UNCITRAL legal instruments for e-commerce and paperless trade

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UNCITRAL’s mandate

• The core legal body of the United Nations system in the field of commercial law.
• A UN Commission with universal membership active in commercial law reform since 50 years.
• UNCITRAL’s goal is the modernization and harmonization of international business law.
• UNCITRAL texts are the global benchmark for the law of electronic transactions, electronic contracting and electronic signatures.
  – Preparation of dedicated texts
  – Introduction of dedicated provisions in other texts (e.g. on arbitration, carriage of goods by sea, public procurement, etc.)
Trade facilitation

• Trade facilitation aims at simplifying procedures and controls relating to movement of goods.
• The goal of trade facilitation is to reduce direct and indirect trade costs
• More cross-border trade means economic development
• No prejudice to border control but mutual reinforcement
• Information and communication technology helps trade facilitation through concepts such as paperless trade and electronic single window (“SW”) facilities
Legal topics relevant for paperless trade facilitation

- UN/CEFACT Rec. 35 lists the legal topics relevant for paperless trade facilitation, including electronic single windows.
- Those topics include:
  - e-transactions and e-contracting;
  - authentication/security (e-signatures/IdM);
  - data protection and retention, including data archiving and sharing;
  - cybercrime, digital forensics.
- Legislative needs should be identified through a comparison of best international standard against existing legislation ("checklist").
E-transactions and e-contracting law

- Establishes general principles on the use of electronic communications, including electronic signatures.
- A limited number of provisions are sufficient to enable the use of electronic means.
- General contract law is not amended.
- Usually first adopted at the national level.
- Those States that have adopted UNCITRAL model laws have a common legislative ground that facilitates mutual legal recognition.
- For a higher level of uniformity, States may adopt the United Nations Convention on the Use of Electronic Communications in International Contracts.
The legal environment for paperless trade facilitation: the private side

- B2B exchanges fall under the scope of commercial law.
- Limited number of provisions needed to address technology requirements.
- The overarching principle of commercial law is “party autonomy” or “freedom of contract”.
- One consequence is that parties are free to choose the technology used in their electronic exchanges.
- B2B e-commerce laws are often based on UNCITRAL texts.
- Legal uniformity facilitates mutual legal recognition of electronic exchanges and “legal interoperability”.
The legal environment for paperless trade facilitation: the public side

• Electronic SW perform also regulatory functions that fall under the scope of customs law, which is a branch of public/administrative law.
• Commercial operators must comply with those regulatory functions.
• One consequence is that commercial operators must adopt SW exchange formats and technologies.
  – This brings additional compliance costs that may discourage commercial operators from using SW.
• SW technical and legal standards are not uniform.
• This hinders mutual legal recognition of electronic exchanges and, therefore “legal interoperability”.
The legal environment for paperless trade facilitation: reconciling private and public side

• In successful cases, B2B laws are applied to the public sector to the fullest extent possible.
• This approach facilitates submission of trade-related data by commercial operators.
• It also reinforces regulatory functions.
• For these reasons, the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific relies on the three universal principles of the law of electronic transactions.
General principles of e-transactions law

1. Principle of non-discrimination
2. Principle of functional equivalence
3. Principle of technological neutrality

- Principles first designed for commercial transactions, now widely accepted and implemented in more than 25 legal systems in Asia and the Pacific
- Ideally, the principles should apply to both private and public entities
- How can they be applied to trade facilitation?
Principle of non-discrimination

“A communication shall not be denied validity on the sole ground that it is in electronic form.”

• Easier to implement in the private sector than in the public sector.
• Typically needs explicit legislation when applied to customs operations.
• Once the law enables the submission of electronic information, and the SW infrastructure is in place, a business culture needs to be established (through in-house training, etc.).
Principle of functional equivalence

“Purposes and functions of paper-based requirements may be satisfied with electronic communications, provided certain criteria are met.”

- Functional equivalent notions should be set forth the general law on electronic transactions.
- For instance, the “written form” requirement is met if the electronic communication is accessible for future reference.
- As a result, all references to “writing”, “original” and “signature” contained in customs law are satisfied according to the requirements of the electronic transactions law.
Principle of technological neutrality

“Legislation shall not impose the use of or otherwise favour any specific technology.”

• Open to future developments.
• Possibility to have more detailed provisions on technology requirements in implementing regulations.
• Many SW facilities set PKI-based requirements for data submission.
• Little interest in private sector because of costs.
• Possible barrier to mutual recognition due to the use of national encryption standards.
• But SW operators want better quality data from commercial documents.
• Practical solution: distinguish data submission and data storage/analysis, professional and occasional users, etc.
Example: electronic signatures’ challenges

• Number of different rules for electronic signatures:
  – In the same jurisdiction, private vs. public sector, and in different branches of the public sector;
  – Across borders.
• Choices often driven by security concerns but could hinder e-commerce and trade facilitation.
• Excessive costs and redundancy of systems led to IdM.
• Cross-border recognition of electronic signatures on a technology-neutral basis is mandated by Free Trade Agreements.
• However, bilateral e-signatures recognition agreements are rare.
• At the multilateral level, article 9(3) United Nations Convention on the Use of Electronic Communications in International Contracts.
UNCITRAL texts on electronic commerce

- Work started already in the 1980s
  - Electronic Data Interchange (EDI), cross-border electronic payments;
- UNCITRAL Model Law on Electronic Commerce, 1996
  - enacted in about 70 jurisdictions;
- UNCITRAL Model Law on Electronic Signatures, 2001
  - enacted in over 30 jurisdictions;
- United Nations Convention on the Use of Electronic Communications in International Contracts, 2005
  - entered into force on 1 March 2013;
  - has 7 State parties and 18 signatories;
  - More than a dozen States have enacted its substantive provisions domestically.
• The UNCITRAL Model Law on Electronic Commerce (MLEC) aims to enable the commercial use of modern means of communications and storage of information.

