



The Standards People



ETSI/IQC Quantum Safe Cryptography  
Conference 2026

# National and industry sector guidance for PQC: what's missing?

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17 / 06 / 2026



# Agenda

State of PQC (mid 2026)

Case Study: USA

Case Study: GSMA Post Quantum Telco Network Task Force (PQTN)

Industry Sector Perspective

Gaps in PQC Guidance (mid 2026)

Actions and Recommendations (2026-2027)

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The image displays three overlapping book covers from the Federal Information Processing Standards Publication series, published by the National Institute of Standards and Technology (NIST).

- FIPS 203: Module-Lattice-Based Key-Encapsulation Mechanism Standard**
  - Category: Computer Security
  - Subcategory: Cryptography
  - Information Technology Laboratory, National Institute of Standards and Technology, Gaithersburg, MD 20899-8900
  - This publication is available free of charge from: <https://doi.org/10.6028/NIST.FIPS.203>
  - Published: August 13, 2024
- FIPS 204: Module-Lattice-Based Digital Signature Standard**
  - Category: Computer Security
  - Subcategory: Cryptography
  - Information Technology Laboratory, National Institute of Standards and Technology, Gaithersburg, MD 20899-8900
  - This publication is available free of charge from: <https://doi.org/10.6028/NIST.FIPS.204>
  - Published: August 13, 2024
- FIPS 205: Stateless Hash-Based Digital Signature Standard**
  - Category: Computer Security
  - Subcategory: Cryptography
  - Information Technology Laboratory, National Institute of Standards and Technology, Gaithersburg, MD 20899-8900
  - This publication is available free of charge from: <https://doi.org/10.6028/NIST.FIPS.205>
  - Published: August 13, 2024

Each cover features the NIST logo, the title, category, and publication date. The covers are white with blue and black text and graphics.

January 7, 2025

To: Banking Conventions and Licensed Payment Service Providers  
Chairman of the Board and CEO

Subject: Building System Preparedness for Cyber-Risks Arising from Quantum Computing  
Legislation

Questioning Corporate

**FEDERAL REGISTER**  
The Daily Journal of the United States Government

Presidential Document

**Sustaining Select Efforts To Strengthen the Nation's Cybersecurity and Amending Executive Order 13694 and Executive Order 14144**

A Presidential Document by the Executive Office of the President on 04/11/2025

**EUROPEAN COMMISSION**

**CONSIDERATION RECOMMENDATION**  
of 14.4.2024  
on a Coordinated Implementation Roadmap for the transition to Post-Quantum Cryptography

**Cybersecurity and Executive Order 14144**

the laws of the United States of America (50 U.S.C. 1701 et seq.), the Immigration and Nationality Act (8 U.S.C. 1201 et seq.), it is hereby ordered.

4144 of January 16, 2025  
(rty), is hereby amended by:  
216), and 216) in subsections 216).

**Focused Activities**

Timeline: 2025 to 2035

- Awareness/Preparation:** 2025-2026
- Discovery & Inventory:** 2026-2027
- Risk Assessment & Planning:** 2027-2029
- Migration Execution:** 2029-2032
- Migration Testing:** 2032-2034
- Validation & Monitoring:** 2034-2035

**Ongoing Activities**

- Governance and Risk Management
- Management of External Dependencies, Industry Outlook, and Risk Landscape
- Dialogue on Barriers and Enabling Conditions

