-1.html">https://2go.iccwbo.org/uniform-rules-for-digital-trade-transactions-urdtt-version-1.html</a>> (last accessed 30 April 2024).

<sup>52</sup> Ibid.

<sup>53</sup> M Madine et al "Application-level interoperability for blockchain networks" (February 2021) ResearchGate, available at: <a href="https://www.researchgate.net/publication/349270583\_Application-Level\_Interoperability\_for\_Blockchain\_Networks>">https://www.researchgate.net/publication/349270583\_Application-Level\_Interoperability\_for\_Blockchain\_Networks>">https://www.researchgate.net/publication/349270583\_Application-Level\_Interoperability\_for\_Blockchain\_Networks>">https://www.researchgate.net/publication/349270583\_Application-Level\_Interoperability\_for\_Blockchain\_Networks>">https://www.researchgate.net/publication/349270583\_Application-Level\_Interoperability\_for\_Blockchain\_Networks>">https://www.researchgate.net/publication/349270583\_Application-Level\_Interoperability\_for\_Blockchain\_Networks>">https://www.researchgate.net/publication/349270583\_Application-Level\_Interoperability\_for\_Blockchain\_Networks>">https://www.researchgate.net/publication/349270583\_Application-Level\_Interoperability\_for\_Blockchain\_Networks>">https://www.researchgate.net/publication/349270583\_Application-Level\_Interoperability\_for\_Blockchain\_Networks>">https://www.researchgate.net/publication/349270583\_Application-Level\_Interoperability\_for\_Blockchain\_Networks>">https://www.researchgate.net/publication/349270583\_Application-Level\_Interoperability\_for\_Blockchain\_Networks>">https://www.researchgate.net/publication/349270583\_Application\_Level\_Interoperability\_for\_Blockchain\_Networks>">https://www.researchgate.net/publication\_State\_Stat

<sup>54</sup> Inclusive Deployment of Blockchain for Supply Chains: Part 6 - A Framework for Blockchain Interoperability. (World Economic Forum with Deloitte white paper, April 2020), available at: <a href="https://www.weforum.org/docs/WEF\_A\_Framework\_for\_Blockchain\_Interoperability\_2020.pdf">https://www.weforum.org/docs/WEF\_A\_Framework\_for\_Blockchain\_Interoperability\_2020.pdf</a>> (last accessed 30 April 2024).

<sup>55</sup> Ibid.

<sup>56</sup> Patel and Ganne "Accelerating trade digitalization", above at note 50 at 41.

<sup>57</sup> D Patel "Digitising trade: The time is now" (season 1, episode 69, Trade Finance Talks) *Trade Finance Global*, available at: <a href="https://www.tradefinanceglobal.com/posts/podcast-s1-ep69-digitising-trade-the-time-is-now/">https://www.tradefinanceglobal.com/posts/podcast-s1-ep69-digitising-trade-the-time-is-now/</a>> (last accessed 30 April 2024).

<sup>58</sup> A Veneck "The cost of digital transformation" (2020), available at: <<u>https://www.lightico.com/blog/the-cost-of-digital-transformation/></u> (last accessed 30 April 2024).

investment in new training, new software and revised roles within organizations. This level of capital investment requires that businesses can prove the return.<sup>59</sup>

According to a Forrester report, companies are continuously investing in new technologies, applications and platforms (32 per cent) and upgrading legacy systems (32 per cent) in an effort to meet digital transformation goals.<sup>60</sup> Yet, there are other costs to consider, including mergers and acquisitions, and divestment and restructuring. Banks and financial services institutions must also think of security, compliance and ecosystem management. Implementing digital solutions requires companies to invest in security and compliance systems and mechanisms. Additionally, given the increasing dependence on a partner ecosystem to deliver customer value, firms must consider how to manage such ecosystems.<sup>61</sup>

These challenges are surmountable by building digital businesses using a dynamic ecosystem, designing technology architecture for agility and adopting a digital product mindset.<sup>62</sup> Ultimately, each institution deals with the costs of digital implementation differently depending on the institution's goals and capabilities.

## Existing solutions to ETR challenges

Despite the laudability of the MLETR, adoption has been slow. In the meantime, parties have resorted to private law solutions where there is no law for digital trade documentation. In such instances, parties agree between themselves to recognize electronic documentation, which has equivalent legal effects as for the paper counterpart. For instance, given the dearth of legislation for electronic BoLs, users have created closed loop systems where the parties agree to treat an electronic BoL as equivalent to a paper BoL.<sup>63</sup> There are also similar developments with respect to promissory notes and bills of exchange. Within these solutions, a party's legal position is recognized only if they sign up to a set of multipartite contractual terms. These provide the parties with a set of legal rights that are equivalent to the rights granted by paper documents. One significant challenge of these multipartite contractual frameworks is that parties have to have signed up to the terms of that particular platform and contracted with each other to determine who will have possession for the duration of the transaction.<sup>64</sup> This is complex and can be prohibitively expensive for smaller traders.

Secondly, parties only acquire personal, not proprietary, rights under this framework. Proprietary rights are enforceable against third parties but, because of the closed system, any party not signed onto the platform and contractual framework is exempt. In comparison, possession of the equivalent paper document would give the holder rights enforceable against the whole world.<sup>65</sup> This makes this solution severely limited.

