



Building an enabling legal environment for paperless trade

Luca Castellani

Head, UNCITRAL Regional Centre for Asia and the Pacific

Incheon, Republic of Korea

Trade facilitation and paperless trade

- 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
 - benefits for end users and consumers
- More cross-border trade = economic development
- No prejudice to regulatory objectives, but mutual reinforcement
- ICT may provide great opportunities for trade facilitation through concepts such as paperless trade and electronic single window facilities

The intersection of law and technology

- Paperless trade often understood as a technological process
- Legal aspects are equally relevant to ensure enforceability of laws, regulations and contractual agreements
- Need to adopt an adequate legal framework
- Contractual provisions do not suffice: statutory rules and implementing regulations are necessary
- Voluntary standards (co-regulation) may also be useful

Elements of 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
- Key legislative challenge: legally enable G2B exchanges, including cross-border
- Need to take into account the broader e-government context

Implementation of enabling legal environment

- Enabled means no barrier to electronic exchanges
 - B2B, B2G and G2G
- Adoption of modern legislation, preferably based on uniform texts (such as those of UNCITRAL)
- Application of that legislation to the public sector to the maximum extent possible
- Avoid over-regulation; consider co-regulation
- Transition to paperless environment is an occasion to review and reengineer processes and streamline existing laws

Factors relevant for paperless trade

- Technological: model chosen for paperless trade
 - E.g., single window architecture
- Cultural: prevailing economic model and legal tradition
 - Legal: regulatory elements vs. enabling elements

Legal topics relevant for paperless trade

- E-transactions and e-contracting
- Authentication / security (e-signatures, IdM)
- Data protection and retention
- Liability of SW facility operator
- Cybercrime, electronic evidence
- ...
- (See UN/CEFACT Rec. 35)

E-transactions law

- Establishes general principles applicable to all electronic transactions
 - Ideally, regardless of the nature of the subject involved (public or private)
- Often based on the UNCITRAL model laws
 - High degree of harmonisation across the world
- Limited number of provisions needed to address technology requirements

General principles of e-transactions law

- Principle of non-discrimination
- Principle of functional equivalence
- Principle of technological neutrality
- Designed for commercial transactions, now widely accepted
- They must be applied also in the public sector

Principle of non-discrimination

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

Principle of functional equivalence

- Legislation shall not impose the use of or otherwise favour any technology
 - Support for future innovations
 - Possibility to have detailed provisions on technology requirements in secondary legislation
 - (e.g., implementing regulations)

Principle of technological neutrality

- Purposes and functions of paper-based requirements may be satisfied with electronic communications, provided certain criteria are met
 - For instance, the “writing” requirement is met if the electronic communication is accessible for future reference

E-contracting law

- In general, contract and liability law are not affected
- Certain areas (letters of credit, bills of lading) are still not electrified
 - Lack of industry trust or of adequate legislation
- When dealing with public offices, special rules may be needed (e-procurement)
- The cross-border dimension needs further work
- Consumer protection outside scope of paperless trade

Cyber security: seeking a balance

- Cyber security is a leading concern for both private and public sector
- Should not hinder the use of electronic communications
 - Differentiate among users, operations
- PKI can provide several services: origin, integrity, time-stamping
 - However, has not delivered as expected
- Some loopholes lie outside the IT system
 - E.g., identification

Authentication: the challenges

- Driven by security concerns, not trade facilitation
- Regulation should help, not hinder trade facilitation
- Excessive costs and redundancy of systems led to IdM
- Cross-border recognition of electronic signatures is rare
 - Only article 9(3) ECC for B2B exchanges
- Number of different approaches for electronic signatures
 - In various jurisdictions
 - In the same jurisdiction, private vs. public sector
- Authentication of objects or authentication in a mobile environment not fully taken into account

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 and other proceedings
 - especially in cross-border context
- Commercially-sensitive data is exchanged
 - duty to keep confidentiality remains unchanged
- Electronic systems can be more or less secure than paper-based ones, depending on architecture and operating standards

Concrete steps for priority action

- E-transactions / e-contracting is the area where the law is most settled
- Consolidate B2B legal environment by adopting the United Nations Convention on the Use of Electronic Communications on International Contracts
- Overcome the B2G divide by favouring convergence while respecting fundamental principles of electronic transactions
- ESCAP Resolution 68/3 on paperless trade and its implementing measures may provide guidance in this process

Thank you for your attention!

For more information:

- UNCITRAL website: www.uncitral.org
- UN NExT website: www.unescap.org/unnext/
- Or send an email to: luca.castellani@uncitral.org