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CIVIL AVIATION AUTHORITY
قطر QATAR



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Overview



2012



3 key missions

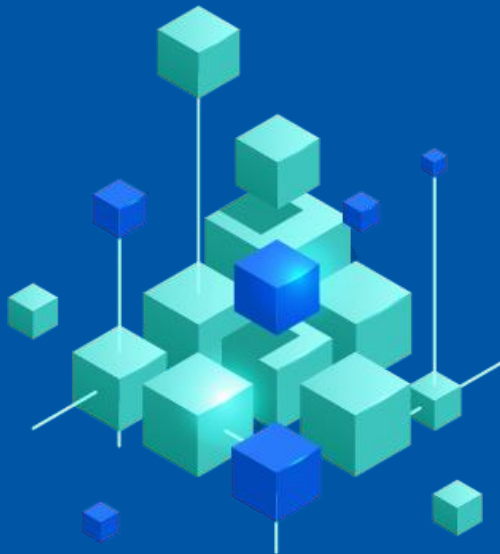
- 1 Driving Digital Trust and Innovation
- 2 Acting as a key player within the Luxembourg Digital Ecosystem
- 3 Supporting governments and businesses in preserving their digital sovereignty



Our support to Luxembourg's public services

Digitalization

Supporting public
services in securely
digitizing their
processes.



Digitalization of
health identity
and processes

Enhancing
security of
protocol
services, and
interactions
with foreign
governments



Our support to Luxembourg's public services

Travel & mobility

People's travel need to
be seamless and
secure.



Physical and
digital
identity and
travel
documents
issuance



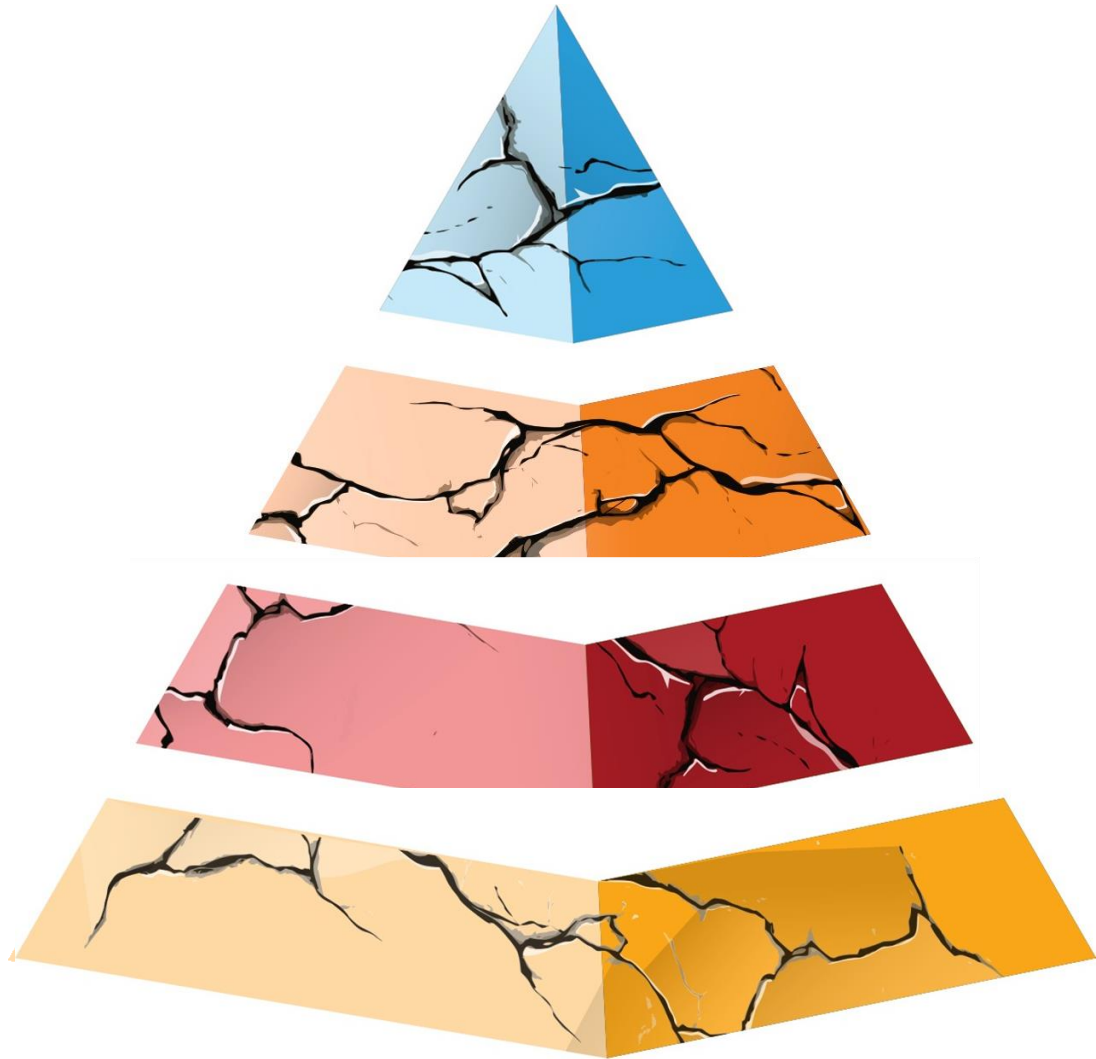
Digital
identity



Enhancing
border
security

**The era of current public-key
cryptography is over**

**Quantum attackers
are becoming a reality.**



Authenticity of electronic
travel documents

ICAO Document 9303

Critical infrastructures (PKI)

Public-key cryptography

What is the main risk?

A valid and verifiable fake passport could exist—crossing **your borders, possibly even issued under **your authority**.**



What is the solution?



Post-quantum cryptography (PQC)

Run on classical computers

Resistant against quantum computers

Next steps

Transit to post-quantum

Standardization efforts for PQC digital signatures in **ISO** has started. INCERT is co-leading this work.



INCERT is working on the topic itself with a PQC prototype for travel documents.

Embed post-quantum cryptography in our solutions

Support public services and businesses with this technology

Thank You