 <sup>59</sup> C Hoffman "First mover disadvantage: The hesitancy behind eBL [electronic bills of lading] adoption" (13 October 2022) Trade Finance Global, available at: <a href="https://www.tradefinanceglobal.com/cots/first-mover-disadvantage-hesitancy-behind-ebl-adoption/amp/">https://www.tradefinanceglobal.com/cots/first-mover-disadvantage-hesitancy-behind-ebl-adoption/amp/> (last accessed 30 April 2024).</a>

60 Variab "The act of divided transformation" above at acta 59.

<sup>60</sup> Veneck "The cost of digital transformation", above at note 58.

<sup>61 &</sup>quot;Digital maturity fuels revenue growth how to succeed in a post-pandemic world" (Forrester Consulting thought leadership paper commissioned by UST, April 2021), available at: <a href="https://go.ust.com/forrester-digital-maturity-study-2021?utm\_source=google&utm\_medium=cpc&utm\_campaign=RE\_Search&utm\_medium=adwords&utm\_campaign= %5B\_campaign%7D&utm\_source=&utm\_term=digital%20transformation%20journey&hsa\_acc=2037824337&hsa\_cam= 14079571327&hsa\_grp=128649976987&hsa\_ad=544099734667&hsa\_src=g&hsa\_tgt=kwd-296569390014&hsa\_kw=digital% 20transformation%20journey&hsa\_mt=b&hsa\_net=adwords&hsa\_ver=3&gclid=CjwKCAjwz5iMBhAEEiwAMEAwGFCT4B-BdfEg91KOw1FkLaEk4wfoNwytQrs7CBMSugg6c7ntk9TKnhoCbgMQAvD\_BwE> (last accessed 30 April 2024).

<sup>62</sup> Ibid.

<sup>63 &</sup>quot;Digital assets", above at note 1 at 16.

<sup>64</sup> Ibid.

<sup>65</sup> Id at 16.

Thirdly, the contractual agreements or rulebooks are not interoperable.<sup>66</sup> Interoperability is the ability of digital systems to make specific kinds of transactions across two or more providers. These closed systems hardly have the ability to exchange and make use of information.

Finally, courts have not tested the legal validity and consequences of these contractual frameworks, unlike their paper equivalents, the position of which is well settled.<sup>67</sup>

# Distributed ledger technology / blockchain to facilitate digitalization of trade finance

The possibility of digitalizing trade finance documents seemed remote because of a lack of technology to enable electronic documents to replicate the relevant properties and functions of paper trade documents. In 2001, the UK Law Commission stated that there was no working equivalent or market demand for the electronic equivalent of a paper BoL, nor was there likely to be in the near future.<sup>68</sup> However, in a 2021 paper, the commission considered this view outdated.<sup>69</sup> DLT or block-chain now makes digitalization of trade finance documents possible.

DLT is part of what are considered to be connectivity technologies. These are "technologies that allow various systems and actors to connect, facilitating the exchange of data".<sup>70</sup> DLT allows for transactions and data to be recorded, shared and synchronized across a distributed network of different network participants (instead of data being centralized in a traditional ledger).<sup>71</sup> Blockchain organizes data into blocks chained together in an append-only mode.<sup>72</sup> Not only does DLT provide a secure and robust environment in which other layers and entities in the ledger can connect and in which various stakeholders can interact directly, on a peer-to-peer basis, without intermediaries, it also allows for traceability.<sup>73</sup> What makes a decentralized ledger different to other shared databases is that a central administrator does not maintain the ledger. Instead, the ledger is maintained collectively by the nodes on the network. No single node can unilaterally add data to the ledger. A node can propose a new data entry, but it will only be added to the ledger when the other nodes validate the trustworthiness of that new piece of data. To add to the ledger, there must be a consensus of other participating nodes. This makes it difficult to tamper with the ledger's contents. For users, this creates trust in the ledger's veracity and confidence in transactions between participating parties. This is the immutable quality of DLT. DLT offers a chance for electronic documents that emulate the properties of their paper counterpart. Parties can transfer electronic documents that are not centralized and records of transactions are permanent.<sup>74</sup> Moreover, DLT systems place control of an electronic document exclusively in the hands of the person with knowledge of the relevant private key. DLTs can be designed to ensure that the contents of the electronic documents are only visible to relevant parties. This will enable privacy of commercially sensitive information.<sup>75</sup>

<sup>66</sup> A DiCaprio et al "Progress on trade digitization in 2021" (July 2021, ICC Digitalisation Working Group / BAFT), available at: <a href="https://www.baft.org/wp-content/uploads/2021/07/Progress-on-Trade-Digitization-in-2021.pdf">https://www.baft.org/wp-content/uploads/2021/07/Progress-on-Trade-Digitization-in-2021.pdf</a>> (last accessed 7 June 2024).

<sup>67 &</sup>quot;Digital assets", above at note 1 at 17.

<sup>68</sup> Id at 16.

<sup>69</sup> Ibid.

<sup>70</sup> Id at 36.

<sup>71 &</sup>quot;Distributed Ledger Technology (DLT) and Blockchain" (World Bank Group FinTech Note No 1, 2017), available at: <a href="https://documents1.worldbank.org/curated/en/177911513714062215/pdf/122140-WP-PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf">https://documents1.worldbank.org/curated/en/177911513714062215/pdf/122140-WP-PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf</a>> (last accessed 10 June 2024).

<sup>72</sup> Veneck "The cost of digital transformation", above at note 58.

