Malaysia PKI Progress & PQC KL 2025 Invitation

Asia PKI Consortium

POS Digicert

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Asia PKI Consortium SSC Meeting |

Manila, Philippines

30 May 2025

Malaysia's PKI Landscape

1
- Government-regulated PKI ecosystem under Malaysian Communication & Multimedia Commission (MCMC) since 1997

2
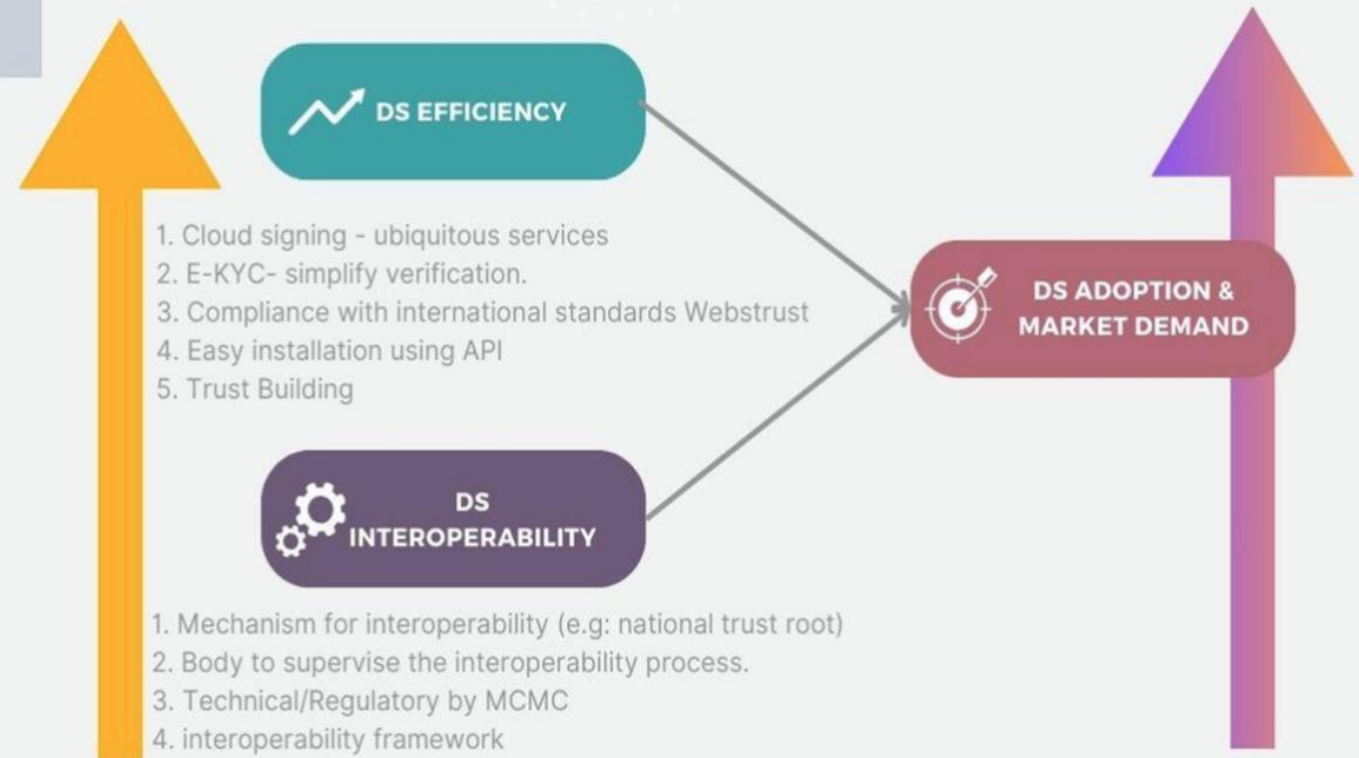- National Cyber Security Agency (NACSA) leads cybersecurity and cryptographic policy

3
- Growth in adoption of digital signatures in public and private sectors

ReSEARCH BY UNIVERSITY SAINS ISLAM MALAYSIA (USIM) FUNDED BY MCMC UNDER DIGITAL SOCIETY RESEARCH GRANT 2023

THE RELATIONSHIP BETWEEN DIGITAL SIGNATURE (DS) EFFICIENCY AND INTEROPERABILITY AGAINST DEMAND AND ADOPTION.

