

**UNCITRAL** United Nations Commission on International Trade Law



## The significance of technology neutrality in support of trade facilitation

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### When was UNCITRAL established? And why?

Established by United Nations General Assembly in 1966.

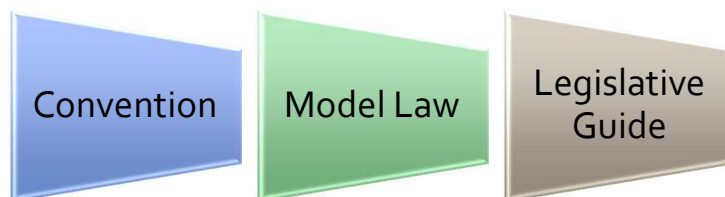
The core legal body of the UN system in the field of private international trade/commercial law.

Mandate: Progressive **harmonization** and **modernization** of international trade law by preparing and promoting the use of legislative and non-legislative instruments in key areas of commercial law.

## Composition of UNCITRAL



## UNCITRAL Texts



- Negotiated with universal participation and reflect balance of national, regional, economic, legal and other interest.
- Drafted with a view to ensure compatibility with the various legal traditions.

## [ UNCITRAL texts on electronic commerce ]



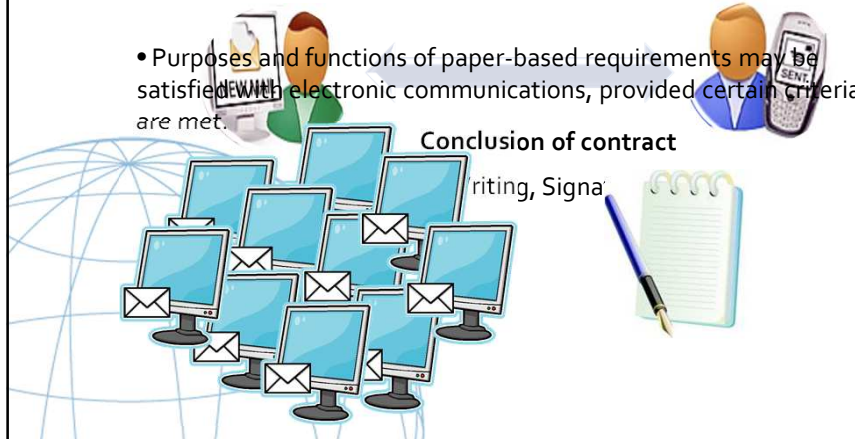
## Fundamental legislative principles

### 1. Non discrimination

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

### 2. Functional equivalence

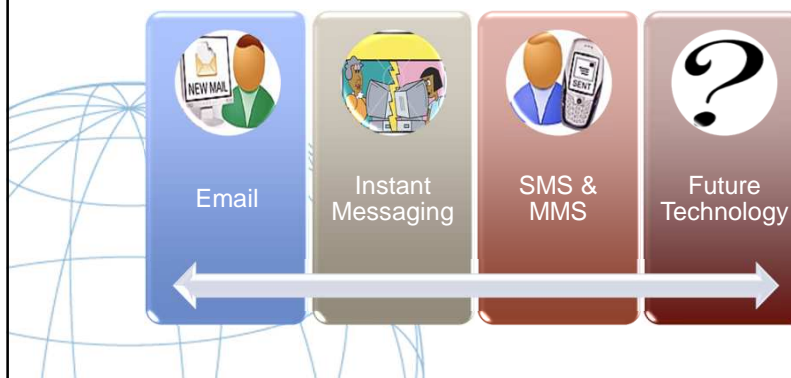
- Purposes and functions of paper-based requirements may be satisfied with electronic communications, provided certain criteria are met.