<sup>73</sup> P Brody "What ERP did for the single enterprise, blockchain can do for the whole supply chain" (9 June 2018) *LinkedIn*, available at: <a href="https://www.linkedin.com/pulse/what-erp-did-single-enterprise-blockchain-can-do-whole-paul-brody/">https://www.linkedin.com/pulse/what-erp-did-single-enterprise-blockchain-can-do-whole-paul-brody/</a>> (last accessed 30 April 2024).

<sup>74 &</sup>quot;Digital assets", above at note 1 at 19.

<sup>75</sup> M Goldby *Electronic Documents in Maritime Trade Law and Practice* (2nd ed, 2019, Oxford University Press), para 2.47.

## Nigeria and the digitalization of trade finance

## Law governing transferable documents (negotiable instruments) in Nigeria

In Nigeria, transferable documents are governed by the BoE Act. This English act is applicable in Nigeria by virtue of being a statute of general application. It was retained and enacted as the Bill of Exchange Act 1917.<sup>76</sup> Transferable documents recognized in the act include bills of exchange, cheques<sup>77</sup> and promissory notes.<sup>78</sup> Another transferable record of relevance is the BoL. The BoL is recognized under the UN Convention on Carriage of Goods by Sea.<sup>79</sup>

The 1917 act is a replica of the English BoE Act. Neither law states that the transferable documents must be in paper form, but it is assumed under the law that this is expected.<sup>80</sup> In the UK, as noted above, the fact that such documents must be in paper form is linked to the problem that documentary intangibles are incapable of being possessed. While this is the position under English law as supported and evidenced in legal precedent, the position is not as clear in Nigeria. This is because the courts have not had the chance to deliberate and decide on this matter. However, it is likely that, if the decision came before the Nigerian courts, precedent would be drawn from English law.

## Legal frameworks for the digitalization of trade finance in Nigeria

Nigeria has some legal frameworks that facilitate electronic commerce. This article now examines these frameworks to determine whether the law, as it currently stands, can accommodate electronic transferable records.

## The Evidence Act 2011

The Evidence Act<sup>81</sup> recognizes electronic documents by virtue of section 84, which deals with the admissibility of documents produced by computers. Section 258 of the act defines a document to include any device by means of which information is recorded, stored or retrievable, including computer output. Section 84 outlined certain criteria that must be fulfilled for the admissibility of electronic device evidence. These conditions are concerned with establishing that the device from which the document was generated had been in regular routine use and substantially free to use during the period when the document was produced. The courts in Nigeria are also clear on the admissibility of a document that is electronically generated.<sup>82</sup> One can thus see that ETRs would likely be admissible as evidence in court, provided the ETR fulfils certain conditions. However, this is only with respect to tendering ETRs as evidence. The act does not deal with substantive issues, such as the legal effect of an ETR and its validity or enforceability in the first place.

## The Cybercrimes (Prohibition, Prevention, Etc) Act 2015

The Cybercrimes Act<sup>83</sup> provides a comprehensive and unified legal regulatory and institutional framework in Nigeria to prohibit, prevent, detect, prosecute and punish cybercrime. The act also ensures the protection of critical national information infrastructure and promotes cyber security and the protection of computer systems and networks, electronic communications, data and

<sup>76</sup> Cap 21 Laws of the Federation of Nigeria (LFN) 1958. Its provisions are in the Bill of Exchange Act currently retained as cap 35 LFN 1990 and more recently cap 138 (vol 2) LFN 2004.

<sup>77</sup> Id, sec 73. 78 Id, sec 83.

<sup>79</sup> UN Convention on Carriage of Goods by Sea (Ratification and Enforcement) Act 2005.

<sup>80</sup> JM Phillips, I Higgins and R Hanke Byles on Bills of Exchange and Cheques (30th ed, 2019, Sweet & Maxwell), para 2-004 in "Digital assets", above at note 1 at 30.

<sup>81</sup> Act No 18 LFN (2011).

<sup>82</sup> Sylva and Another v INEC and Others (2016) LPELR-45730 CA.

<sup>83</sup> Cybercrimes (Prohibition, Prevention, Etc) Act 2015.

computer programmes, intellectual property and privacy rights. The act recognizes the use of e-signatures with respect to goods or any other transaction, with certain exceptions.<sup>84</sup> While this act is a step in the right direction, electronic signatures are just one aspect of electronic transactions and do not address the legal validity of ETRs.

## Electronic Transaction Bill 2019

At the time of writing, the Electronic Transaction Bill 2019 (SB 155) (ETB) is yet to be enacted. A previous Electronic Transaction Bill (SB 015) was introduced on 11 August 2015 and passed on 18 May 2017 at the Senate plenary session,<sup>85</sup> but it never received presidential assent. On 13 November 2019, the ETB passed its first reading. On 27 February 2020, the Senate undertook the second reading and began the process of providing a legal framework to guide electronic transactions in the country through a bill sponsored by Senator Amosun.<sup>86</sup> The ETB still awaits the committee report.<sup>87</sup>

While not yet in effect, the ETB has certain provisions that, if adopted, would encourage electronic transactions, but the bill expressly excludes negotiable instruments. The objective of the bill is to provide a legal and regulatory framework for: conducting transactions using electronic or related media; protecting the rights of consumers and other parties in electronic transactions and services; and facilitating electronic commerce in Nigeria. Section 3 of the ETB provides that "information shall not be denied legal effect, validity and enforceability solely on the grounds of the medium in or on which the information is solely represented, the technology in which the representation of the information was made in which [sic] the information is being communicated".<sup>88</sup> The ETB also ensures media / technological neutrality and functional equivalence between traditional means of contract formation and electronic contracting media. The bill also supports electronic evidence under section 7 of the Evidence Act, which deals with the admissibility of documents. Thus, the bill precludes any rule of evidence from denying the admissibility of any document in evidence because it is in paper form or in the form of a document as defined in the bill.

