



Ministry of Information Technology
& Telecommunication

DIGITAL PAKISTAN

END-TO-END TRADE DIGITALIZATION: LEGAL FRAMEWORK AND CERTIFICATION IN PAKISTAN



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ELECTRONIC CERTIFICATION ACCREDITATION COUNCIL (ECAC)

**- MINISTRY OF INFORMATION TECHNOLOGY AND TELECOMMUNICATION
(MOIT&T) - GOVT. OF PAKISTAN**



SEQUENCE



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 Background

 Establishment of ECAC

 Functions



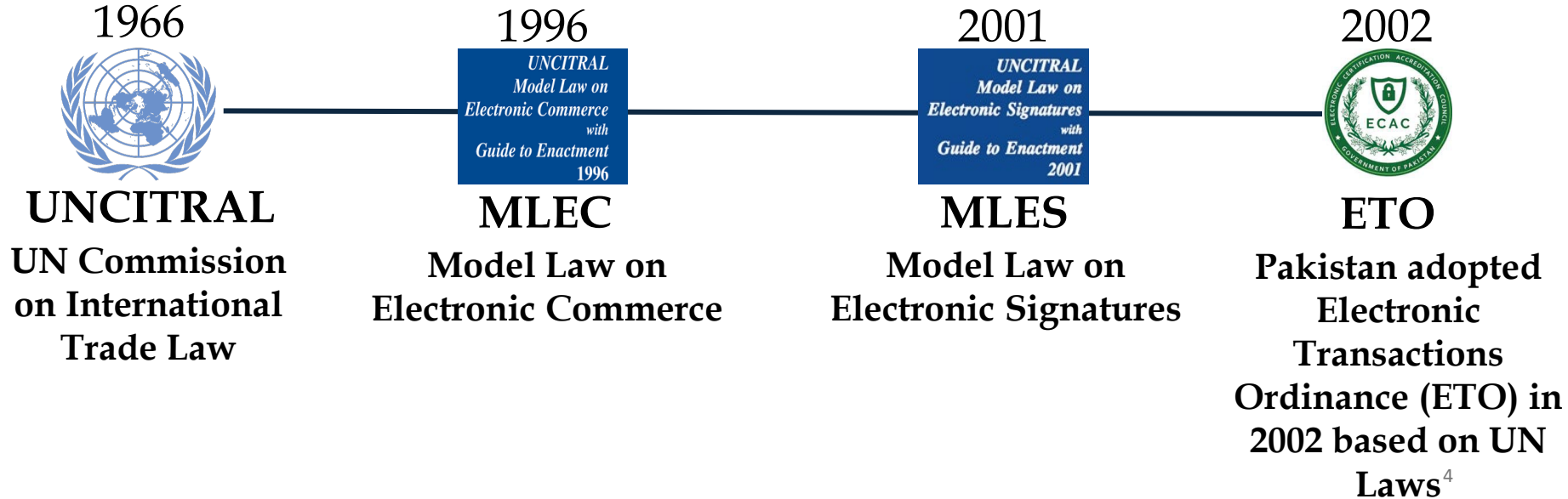
ORIGIN OF ELECTRONIC TRANSACTIONS ORDINANCE (ETO) 2002 PAKISTAN



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E-Transactions governed through legal regulatory framework for global recognition





PURPOSE OF ETO 2002



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- An Ordinance to recognize and facilitate documents, records, information, communications and transactions in electronic form, and to provide for the accreditation of Certification Service Providers.
- Legal sanctity to Documents, Records, Information, Communications and Transactions in Electronic form.
- Provides legal and policy framework to create trust in electronic transactions.
- Scope: Extends to the whole of Pakistan



ELECTRONIC CERTIFICATION ACCREDITATION COUNCIL (ECAC)



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- Electronic Certification Accreditation Council (ECAC) was established under Section 18 of the Electronic Transactions Ordinance (ETO) 2002 of Pakistan.
- ETO 2002 mandates ECAC to accredit and regulate the working of Certification Service Providers (CSPs).
- CSPs issue Digital Certificates for Trust & Security of users, devices and services in cyberspace.



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- ECAC is the National Trust Services Regulator of Pakistan under the Ministry of IT & Telecom, Govt. of Pakistan.
- Established to enable secure, legally valid digital transactions.
- Aligns Pakistan's digital ecosystem with global legal and technical standards.



DIGITIZATION OF PAKISTAN - ROLE OF ECAC



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Digitalization of Pakistan:

- e-Governance
- e-Commerce
- e-Health
- e-Education
- e-Banking
- e-Procurement
- e-office
- e-Tax, etc.

Legal Sanctity, Trust & Security build the foundations for secure **Digitalization** in all above sectors.



FUNCTIONS / MANDATE OF ECAC



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- Accreditation of CSPs.
- Monitoring of Accredited CSPs.
- Establish and manage the repository.
- Research in relation to cryptography services.
- Recognition/ Accreditation of foreign CSPs.
- Encourage Standardization.
- Advice/recommendation on matters covered under ETO 2002.