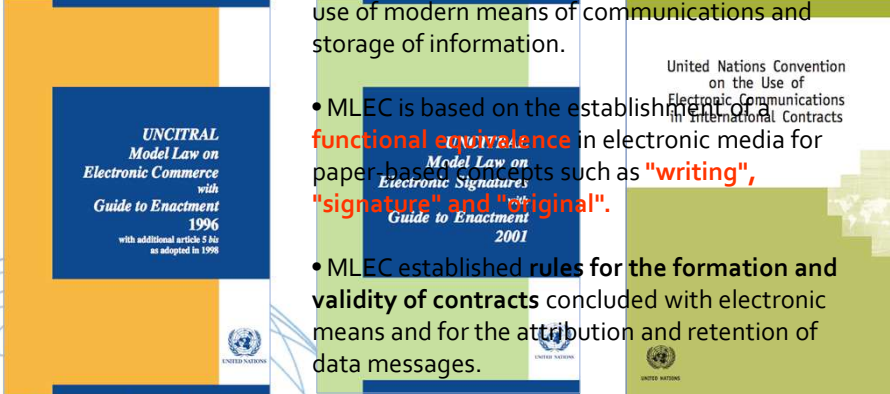


## Fundamental legislative principles (cont'd)

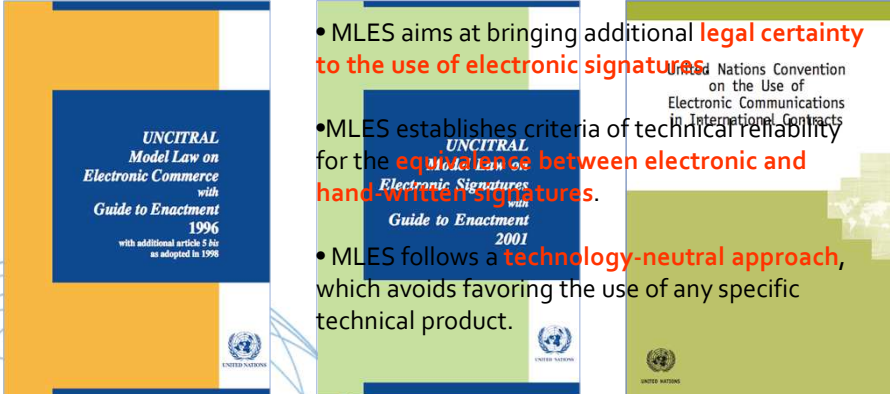
### 3. Technological neutrality

- Equal treatment of different technologies (EDI, e-mail, Internet, instant messaging, fax, etc.)
- Possibility to have detailed provisions on technology requirement in the regulations implementing e-commerce legislation.





- MLEC is intended to **facilitate commerce** via the use of modern means of communications and storage of information.
- MLEC is based on the establishment of a **functional equivalence** in electronic media for paper-based concepts such as **"writing", "signature" and "original"**.
- MLEC established **rules for the formation and validity of contracts** concluded with electronic means and for the attribution and retention of data messages.

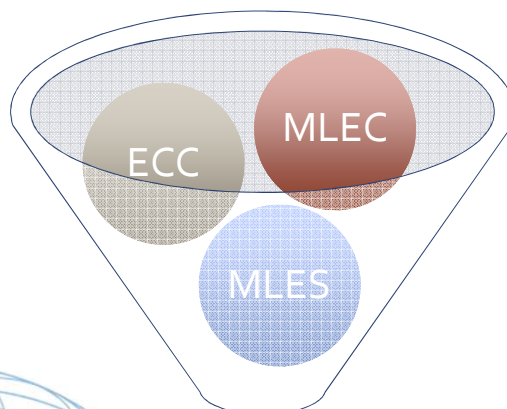
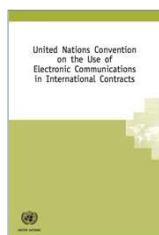
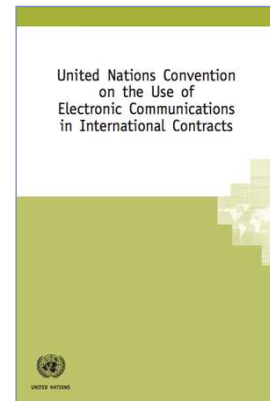
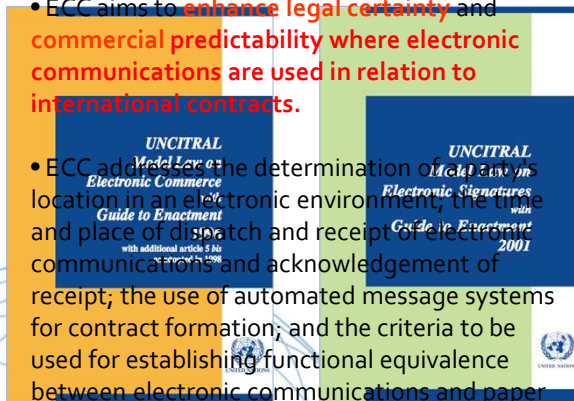


- MLES aims at bringing additional **legal certainty to the use of electronic signatures**.
- MLES establishes criteria of technical reliability for the **equivalence between electronic and hand-written signatures**.
- MLES follows a **technology-neutral approach**, which avoids favoring the use of any specific technical product.