While the bill supports electronic documents for electronic transactions, it excludes negotiable instruments. Part 2, section 2 ("Application and scope of provisions regarding electronic records") states: "[t]his Bill shall not apply to any law requiring writing or signature in any of the following circumstances: (a) The execution of negotiable instruments ...".

One of the requirements of a negotiable instrument is that the maker or drawer must sign it. Thus, based on section 3 of the bill, this provision suggests that electronic execution of negotiable instruments will not have legal effect, validity or enforceability. Furthermore, the ETB focuses specifically on electronic transactions and excludes negotiable instruments. This suggests that there is currently no law addressing ETR in Nigeria.

The ETB is inspired by UNCITRAL texts on e-commerce. For example, the Model Law on Electronic Commerce 1996 (MLEC) and the UN Convention on the Use of Electronic Communications in International Contracts 2005 (CUECIE) both focus on the functional equivalence between electronic communications and paper documents, as stated in article 1 of both laws. Whereas the MLEC deals with any kind of information in the form of a data message used in the context of commercial activities for domestic transactions, the convention focuses on electronic

88 Electronic Transaction Bill, sec 3(1)(a).

<sup>84</sup> Id, sec 17(2).

<sup>85</sup> A Akinkunmi "The Electronic Transaction Bill: Prospect for FinTech and e-commerce in Nigeria" (22 April 2018) Paragon Advisors Nigeria, available at: <a href="https://paragonadvisors.com.ng/index.php/2018/04/22/the-electronic-transaction-bill-prospect-for-fintech-and-e-commerce-in-nigeria/">https://paragonadvisors.com.ng/index.php/2018/04/22/the-electronic-transaction-bill-prospect-for-fintech-and-e-commerce-in-nigeria/> (last accessed 30 April 2024).</a>

<sup>86</sup> O Osadebamwen "Electronic transaction: Senate prepares legal framework to guide deals" (27 February 2020) Nigerian Tribune, available at: <a href="https://tribuneonlineng.com/electronic-transaction-senate-prepares-legal-framework-to-guide-deals">https://tribuneonlineng.com/electronic-transaction-senate-prepares-legal-framework-to-guidedeals/> (last accessed 30 April 2024).

<sup>87</sup> Akinkunmi "The Electronic Transaction Bill", above at note 85.

information exchanged between parties whose places of business are in different states. This is similar to the scope of the Nigerian ETB, section 2 of which states that the bill applies to the use of information in electronic or other media.

Articles 7 and 9 of the MLEC and the CUECIE deal with functional equivalence between electronic authentication and handwritten signatures. This is also quite similar to section 11 of the ETB. All three laws provide that, where a signature is required, that requirement is met if a method is used to identify that person and that method is as reliable as appropriate for the purpose for which the data message was generated.

A fundamental similarity between the ETB, the model law and the CUECIE is that they do not provide for ETR. Thus, article 2(2) of the CUECIE explicitly excludes bills of exchange, promissory notes, consignment notes, BoLs, warehouse receipts and any transferable documents or instruments that entitle the bearer or beneficiary to claim the delivery of goods or the payment of a sum of money. Part two of the MLEC, which deals with electronic commerce in specific areas, contains provisions that apply equally to non-negotiable transport documents and the transfer of rights in goods by way of transferable BoLs.<sup>89</sup> The principles embodied in articles 16 and 17 are applicable not only to maritime transport but also to transport of goods by other means, such as road, rail and air.<sup>90</sup> None of these laws, therefore, make provisions for ETRs, thus leaving wide scope for the adoption of the MLETR.

# The UNCITRAL Model Law on Electronic Transferable Records

#### **Overview of the MLETR**

The MLETR is an initiative of UNCITRAL, prepared between 2013 and 2017 and finally adopted in 2017. The MLETR aims to enable the legal use of electronic transferable records both domestically and across borders. It is also a key enabler of digital trade financing and paperless trade facilitation, and supports the use of emerging technologies such as blockchain, the Internet of Things and smart contracts. As a model law, the MLETR is flexible and can be adapted to suit individual domestic circumstances. One advantage of the MLETR is that it seeks to identify a functional equivalent or analogue to possession. Thus, the principles and provisions of the MLETR deal with a core issue enabling the widespread use of electronic documents.

Article 7 is the general provision of the MLETR. It states, "an electronic transferable record shall not be denied legal effect, validity or enforceability on the sole ground that it is in the electronic form". The MLETR applies to transferable documents or instruments in electronic form. Article 2 defines a transferable document or instrument 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. The MLETR does not specify particular documents that are transferable but leaves the applicable substantive law to determine this, according to different jurisdictions.

There are three central provisions of the MLETR that must be satisfied in order for an electronic document to attain functional equivalence. Article 10 states:

- "(1) Where the law requires a transferable document or instrument, that requirement is met by an electronic record if:
  - (a) The electronic record contains the information that would be required to be contained in a transferable document or instrument; and
  - (b) A reliable method is used:

<sup>89</sup> See MLEC, arts 16 and 17.