ECAC Initiatives Supporting Digitalization Technology Harmonization



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<https://ecac.pki.gov.pk/>
(Root & Issuing CAs)

ECAC Initiatives Supporting Legal Harmonization



- Pakistan GCC Free Trade Agreement (FTA) signed [through Ministry of Commerce \(MoC\), Govt. of Pakistan;](#)

- Enabling cross-border *Trust* in electronic transactions.
- Ensuring secure paperless cross-border trade b/w Pakistan & GCC Countries.
- Recognition of Accredited Digital Certificates of ECAC by the other GCC Countries.

- Action Item:
 - Establishment of Working Groups with GCC relevant organization using the platform of Ministry of Commerce & MOITT

GCC Member Countries:

1. Saudi Arabia



2. United Arab Emirates (UAE)



3. Bahrain



4. Oman



5. Qatar



6. Kuwait



SDAIA
الهيئة السعودية للبيانات
والذكاء الاصطناعي
Saudi Data & AI Authority



Sultanate of Oman
Information Technology Authority
National Digital Certification Center

**Oman National
PKI**



الوكالة الوطنية للأمن السيبراني
National Cyber Security Agency



Kuwait
Central Agency for information technology



ECAC's Role in Global Dialogue



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- Active engagement with UNCITRAL Working Groups.
- Willingness to collaborate on research, surveys, and technical development
- Sharing implementation best practices and policy experiences



ECAC's Role in Global Dialogue



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ICLRC Themes / Focus Areas	Electronic Transactions Ordinance (ETO) 2002	Electronic Certification Accreditation Council (ECAC)
1. Harmonization of international digital trade rules	Recognizes legal equivalence of electronic documents, signatures, and contracts with traditional paper-based ones	Supports harmonization via recognition of foreign CAs and adoption of international standards like WebTrust Audit, ISO 21188, ISO 27001/27701, FIPS 140/2 & 140/3
2. Support for UNCITRAL Model Laws (e.g., MLEC 1996, MLES 2001)	ETO 2002 draws heavily from MLEC and MLES principles (functional equivalence, technology neutrality, non-discrimination)	Aligns PKI framework and CA accreditation processes with UNCITRAL principles; promotes international legal and technical interoperability
3. Legislative enactment diversity and interaction across jurisdictions	Applies within Pakistan, with provisions for cross-border recognition	Provides cross-border recognition mechanisms through mutual CA recognition, audit standards, and international liaison (WebTrust Standards)
4. Implementation status of UNCITRAL texts (based on heat maps/questionnaire)	ETO 2002 partially implements UNCITRAL MLEC and MLES, with no updates since 2002 and new updates are in process with the Ministry of IT & Telecom and the Ministry of Law & Justice Pakistan	ECAC monitors and advises on updates required in the National frameworks in light of global UNCITRAL/legal developments
5. Alternative approaches to E-Commerce regulation in different jurisdictions	Legal framework, AI in new phase, Block chain based on digital identity, and smart contract regulations	ECAC champions emerging areas (e.g., Blockchain certification, digital identity trust models) in collaboration with legal/policy stakeholders



ECAC's Role in Global Dialogue



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ICLRC Themes / Focus Areas	Electronic Transactions Ordinance (ETO) 2002	Electronic Certification Accreditation Council (ECAC)
6. Promising legal issues not yet addressed by UNCITRAL (e.g., data sovereignty, AI in contracts)	ETO 2002 Technology neutrality allows to address newer technologies and few are in process like AI, and IoTs	ECAC participates in international forums (e.g., UNCITRAL, CCADB, CAB Forums, PKI Consortiums) to influence development of future legal standards and frameworks. ECAC has deployed technology of National PKI with data transaction identity and data source identity.
7. Stocktaking of digital trade laws (national & treaty levels)	Pakistan's ETO 2002 is in process of integrated with trade treaties or Free Trade Agreements under the WTO	ECAC promotes inclusion of digital trust services in trade policy and regional cooperation frameworks Pak GCC free trade agreement and other initiatives have been undertaken with the support of Ministry of Commerce
8. End-to-end trade digitalization (interoperability, trust, identity, security)	ETO provides foundational support, and support with sub regulation for trust services interoperability	ECAC operates Pakistan's National Root CA; ensures secure, compliant, and interoperable trust and identity infrastructure and guide all regulators in Pakistan
9. Technology neutrality and functional equivalence principles	Core principles embedded in ETO 2002	ECAC enforces technology-neutral certification policies; evaluates new technologies (e.g., quantum-safe cryptography) for legal equivalence
10. UNCITRAL's next-generation model law development and future regulatory shaping	ETO revision in progress to integrate the future identity challenge like AI generated data	ECAC contributes thought leadership, feedback, and technical inputs to UNCITRAL WG IV sessions and cross-border regulatory dialogue. ECAC elaborate and support how PKI technology can support in AI generated data for maintaining trust



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Thank You

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