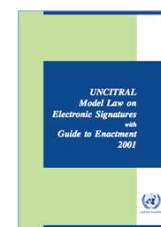
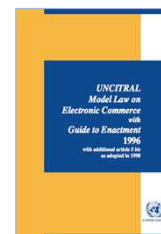
- ECC builds up and, in certain cases, **updates the provisions of both Model Laws.**

- ECC aims to **enhance legal certainty and commercial predictability where electronic communications are used in relation to international contracts.**

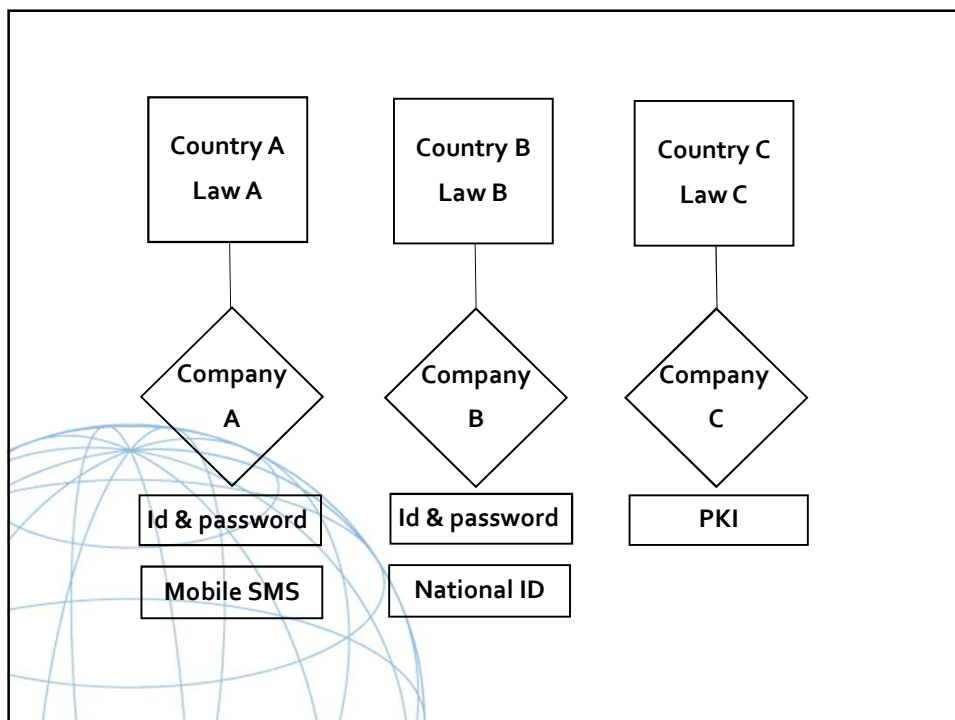
- ECC addresses the determination of party's location in an electronic environment, the time and place of dispatch and receipt of electronic communications and acknowledgement of receipt; the use of automated message systems for contract formation; and the criteria to be used for establishing functional equivalence between electronic communications and paper documents.