• It is based on the establishment of a functional equivalence in electronic media for paper-based concepts such as "writing", "signature" and "original".

• It also establishes rules for the formation and validity of contracts concluded electronically and for the attribution and retention of data messages.
The UNCITRAL Model Law on Electronic Signatures (MLES) aims at bringing additional legal certainty to the use of electronic signatures.

It establishes criteria of technical reliability for the equivalence between electronic and handwritten signatures.

It follows a technology-neutral approach, which avoids favoring the use of any specific technical product.

It establishes basic rules for assessing possible responsibilities and liabilities for the signatory, the relying party and trusted third parties intervening in the signature process.
• The Electronic Communications Convention (ECC) builds up on and updates the provisions of both Model Laws.

• It aims at enhancing legal certainty and commercial predictability where electronic communications are used across borders.

• The ECC contributes to enabling paperless trade by, among others: 1) validating the legal status of electronic transactions by setting general functional equivalence requirements of “writing”, “original” and “signature”; 2) preventing medium and technology discrimination; 3) enabling cross-border recognition of electronic signatures; 4) permitting the use of electronic means in alternative dispute resolution mechanisms.
ECC relevance for paperless trade

- The ECC creates the legal framework to promote B2B exchanges.
  - It ensures that fundamental principles of e-commerce law are recognised.
  - It helps harmonising domestic legislation.
- Facilitates the establishment of “legal interoperability” also for B2G and G2G transactions.
- For that reason, referenced in article 10 of the Framework Agreement.
- For instance, article 9(3) sets the conditions for recognition of foreign electronic signatures
  - It also fulfils legal requirements contained in FTAs.
Electronic transferable records

- UNCITRAL texts allow to establish rules for the use of electronic means in conjunction with all needs of commerce
- Exception for functional equivalence of notions based on physical control of documents such as possession and delivery
- UNCITRAL texts dealing with electronic transferable records exist in the field of carriage of goods by sea (articles 16 and 17 MLEC; Rotterdam Rules).
- Decision to prepare a dedicated text on Electronic transferable records (“ETR”).
Draft UNCITRAL Model Law on Electronic Transferable Records

• Fundamental principles of the draft MLETR:
  – Limited to establishing functional equivalence rules
    • does not affect substantive law
  – Technology neutrality: compatible with registry-, token- and distributed ledgers (block-chain) systems.
  – Recognises party autonomy.

• Current text is a model law for functional equivalent records
  – it could be used to prepare a treaty or a model law for records existing only in electronic form

• For the purpose of trade facilitation, it allows to input and reuse trade-related electronic data in the best (accurate, updated, complete) form.
Draft UNCITRAL Model Law on Electronic Transferable Records: Basic Features

- One fundamental issue is to avoid multiple requests for performance.
- Traditional approach based on “uniqueness” is impossible to meet with 100% certainty.
- Existing paper-based business models are not 100% error-free, but are considered sufficiently reliable in light of practical experience.
- The MLETR aim to combine the “control” and “singularity” approaches to provide sufficient assurance that multiple claims will not arise.
The MLETR applies to “electronic transferable records”, which are defined as electronic equivalents of a transferable document or instrument issued on paper that entitles the holder to claim the performance of the obligation indicated in the document or instrument and that is capable of transferring the right to performance to that obligation through the transfer of the document or instrument.

- The performance is delivery of goods or payment of a sum of money.
- In practice, the MLETR may apply to: bills of lading; promissory notes; bills of exchange; warehouse receipts, etc.
- One ETR could reply multiple documents related to both transport and finance.
Draft UNCITRAL Model Law on Electronic Transferable Records: Basic Features

- Use of ETR must be agreed to but consent may be implicit.
- No additional information requirements, but possible to add dynamic information (fintech enabler).
- All that can be done on paper is possible with an ETR:
  - amendment, reissuance, division and consolidation, issuance in multiple originals, etc.
- However, this does not mean that business processes shall be transposed as they are:
  - dematerialisation provides a chance to reengineer.
Draft UNCITRAL Model Law on Electronic Transferable Records: Policy Considerations

• The cross-border commercial transaction is one: do we really need to de-construct it in several documents?
• Dematerialisation of certain commercial documents is a necessity.
• Legal tools are needed to help in the transition.
• The MLETR provides also an opportunity to re-think existing business models: documents that are now related but distinct may be merged.
• Data may be re-used for paperless trade and electronic single windows.
Building an enabling legislative environment: concrete steps

- Legal recognition of electronic communications at the international level may be achieved:
  - Through the adoption of treaties;
  - Through the harmonisation of national laws on the basis of uniform legal standards, when they exist.
- This approach is endorsed in article 10 of the Framework Agreement.
- Standards may be global (UNCITRAL) or regional (e.g., APEC Data Privacy Pathfinder and Cross Border Privacy Rules).
- Need to coordinate those standards harmoniously in order to create a truly enabling legal environment for paperless trade.
For more information

- Visit the UNCITRAL website at http://www.uncitral.org/uncitral/uncitral_texts/electronic_commerce.html
- Send an email to luca.castellani@uncitral.org

Thank you!