

MLETR-Compliant Title Transfer Project

Presenter: Ren Yuh KAY

Supported By: Project Group

UN / CEFAC





Scope

White Paper that provides clear guidance on broad technical methods to achieve the requirements outlined in the Model Law on Electronic Transferable Records (contextualized towards electronic negotiable Bills of Lading)

- How Distributed Ledger Technology could be used to facilitate title transfers of MLETR-compliant title records (other feasible technologies may also be considered)
- How existing UN/CEFACT deliverables could be used in this context
- Key issues to consider while creating, administering and using technologies for electronic transferable records

UN/CEFACT Recommendation 12 in 2011 – Simplify, rationalize and harmonize the procedures and documents used to evidence the contract of carriage in maritime transport by encouraging the use of Sea Waybills

[illegible]

Negotiable Bills of Lading still mostly paper based

Manual processing and delivery with high costs

Risk of fraud
e.g. forgeries

Interoperable with global trade network

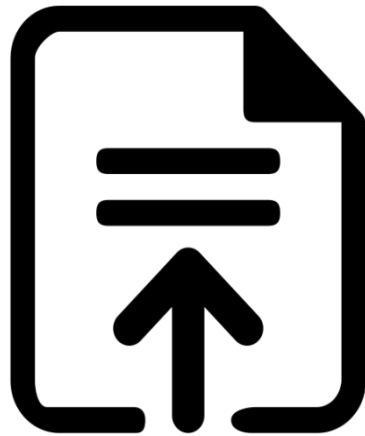
Lower costs of processing

Enable innovative services

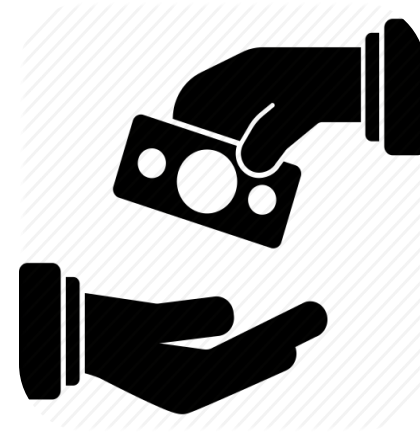


What is a transferable document?

Any transferable document or instrument that entitles holder to claim delivery of goods or payment of sum of money.



Entitled to claim



Perf of Obligation - Delivery of goods
e.g. bills of lading, warehouse receipts, dock warrants

Payment of money
e.g. bills of exchange, promissory notes



UNCITRAL Model Law on Electronic Transferable Records (2017)

International standards on electronic functional equivalent of paper transferable document or instrument help to reduce existing problems with digitalisation

Requirements of unique original, possession and endorsement & delivery

“the ETR” as functional equivalent of unique original

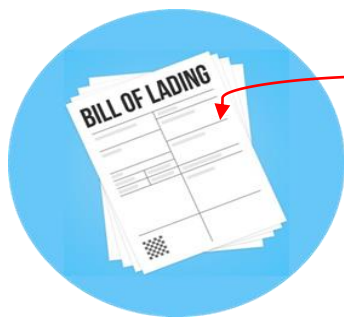
“Control” as functional equivalent of possession

Protection against claims from third parties is a distinguishing feature – can only be achieved with statutory provisions (not by contract)