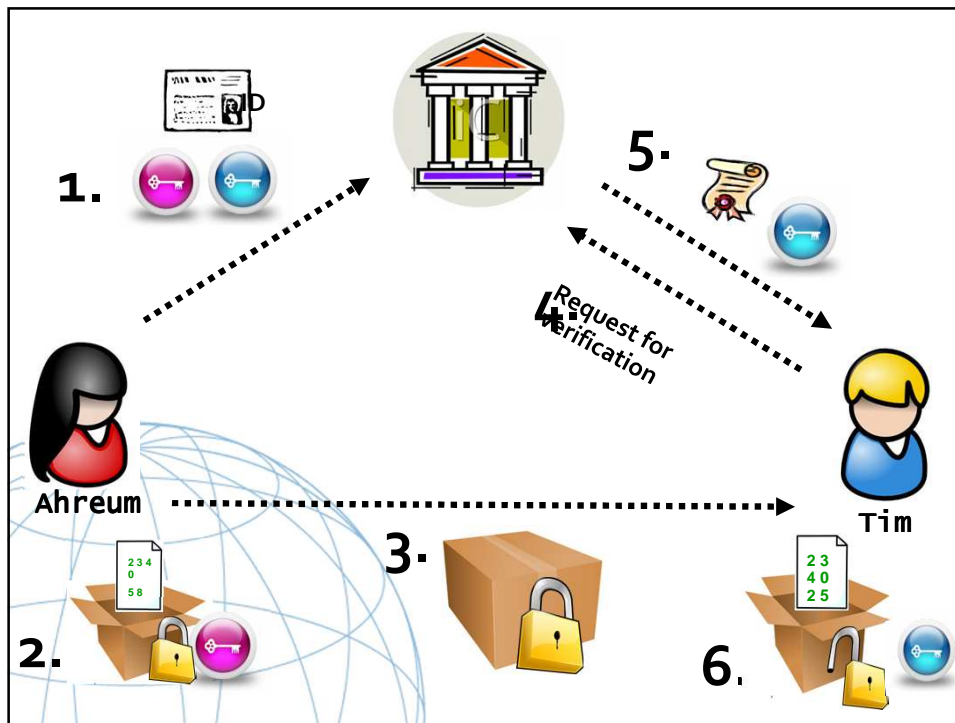


Comprehensive general framework for the use of electronic transactions



[ Case Study ]  
- from consumer's point of view -





### Technology-specific approach

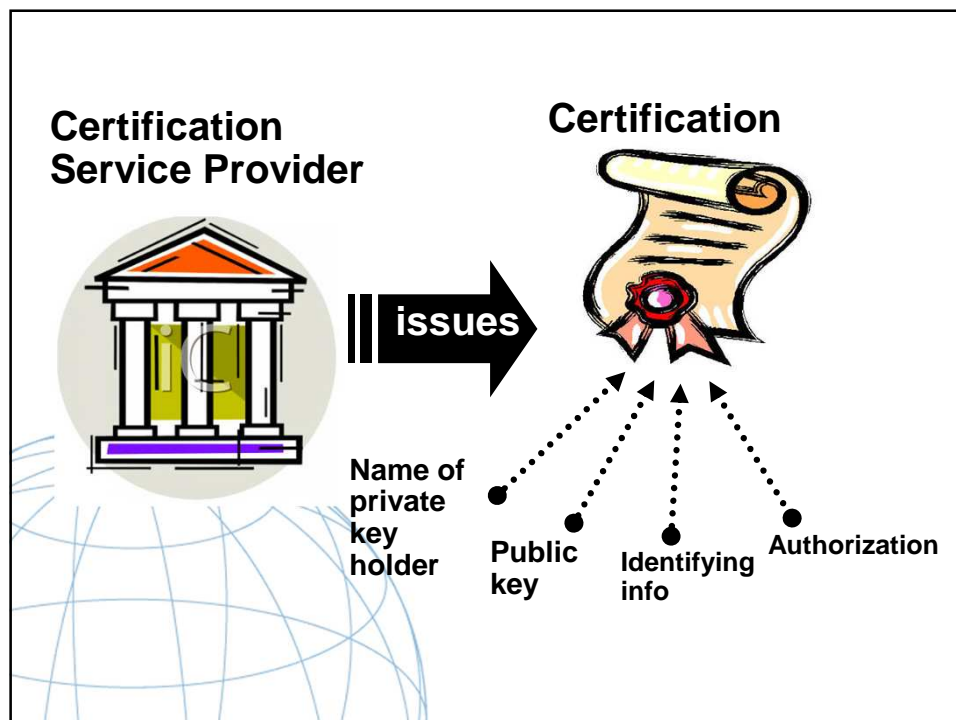
Sets specific technology; Parties are not allowed to choose

- Prescribes the use of a specific technology.
- Not technology neutral – risks excluding other possibly superior technologies from entering and competing in the marketplace.
- Fixing requirements before a particular technology matures.
- Parties are not free to choose signature method they deem appropriate.