<sup>90</sup> See "MLETR explanatory notes", above at note 37, para 110.

- (i) To identify that electronic record as the electronic transferable record;
- (ii) To render that electronic record capable of being subject to control from its creation until it ceases to have any effect or validity; and
- (iii) To retain the integrity of that electronic record.
- (2) The criterion for assessing integrity shall be whether information contained in the electronic transferable record, including any authorised change that arises from its creation until it ceases to have any effect or validity, has remained complete and unaltered apart from any change, which arises, in the normal course of communication, storage and display."

Under article 10, to meet the functional equivalence criterion, an electronic document must: contain the same information required to be included in the paper equivalent; use a reliable method to identify the electronic record; be subject to control; and retain its integrity (essentially that there has been no unauthorized amendment or interference).

The second important provision is article 11, which states:

- "(1) Where the law requires or permits the possession of a transferable document or instrument, that requirement is met with respect to an electronic transferable record if a reliable method is used:
  - (a) To establish exclusive control of that electronic transferable record by a person; and
  - (b) To identify that person as the person in control.
- (2) Where the law requires or permits transfer of possession of a transferable document or instrument, that requirement is met with respect to an electronic transferable record through the transfer of control over the electronic transferable record."

The implication of this provision is that there must be a reliable method for showing that a person has exclusive control of the documents electronically and to identify the person who controls the document. While this provision does not define control, the explanatory notes show that it is intended as an equivalent to factual possession.<sup>91</sup>

The third important provision is article 12. Articles 10 and 11 stipulate that there should be a reliable method for meeting the functional equivalence requirements. The standards for reliability are then provided in article 12, which states that such standards should be:

- "(a) As reliable as appropriate for the fulfilment of the function for which the method is being used, in the light of all relevant circumstances, which may include:
  - (i) Any operational rules relevant to the assessment of reliability;
  - (ii) The assurance of data integrity;
  - (iii) The ability to prevent unauthorised access to and use of the system;
  - (iv) The security of hardware and software;
  - (iv) The regularity and extent of audit by an independent body;
  - (v) The existence of a declaration by a supervisory body, an accreditation body or a voluntary scheme regarding the reliability of the method;
  - (vii) Any applicable industry standard; or
- (b) Proven in fact to have fulfilled the function by itself or together with further evidence."

Article 12(a)(vii) is particularly useful because it gives room for any industry standard of which parties are aware and possibly future industry developments. Article 12(b) is also useful because reliability can be assessed retrospectively in a particular case. This would help reduce frivolous litigation.<sup>92</sup>

<sup>91 &</sup>quot;Explanatory note" (2018, UN Commission on International Trade Law), paras 13(b), 107-08 and 119.

<sup>92 &</sup>quot;Digital assets", above at note 1 at 56; "MLETR explanatory notes", above at note 37, para 136.

# The MLETR in other jurisdictions

#### Singapore and the MLETR

In Asia, Singapore has set itself apart as a leader in issues related to electronic commerce. As the first country to adopt the MLEC, it enacted its Electronic Transactions Act (ETA) in 1998. It became the second country, after Bahrain, to adopt the MLETR into its legislation. Initially, the scope of the ETA excluded negotiable instruments.<sup>93</sup> Thus, if a party wanted to use an electronic trade document, it needed to be onboarded on the same technological platform as the counterparty. Formal written documents of the onboarding arrangements provided some legal certainty in the contract.

Following public consultation, the Singapore Parliament passed the amendments contained in part 2a of the Electronic Transactions (Amendment) Act No 5 (ETA Amendment Act) in February 2021. This meant that the ETA was amended to give effect to the MLETR instead of enacting a new, separate act. The ETA now largely follows the MLETR, albeit with a few modifications and omissions. The most significant are: the requirement that all information in a transferable document or instrument be reproduced in its electronic transferable record replacement and vice versa, subject to exceptions;<sup>94</sup> and sections 16M(2)(a), 16N(2)(a), 6, 16N(3) and 16O(2), which introduce an accreditation system. If an electronic transferable record is associated with an electronic transferable record management system provided by an approved provider, the methods used by that management system are presumed "reliable".<sup>95</sup>

In terms of scope, "transferable document" or "instrument" covers bills of exchange, promissory notes and BoLs.<sup>96</sup> However, this is not an exhaustive list as the explanatory statement to the bill notes that any other document that acquires the title of transferable document or instrument would fall within the definition; it would be a matter for substantive law to decide.<sup>97</sup> The Singapore act closely follows articles 10 and 11 of the MLETR by referring to control and exclusive control as functional equivalents of possession. The reliability standards are also similar to the MLETR because the Singapore act requires a reliable method to prove control over the electronic record, the identity of the person controlling the electronic record and the integrity of the electronic record.<sup>98</sup> Like the MLETR, the Singapore act also states that reliability may be determined by the existence of a declaration by a supervisory body, an accreditation body or a voluntary scheme, regarding the reliability method. Unlike the MLETR, the Singapore act goes further to establish an accreditation system, which makes an electronic document reliable for the purposes of the act.<sup>99</sup>

#### Bahrain

As the first country to adopt the MLETR in 2019, Bahrain largely reflects the MLETR. As in Singapore, there is an accreditation system (which is to be determined by the minister of an administrative agency designated in a decree) to certify reliability. The legislation defines a "document" as: "(1) [b]ills of lading; (2) [l]etters of credit; (3) [w]arehouse receipts; and (4) [a]ny other document of title, in respect of an obligation to deliver goods indicated in the document, specified in a regulation issued by the competent Minister for Transportation after consultation with the Governor".<sup>100</sup> It further defines "instrument" as: "(1) [c]heques; (2) [b]ills of exchange; (3) [p]romissory notes; and (4) [a]ny other instruments, in respect of an obligation to pay a fixed amount of money indicated in the instrument, specified in a regulation issued by the Governor".<sup>101</sup>

<sup>93</sup> Electronic Transactions Act 1988 (cap 88), sched 1, sec 4.