DS EFFICIENCY

1. Cloud signing - ubiquitous services
2. E-KYC- simplify verification.
3. Compliance with international standards Webstrust
4. Easy installation using API
5. Trust Building

DS INTEROPERABILITY

1. Mechanism for interoperability (e.g: national trust root)
2. Body to supervise the interoperability process.
3. Technical/Regulatory by MCMC
4. interoperability framework

DS ADOPTION & MARKET DEMAND

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Key National Initiatives – e-INVOICE & MyDIGITAL ID

E-Invoice Implementation

- Malaysia is rolling out e-Invoice in phases to strengthen tax administration dan digital economy efficiency
- Supports B2B, B2C and B2G transactions with near real time validation
- Requires high-assurance digital signatures
- All local CAs including Pos Digicert are involved

MyDigital ID

- National digital identity app built on Malaysia Government PKI for secure authentication
- Adoption is growing but still hindered by integration issues with existing use-cases

Pos Digicert's Contributions

- **NATIONALLY LICENSED CA UNDER MCMC**

- **WEBTRUST-COMPLIANT OPERATIONS AND GLOBAL INTEROPERABILITY**

- **SOLUTIONS FOR DIGITAL SIGNING SOLUTIONS, EINVOICING, EPRESCRIPTION, EKYC AND MORE**

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Pos Digicert Product and Solution – Stack for Digital Trust

IDENTITY	SIGNING	APPLICATION / FEATURES
Identity verification eKYC iDsaya KYC Trusted Database	**Digital Signing** Signature Workflow Cloud Signature Qualified Signature **Document Signing with AI**	Long-Term Validation eCredentia
Authentication Strong Authentication Biometric Authentication Token Authentication	**Digital Certificates** Remote Certificate Electronic Seal SSL Certificate Time Stamping Transaction Signing QR Code	**AI Solution & Digital Security** • Certificate Lifecycle Management (CLM) • Trust Services • Agentic Ai & Responsible AI Integration • Data & Access Security • Application & Web Security • Threat Detection & Response • Enterprise Key Management (EKM) • Encryption Services
Digital Identity Digital Identity Digicert Locker	**Public Key Infrastructure** PKI as a Service PKI Middleware	

Post-Quantum Readiness

- NACSA spearheading national PQC readiness framework

- Multi-sector engagement with regulators and industry

- Pos Digicert supporting pilot deployments and advisory

Post-Quantum Cryptography Journey

- POS DIGICERT is currently testing NIST-approved PQC algorithms

- We're raising awareness around industry and pushing for ecosystem readiness, especially for application/system owners to update libraries and architectures.

- Implementing PQC will involve significant cost, system upgrades, and changes to policy and compliance frameworks.

- Malaysia's revised National Cryptography Policy by NACSA was issued 22 January 2025, which provide clearer guidance and CAs like POS DIGICERT invited to give input.

- To future-proof our services and infrastructure, POS DIGICERT is now prioritizing **crypto agility,** ensuring we can transition rapidly and securely as cryptographic standards evolve.

- A major focus in 2025-2026 will be awareness and ecosystem preparedness.

PQC Conference 2025 – Kuala Lumpur

- Date: 28–30 October 2025
- Venue: Connexion Conference & Event Centre (CEC)
- https://pkic.org/events/2025/pqc-conference-kuala-lumpur-my/

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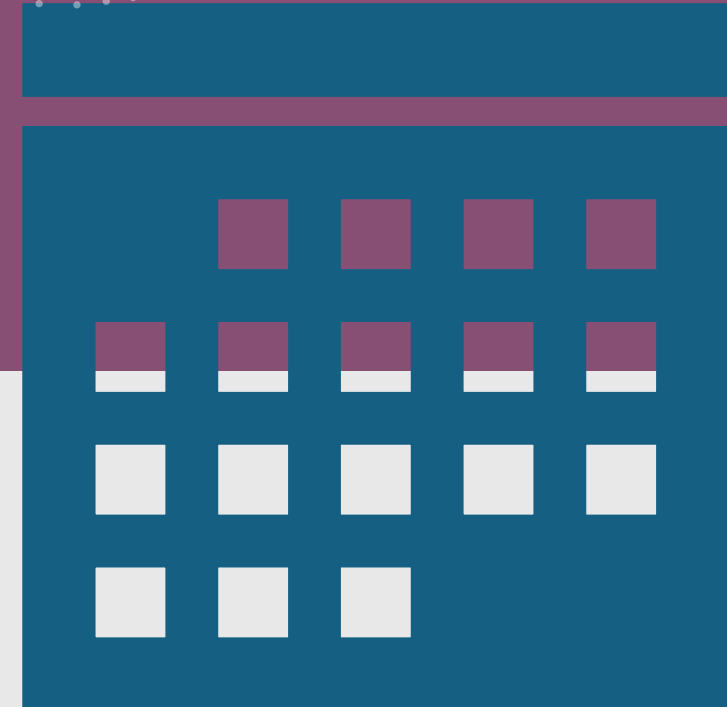
Invitation to Asia PKIC Members

- Share your regional PKI and PQC experience

- Submit abstracts here: https://tinyurl.com/PQC2025Abstract

- Join technical panels, working groups, and solution showcases

Closing Note

- Let's shape digital trust in Asia through shared leadership

- Pos Digicert looks forward to welcoming you in KL this October

- Together, we are stronger in the post-quantum future