Model Law Requirements of an ETR

An Electronic Transferable Record

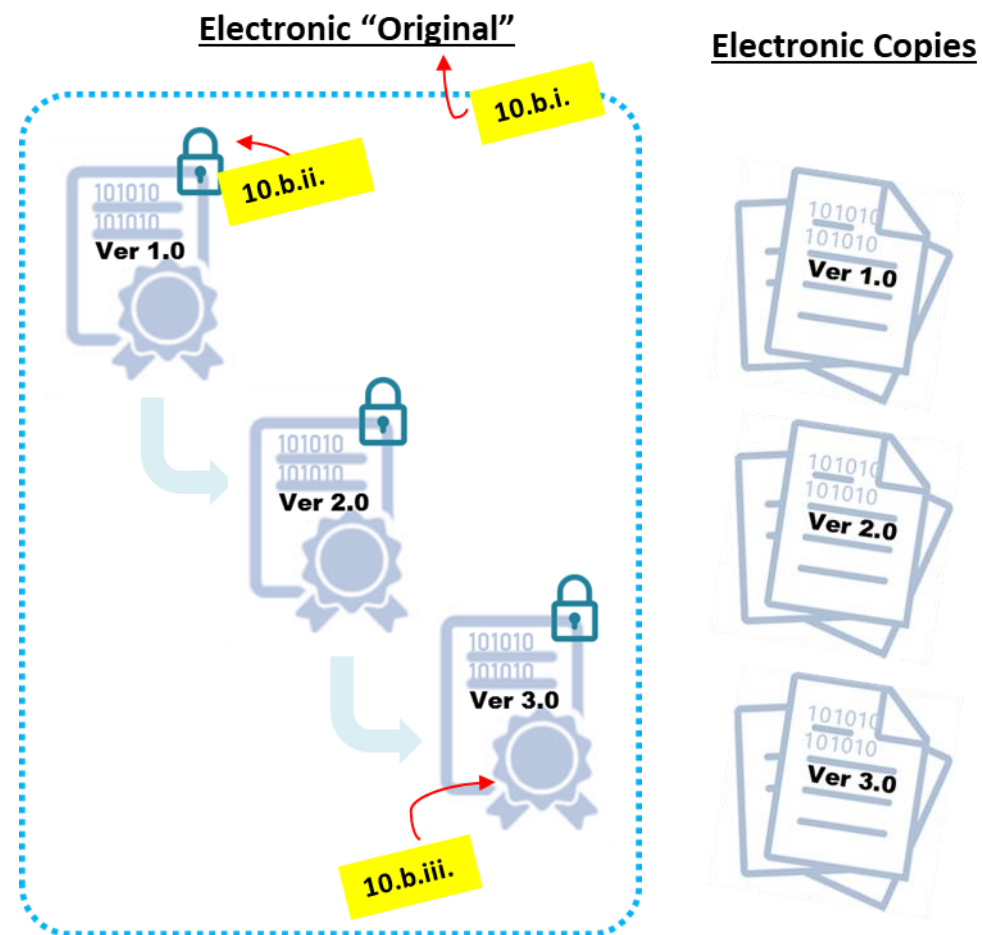


Article 10.a. contain **all required information/data** as per the **original paper counterpart**

Article 10.b. a **reliable method** is used to:

- i. identify an electronic record as **the** electronic transferable record; [singularity]
- ii. subject the electronic record to **control** from its creation to expiry [exclusive control]
- iii. retain the **integrity** of the electronic record. [integrity]

complies with the requirements of article 10;





Model Law Requirements of an ETR

“Reliable Method” Requirements

Article 12.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 unauthorized access to and use of the system;
- iv. The security of hardware and software;
- v. The regularity and extent of audit by an independent body;
- vi. 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



Project Group

- Meets once every 3 weeks
- Experts from UNCITRAL, UNESCAP, FIATA, ICC, various Academic Institutions, various private sector participants (tech providers, port authority, banks)
- 19 of 20 pages.



- Chapter 1: Executive Summary
- Chapter 2: Business case for digitalizing Bill of Lading
 - What is a BL
 - i) Receipt for the goods described therein
 - ii) Evidence of contract of carriage
 - iii) Document of title, when it is a negotiable BL
 - What is the current process
 - Proof of Identity
 - Proof of Integrity
 - Proof of Origin
 - Proof of Existence





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- Chapter 2: Business case for digitalizing Bill of Lading (cont'd)
 - Issues with Paper
 - Multiple parties who are mutually distrustful
 - Difficulties w validation as the data are from other systems
 - Physical contact
 - Many current statute legislation requires collateral in paper
 - Slowness
 - Not able to be easily ingested by systems
 - Purpose of White Paper
 - The goal of this White Paper is to provide guidance on the implementation of these formal requirements of the MLETR for BLs. It attempts to illustrate how the resulting requisites can be satisfied in current practice and with the existing technology.