<sup>94</sup> ETA Amendment Act.

<sup>95</sup> Id, sec 16O(2).

<sup>96</sup> Id, sec 6, inserting id, sec 16A.

<sup>97</sup> Electronic Transactions Amendment Bill No 1 (2021), "Explanatory statement".

<sup>98</sup> ETA Amendment Act, sec 6, inserting id, secs 16O(2) and 16O(3).

<sup>99</sup> Law No 55, Electronic Transferable Records (2018), art 1.

<sup>100</sup> Ibid.

<sup>101</sup> Ibid.

## Abu Dhabi

The Abu Dhabi Global Market, a financial free zone in the UAE, issued its Electronic Transaction Regulations 2021. These regulations adopt several UNCITRAL model laws, including the MLETR. With minor amendments, they reflect the MLETR and allow the issue and signature of negotiable instruments.<sup>102</sup>

# G7 collaboration

On 28 April 2021, the G7 digital and technology ministers committed to adopting ETRs in international trade. This, they agreed, was to be done through a framework that will promote the adoption of MLETR.<sup>103</sup> A more comprehensive framework for G7 collaboration on ETR will be established based on the findings of a domestic scoping exercise.<sup>104</sup>

## Kiribati

On 11 August 2021, the Parliament of Kiribati passed the Electronic Transactions Bill and on 21 September 2021 the president assented to it.<sup>105</sup> The act is based on UNCITRAL texts and recognizes electronic transactions in commercial and non-commercial settings.<sup>106</sup> A distinctive feature of the Kiribati act is that it incorporates the MLETR in its part 5. Kiribati is the first Pacific country to do so and the fourth jurisdiction in the world.<sup>107</sup> The act is based on UNCITRAL texts.

## United Kingdom

The UK House of Lords introduced the Electronic Trade Documents Bill (HL Bill 57) in Parliament on 12 October 2022. This bill aims to give digital trade documents the same legal standing as their paper equivalents. This is ultimately aimed at providing efficiency, flexibility and more choice to commercial parties. The bill, if passed, will update laws such as the BoE Act and the Carriage of Goods by Sea Act 1992. This is ultimately the right step towards digitalizing trade.<sup>108</sup>

# Benefits, challenges and suggestions for adopting the MLETR in Nigeria

# **Benefits**

The benefits of adopting the MLETR in Nigeria go beyond those for other jurisdictions globally. These benefits are connected to the inherent benefits of digitalization. Broadly speaking, digitalizing negotiable instruments will help Nigerian businesses and their foreign counterparts to eliminate delays, bureaucracy and errors that often plague international trade transactions. Using new technology such as DLT and smart contracts will also promote innovation. There will also be increased transparency and security for trade finance. Digitalization also aligns with the Sustainable Development Goals (SDG). In terms of the first SDG (no poverty), digitalization can help alleviate poverty and reduce inequalities by facilitating global trade, reducing trade barriers and promoting shared prosperity.

<sup>102</sup> DiCaprio et al "Progress on trade digitization", above at note 66 at 5.

<sup>103 &</sup>quot;Framework for G7 collaboration on electronic transferable records" (28 April 2021, G7 Digital and Technology Track, annex 4), available at: <a href="https://assets.publishing.service.gov.uk/media/609cf6108fa8f56a3a2958bd/Annex\_4\_Framework\_for\_G7\_collaboration\_on\_Electronic\_Transferable\_Records.pdf">https://assets.publishing.service.gov.uk/media/609cf6108fa8f56a3a2958bd/Annex\_4\_Framework\_for\_G7\_collaboration\_on\_Electronic\_Transferable\_Records.pdf</a> (last accessed 7 June 2024).

<sup>104</sup> Ibid.

<sup>105</sup> The act is available at: <a href="https://www.president.gov.ki/images/Gazettes/gaz2021/Electronic\_Transactions\_Act\_2021.pdf">https://www.president.gov.ki/images/Gazettes/gaz2021/Electronic\_Transactions\_Act\_2021.pdf</a> (last accessed 7 June 2024).

<sup>106</sup> L Castellani "MLETR in developing countries: Lessons from the Pacific" (11 October 2021) *LinkedIn*, available at: <a href="https://www.linkedin.com/pulse/mletr-developing-countries-lessons-from-pacific-luca-castellani/?trackingId=xBJV6m">https://www.linkedin.com/pulse/mletr-developing-countries-lessons-from-pacific-luca-castellani/?trackingId=xBJV6m</a> zvR4S6YX4QTKbSCA%3D%3D> (last accessed 10 June 2024).

<sup>107</sup> Ibid.

