



Enabling legal environment for paperless trade

Luca Castellani

Head, UNCITRAL Regional Centre for Asia and the Pacific

Incheon, Republic of Korea

What is paperless trade?

- Notion built around trade facilitation in customs operations through electronic single windows – a B2G transaction
- Goal to set up cross-border single windows – a G2G international transaction
- But international trade is a B2B transaction
- Broader e-governance context
- Need to enable paperless trade in all of these dimensions

The intersection of law and technology

- Paperless trade often understood as a technological process
- Legal aspects are equally relevant to ensure enforcement of regulations and private agreements
- Contractual provisions may not suffice: statutory rules are necessary, co-regulation may be desirable
- Not enough attention to legal aspects

Relevant factors that can influence paperless trade

- Technological: model chosen for paperless trade (e.g., single window architecture)
- Legal: regulatory elements vs. enabling elements
- Rigidity may be found in both: formalistic approach to transactions with public offices as well as among private individuals
- Examples: requirements for signature (case of attribution of a statement)
- Prevailing economic model and legal traditions need to be factored in

General principles of electronic transactions law

- Principle of non-discrimination
- Principle of functional equivalence
- Principle of technological neutrality
- Designed for commercial transactions, now widely accepted
- They need to be extended to public sector, to substitute current prevailing sectorial approach

E-contracting

- Generally successful
- Few adjustments due to technological requirements
- General contract law is not affected
- However, certain areas are still not touched (letters of credit, bills of lading) due to lack of industry trust or adequate legislation

E-contracting (2)

- When dealing with public offices, further fine-tuning may be needed (e-procurement)
- The cross-border dimension needs further legislative work
- Consumer protection outside scope of paperless trade
- Liability (both civil and criminal) principles usually unchanged

Authentication and security

- Cybersecurity is a leading concern for private and public authorities
- Should not hinder the use of electronic communications
- IT can provide several services: origin, integrity, time-stamping
- However, PKI has not yet delivered as expected
- Some loopholes lie outside the IT system: e.g., identification

Authentication and security (2)

- Number of different approaches for electronic signatures
 - In various jurisdictions
 - In the same jurisdiction, private vs. public sector
- Cross-border recognition is not common
- Not ready for authentication of objects, mobile environment
- Excessive costs and redundant systems led to discussions on identity management

Data retention and protection

- Increasing attention for protection of databases, emerging technical standards
- Additional concerns about taking of evidence in investigations and admissibility in criminal proceedings
 - especially in cross-border context
- Commercially-sensitive data is exchanged
 - duty to keep confidentiality remains

Data retention and protection (2)

- Electronic systems can be more or less secure than paper-based ones, depending on architecture and operational standards
- Exchange of information is now led by security concerns, not trade facilitation
- Regulation should help, not hinder trade facilitation

Implementation of enabling legislative environment

- Enabling means no barrier to electronic exchanges (B2B, B2G and G2G)
- Adoption of modern legislation, preferably based on widely-accepted uniform standards
- Extension of that legislation to the public sector to the maximum extent possible
- Avoid over-regulation; favour co-regulation
- Transition to paperless environment is an occasion to re-engineer processes and streamline existing laws