

*INTRODUCTION TO THE UNCITRAL MODEL LAW ON
ELECTRONIC TRANSFERABLE RECORDS*

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Documents of Title and Negotiable Instruments

- Enablers of international trade:
 - Bill of Lading: an instrument for selling goods while afloat. Provides **information about the goods authenticated by an independent third party (the carrier)**.
 - Bill of Exchange and promissory note: a financial instrument used for **trade in goods on credit**. Carry **authenticated information about the amount due from the debtor**.
- Tools for achieving certain desired effects at law
 - the physical transfer of these instruments (with required formalities) **transfers rights to the transferee** (right to demand performance).

Why not just keep using paper?

- **Cut costs**
 - ‘administrative costs can be as high as 15 percent of the value of the goods shipped.’ **IBM 2018**
- **Increase efficiencies in the supply chain**
 - ‘paperless systems can generate savings for traders through faster movement of goods as well as greater efficiency at border agencies where the exchange involves trade administration documents. Paperless trade can also help businesses meet regulatory compliance obligations more efficiently and at a lower cost....’ **World Economic Forum 2017**

Why not just keep using paper?

- Transform a business model (shipping industry)
 - ‘the future lies in understanding the needs of the charterers and shippers....’ **Lloyd’s List 2018**
 - ‘Maersk Line ... is offering to finance shipments and remove the paper trail from financing deals. Maersk says it has no need to ask for collateral ... because it is carrying the goods on its vessels.’ **Reuters 2017**
 - ‘CMA CGM Group is offering a new range of cargo insurance products for customers, including a provision to provide quick compensation for companies whose goods have been damaged or lost during transit for any reason. The compensation product, named "Cargo Value Serenity", will provide a refund of up to 100 per cent of the value of the goods in less than 30 days....’ **Transport Weekly 2017**

Documents of Title and Negotiable Instruments

- Authenticated information contained on paper is *reliable* but is *limited* in terms of its functionality. Electronic data can perform a multiplicity of functions.
- Documents of Title and Negotiable Instruments work because:
 - they *achieve desired legal outcomes*;
 - we *trust* them.
- What does it take for the same legal outcomes to be achieved by electronic data?
- What does it take to make electronic data trustworthy?

Desired Legal Outcomes

- **BoL and BoE/PN:**
 - Transferee obtains a reliable record that a performance obligation exists (paper document signed by obligor) and an assurance that performance is due to it (act of accepting voluntary transfer of document).
 - Transferee can exercise rights vs issuer and/ or acceptor.
 - Transferee can show that such rights vest in it.
- **BoL:**
 - Transferee obtains title to the goods and can show that such rights vest in it.

Achieving Desired Legal Outcomes

- Adopt legislation that spells out desired outcomes and how they may be achieved through electronic records and communications;

OR

- Identify **what constitutes the electronic functional equivalent of the Document or Instrument**, leaving the desired outcomes to be spelt out by existing law governing the paper form.

Model Law on Electronic Transferable Records (MLETR)

Article 10. Requirements for the use of an electronic transferable record

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:
 - (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 authorized 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.

Meeting MLETR Requirements

- 10(1)(a): equivalence in terms of content (but see also Article 6 – additional content not precluded – potential to increase functionality).
- 10(1)(b)(i) Mechanism for precluding “double spending”: performance obligation must be singular.
- 10(1)(b)(ii) Person to whom performance is due must be identifiable.
- 10(1)(b)(iii) and 10(2): techniques to maintain integrity (any changes to the record must be identifiable).

MLETR

Article 11. Control

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.

Meeting MLETR Requirements

- Ability to establish reliably to whom performance is due.
- Need to determine, on designing the system and its underlying terms of use, what constitutes a “transfer of control”: i.e. **what act is equivalent to handing over a document, with or without endorsement?**
- See also Article 15 – Endorsement (writing + signature).
- Acts may include:
 - Clicking an “(endorse and) transfer” button available only to the person in control.
 - Clicking an “accept” button available only to designated transferee.
 - An update of what article 10 terms the electronic *transferable* record (data relating to the performance obligation + data relating to the person to whom it is due).

MLETR

Article 12: General Reliability Standard

For the purposes of articles ... 10 [and] 11 ... the method referred to shall 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 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; or

(b) Proven in fact to have fulfilled the function by itself or together with further evidence.

Meeting MLETR Requirements

- (i) Operational Rules: framework governing operation of the electronic system should be geared towards the achievement of desired outcomes.
- (ii) Data Integrity: system must incorporate techniques to protect data from tampering and external attacks.
- (iii) Unauthorised access and use: Who is permitted to enter data and method for becoming a system user are relevant considerations, as well as vulnerabilities to internal attacks.
- (iv) Security of hardware and software: may bring into play worker complacency.
- (v) Audit: system may need to be audited prior to going live, and regularly thereafter, to check for vulnerabilities.
- (vi) External Assessment and (vii) Industry standards: International Organisation for Standardisation (ISO) provides benchmarks against which system may be assessed: Technology-specific standards, as well as general Quality, Risk Management, Business Continuity and Security Management Standards developed by ISO may apply.



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THANK YOU

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