<sup>108</sup> H Manaadiar "UK is a few steps away from legislating electronic trade document transfer" (14 October 2022) *Shipping and Freight Resource*, available at: <a href="https://www.shippingandfreightresource.com/uk-is-a-few-steps-away-from-legislatingelectronic-trade-document-transfer/">https://www.shippingandfreightresource.com/uk-is-a-few-steps-away-from-legislatingelectronic-trade-document-transfer/</a>> (last accessed 30 April 2024).

Specifically, in Africa, a major impediment to trade is the lack of availability of trade finance for micro, small and medium enterprises (MSMEs). This is the "lubricant of trade without which opportunities for growth and development are missed".<sup>109</sup> Some reasons for lack of finance are a greater risk profile, lack of additional collateral and the formal documentation needed for financing, complexities of financing cross-border activities and proportionally high costs of services due in part to a lack of digitalization. To demonstrate the high cost of service from lack of digitalization, in Nigeria the annual financing gap for small and medium enterprises (SMEs) is 617.3bn.<sup>110</sup> This is mainly attributable to a lack of automation due to a non-digitized environment.<sup>111</sup> For these MSMEs, the costs of processing trade finance transactions can be far too high compared to the lowvalue or single transactions that MSMEs typically use.<sup>112</sup> The ICC Global Survey on Trade Finance opined that certain challenges faced by MSMEs are due to the banks that serve them.<sup>113</sup> Smaller local or regional banks that have fostered trust with the MSMEs are the ones that lag behind in trade digitalization. In any event, around 75 per cent of the local banks are not optimistic that digitalization will have any benefit on their operations and just 55 per cent believe there will be any cost saving when they digitalize.<sup>114</sup> This projection is attributable to the perceived cost of trade when weighed against the potential benefits.<sup>115</sup> Yet, the reluctance by banks that service underfinanced SMEs in developing countries may be construed as contradictory to the belief of the 55 per cent of local banks that state that they are best positioned to serve MSMEs in terms of digitalization.<sup>116</sup> Considering the trade financing gap of MSMEs in Nigeria, there is no doubt that digitalization would be very helpful. However, such digitalization must have legal certainty. A harmonized law like the MLETR can be very helpful in providing legal certainty for both commercial parties and regulators.

It is estimated that there are 4 billion documents related to trade finance, which could constitute about half a million trees.<sup>117</sup> Digitalization can reduce the consumption of paper, thereby aligning with SDG 12 (responsible consumption and production).<sup>118</sup> Fraudulent business practices involving bogus financial documents are common in Nigeria.<sup>119</sup> Corruption is also rife across various institutions, including in respect of trade and customs procedures. Current technologies (including DLT), which the MLETR can enable, will substantially reduce fraud risk via smart contracts, bringing greater trust to the international trade system. This is a much-needed avenue to mitigate fraud and will allow for easier detection of patterns of corruption. This, in turn, will enable the government to take appropriate action. There will also be greater clarity regarding the requirements for clearing goods. This aligns with SDG 16 (peace, justice and strong institutions).

Another benefit of the MLETR to Nigeria and Africa is that the model law supports the digitalization of trade finance documents, which can help with easier mobilization of assets as collateral.

<sup>109</sup> *Trade Finance in Africa: Overcoming Challenges* (September 2017, African Development Bank Group) at 4, available at: <a href="https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/Trade\_Finance\_in\_Africa\_Survey\_Report.pdf">https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/Trade\_Finance\_in\_Africa\_Survey\_Report.pdf</a> (last accessed 30 April 2024).

<sup>110</sup> O Anudu "PwC puts annual financing gap for Nigerian SMEs at N617.3bn" (20 July 2020) Business Day, available at: <a href="https://businessday.ng/enterpreneur/article/pwc-puts-annual-financing-gap-for-nigerian-smes-at-n617-3bn/">https://businessday.ng/enterpreneur/article/pwc-puts-annual-financing-gap-for-nigerian-smes-at-n617-3bn/</a> (last accessed 30 April 2024).

<sup>111</sup> Patel and Ganne "Accelerating trade digitalization", above at note 50 at 11.

<sup>112</sup> Ibid.

<sup>113 2020</sup> ICC Global Survey, above at note 36.

<sup>114</sup> Patel and Ganne "Accelerating trade digitalization", above at note 50 at 11.

<sup>115</sup> Ibid.

<sup>116</sup> Id at 12.

<sup>117</sup> ICC Global Survey 2018: Securing Future Growth (2018, ICC) at 138, available at: <a href="https://2go.iccwbo.org/subjects/icc-2018-global-trade-securing-future-growth.html">https://2go.iccwbo.org/subjects/icc-2018-global-trade-securing-future-growth.html</a>> (last accessed 30 April 2024).

<sup>118</sup> Id at 139.

<sup>119 &</sup>quot;Nigeria: Country commercial guide - Trade financing" (June 2023, International Trade Administration), available at: <a href="https://www.trade.gov/country-commercial-guides/nigeria-trade-financing">https://www.trade.gov/country-commercial-guides/nigeria-trade-financing</a>> (last accessed 30 April 2024).