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- Chapter 3: Fulfilling the MLETR requirements
 - Writing
 - relevant information in the ETR can be accessed so as to be readable in the required natural language
 - Signature
 - i) to identify the signatory and
 - ii) sufficiently express the intention of such person in regard to the relevant information in the ETR.
 - Integrity
 - that it retains the same contents it had when originally issued together with any ensuing authorised changes
 - subsequent authorized changes must be identifiable as amendments.
 - Singularity
 - Centralised DB
 - Decentralised Ledger



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- Chapter 3: Fulfilling the MLETR requirements
 - Control
 - Being the functional equivalent of factual possession for the purposes of MLETR
 - No ambiguity as to who has control of the ETR
 - Tokenisation
 - Conferral of Exclusive Control and Preclusion of Double-Spending
 - Transfer of a ERC-721 token
 - Delivery and endorsement
 - Requirement to identify the person in control does not prevent the anonymous circulation of the ETR to bearer
 - Article 15 of the MLETR does away with the notion that the endorsement needs to be on the back of the document when the document is in electronic rather than paper form, but emphasizes that it must satisfy the requirements for writing and signature discussed above.
 - Change of mediums
 - Electronic systems should enable users to request and obtain bidirectional swaps between paper documents and ETRs.
 - To preserve singularity, a paper document and ETR should only be exchanged for one another and this could rely on the force of technical and/or process controls.



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- Chapter 4: Practical Considerations
 - Verifiability
 - Parties can be satisfied that the ETR is authentic, accurate, complete and updated.
 - Per the World Trade Organization Agreement on Trade Facilitation Article 10.2 which governs the acceptance of copies of supporting documents required for import, export, or transit formalities, border control agencies should not need to be provided the original supporting document.
 - The ETR's authenticity must be verifiable in all respects, in particular the identity of the person in control, the ETR's issuer and any other party whose identity may be relevant (e.g. an acceptor or a pledgee).
 - Business confidentiality and Banking secrecy
 - Technical solutions need to allow that such business secrets are kept confidential since otherwise these solutions risk being disregarded in favor of traditional paper documents where it may be easier to maintain confidentiality.
 - Personal data regulation and the right to be forgotten
 - The MLETR has left the question of storage and retention to existing domestic law, but any electronic system or platform over which ETRs are issued or transferred needs to take these obligations into account.
 - Distributed ledgers are very useful for evidentiary purposes due to the fact that information cannot be deleted from the ledger; however, this has to be made compatible with data protection laws and the right to be forgotten if personal data or PII data is stored on the ledger



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- Chapter 4: Practical Considerations (cont'd)
 - Procedural formalities for enforcement
 - Certain ETRs, such as Bills of Exchange, Promissory Notes or Cheques may need to be enforced through formal procedures such as protest when they are dishonoured. ETRs may also need to be used as evidence in court. Therefore, even after they are dishonoured, systems should be able to satisfy procedural requirements.
 - Long term data preservation
 - The Model Law does not contain specific provisions on storage and archiving. All applicable retention requirements are found in other law, including the law on privacy and data retention, and should be complied with.
 - Using distributed ledgers with immutable chains of evidence will go a long way towards providing security. In the event that a distributed ledger or registry should cease to provide the service, each party to a transaction is still able to keep a locally stored copy of the entire ledger as a backup.
 - Dynamic information*
 - MLETR supports inclusion of dynamic info which has to be preserved in the record



Call for Participation

- Welcome to write to:
 - Kay : workkay999@gmail.com
 - Serena: serenek7@gmail.com
 - Edmund: edmundg@zoho.com
 - Ian: iwatt@nextrade.world