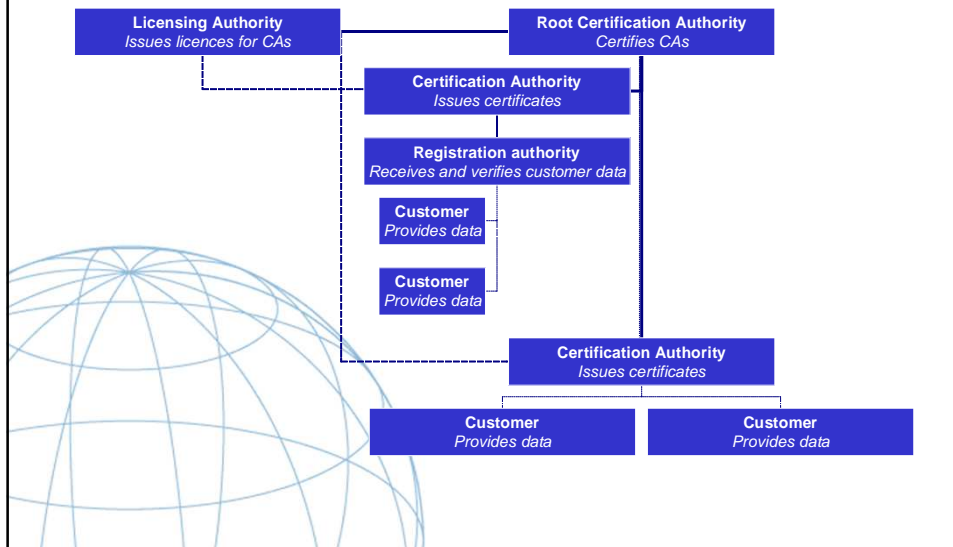
Digital signature based on cryptography (PKI)



[ Problems]  
- from government/business point of view -



## Public Key Infrastructure (PKI)

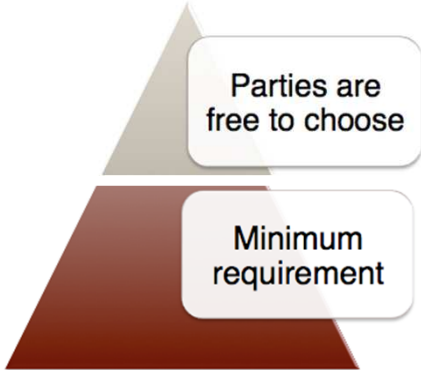


1. What about States that have different technical and/or legal requirements for establishment of certification authority?
2. What about States without the resources to establish and maintain root certification authority?
3. Would it be possible for parties to recognize foreign certificates (i.e. certificates issued under a foreign jurisdiction?)
4. How can business sector comply with different regulations on e-signature?
5. How will different levels of technology affect the business flow, supply chains, resources management of a company?

## [ Solution ]

- legal point of view -

### Technology neutrality - Minimalist approach



**Parties are  
free to choose**

**Minimum  
requirement**

- Law provides minimum requirements.
- Follows the principle of technological neutrality.
- Functional equivalence is confirmed provided that certain specified functions and requirements are met.
- Parties are free to choose signature method they deem appropriate.

Min. Requirement & Choice of ID and Password

## Technology neutrality - "Two-tier" legislation

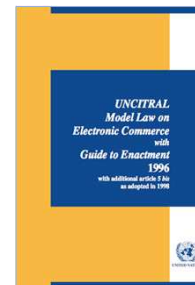


## Model Law on Electronic Commerce

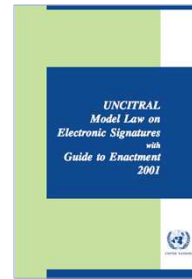
Article 1: Scope of application

Article 2. Definition "data message"

Article 7: Signature



## Model Law on Electronic Signature



Article 1: Sphere of application

Article 3. Equal treatment of signature technologies

Article 6: Compliance with a requirement for a signature

Article 12: Recognition of foreign certificates and electronic signatures

## Electronic Communications Convention



Preamble (fifth paragraph)

Article 9: Legal recognition of electronic communications

Article 11. Invitation to make offers

Article 12: Use of automated message systems for contract formation

## Thank You!

For more information on the work of UNCITRAL in the  
area of electronic commerce, or on other topics, please  
visit our web site  
<http://www.uncitral.org/>

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