A challenge for Africans is enforcement. Thus, if this stage is automated through smart contracts, which the MLETR supports, it will help to mitigate the risk. Explaining in detail, Castellani states,

"The MLETR supports smart contracts in the sense that it allows the inclusion of dynamic information in the electronic transferable record. However, this provision presupposes the existence of an Electronic Transaction Act that is also supportive of smart contracts. And yes, automated execution of certain clauses (eg, payment of pre-liquidated damages in case of non-performance) may overcome the obstacles to enforcing decisions in Africa."<sup>120</sup>

Furthermore, digitalization in the area of logistics can help increase visibility in Nigeria. Digital infrastructure such as blockchain can help track ships and trucks, optimize loading capacity, reduce administrative costs and increase transparency in prices. The MLETR will govern this digital infrastructure. Castellani states:

"The digital supply chain will be governed by the Electronic Transactions Act - especially if the Act applies to commercial and non-commercial transactions, hence covering also e-government (of which single windows for customs operations are a part). One component of the digital supply chain is the electronic bill of lading - which is, however, an important one given that the bill of lading is a source of high-quality data - and the electronic bill of lading requires the adoption of the MLETR".<sup>121</sup>

The social benefits of digitizing trade can also often be overlooked but include, for instance, that "the ability to digitize trade has the potential to unlock richer data allowing banks to do better 'know your customer', to do a better credit risk analysis, as well as, enabling banks to extend more finance to SMEs and to corporates, who are likely to need it the most when facing the road to recovery post pandemic".<sup>122</sup>

# Barriers and hindrances to adopting the MLETR in Nigeria

In Nigeria, there is a low level of adoption of UNCITRAL texts. The MLETR complements existing UNCITRAL texts on e-commerce, the MLEC and the CUECIC. According to Castellani, "[w]e see in Africa a patchwork of enactments, with more support for UNCITRAL in common law jurisdictions. The matter has low priority on the legislative agenda: Nigeria is a case in point as various UNCITRAL-based electronic transactions bills have been drafted in the past decade, but none has been adopted."123 These laws are not considered a priority, even with increasing digital transactions. Furthermore, UNCITRAL laws and other international laws are not adopted in Nigeria because of legislative inertia. It is commonplace to find laws being considered for years and decades, with none being adopted. The cumbersome process of law-making, which entails a bill passing four stages, receiving three readings and being subjected to assent by the president before it can be passed into law, means that international laws may stall at any of those stages. There is also a lack of capacity, in terms of both inadequacy and insufficiency of staff in Africa with expertise in commercial law. This has long been recognized as the reason why commercial law reform at the domestic level is slow. Despite the seeming lack of interest in electronic transactions in developing countries, Castellani speaking on Paraguay's electronic transaction reform states, "e-transactions law reform in developing countries is starting to get the attention it deserves with respect to both legal

<sup>120</sup> L Castellani (personal email, 17 October 2021) (on file with the author). Mr Castellani is legal officer, UNCITRAL Secretariat.

<sup>121</sup> Ibid.

<sup>122</sup> Patel "Digitising trade", above at note 57.

<sup>123</sup> L Castellani (personal email, 23 August 2021) (on file with the author).

drafting and implementation. This is encouraging evidence that the digital economy is becoming a reality for all".<sup>124</sup>

## How to adopt the MLETR in Nigeria

For Nigeria, because there is currently no law on electronic transactions, it is recommended that, as in Abu Dhabi, Nigeria should enact an Electronic Transaction Act. There is already an Electronic Transactions Bill in the House of Assembly, which could be modified to adopt several UNCITRAL laws, including the MLETR. Then amendments suitable to the local circumstances could be made. Lessons could also be drawn from Singapore. For instance, section 16O(2) of Singapore's ETA, which is not found in the MLETR, and the same provision that introduces an accreditation system, would be particularly useful in Nigeria. This would mean that the methods used by any ETR associated with an electronic transferable record management system provided by an approved provider, such as the telecommunications agency, would be presumed reliable. Under section 16O(2) of the ETA, the approver must be registered, licensed and accredited or recognized under the new part II A. This section would be useful in Nigeria where there is inadequate digital infrastructure, which may hinder the ability to assess the criteria set out by section 16O(1) of the ETA, establishing a method "as reliable as appropriate for the fulfilment of the function for which the method is being used". Such phrases may ultimately pose a challenge for interpreters, such as courts.

#### Conclusion

Digitalizing international trade documents is now an imperative because it is a way to address the delays and inefficiencies caused by heavy and cumbersome documentation in global trade. The benefits of digitalizing trade documents (faster transactions, reduced errors and fraud, better "know your customer", promoting innovation and ensuring transparency) can enhance international trade transactions in Nigeria. Amid a range of technology to achieve the digitalization of international trade documents, DLT or blockchain technology provides the most promising features.

There are hindrances and challenges to digitalizing trade documents, such as complexity, financial costs and lack of legal certainty. The lack of legal certainty has been the most challenging. However, the MLETR addresses this gap adequately by providing a model law for different countries to adopt. The model law enables electronic transferable records by providing functional equivalence rules to paper documents.

In Nigeria, digitalization continues to gain ground, both domestically and in international trade. However, there are currently no laws to address this development with respect to international trade documents. The MLETR can fill this gap because, as a model law, it can be adapted to suit local circumstances. The Electronic Transactions Bill, yet to be enacted in Nigeria, provides an excellent opportunity for relevant provisions of the MLETR to be included before enactment. This has been done in jurisdictions such as Singapore and Abu Dhabi, and Nigeria can draw implementation lessons from these jurisdictions.

Competing interests. None

<sup>124</sup> Ibid.

**Cite this article:** Anyamele U (2024). Promoting Digitalization of Electronic Trade Documents in Nigeria through the Model Law on Electronic Transferable Records. *Journal of African Law* 1–20. https://doi.org/10.1017/S0021855324000202