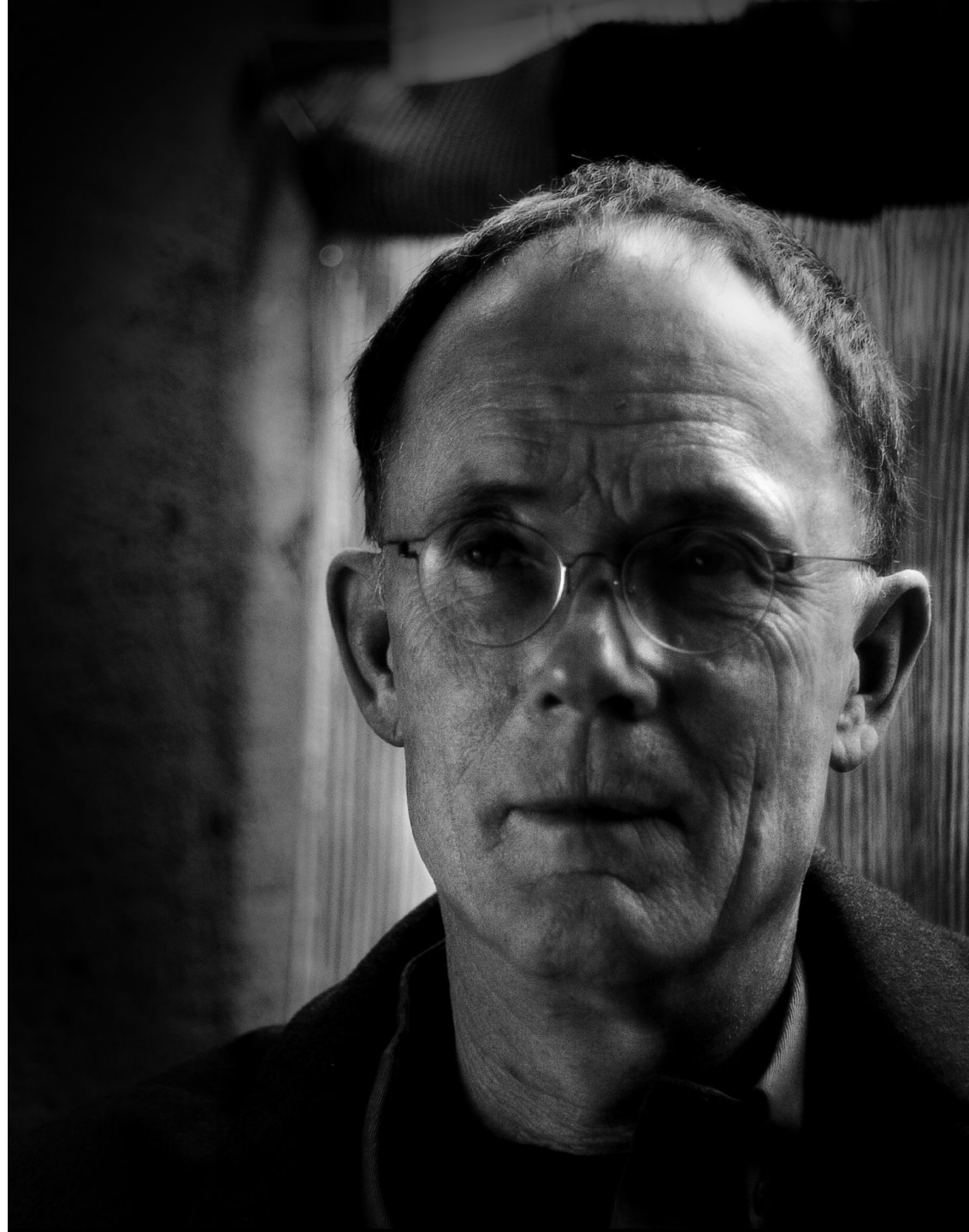
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*“The future is already here —  
it's just not very evenly distributed”*

– William Gibson (1993)

Portrait of author William Gibson taken on his 60th birthday; March 17, 2008.  
Wikimedia Commons. CC-SA-2.0





# USA & PQC

A partial list of US activities in PQC ..

## Scope

Policy / Strategy

Standards

Legislation

Regulation

Budget / Funding

Procurement

Convening

## Ongoing

Date	ID	Title
Apr 2015		Workshop on Cybersecurity in a Post-Quantum World , NIST
May 2022	NSM-10	Memorandum on Promoting United States Leadership in Quantum Computing While Mitigating Risks to Vulnerable Cryptographi , White House
Aug 2022	CISA-2022	Preparing Critical Infrastructure for Post-Quantum Cryptography, CISA
Dec 2022	HR7535	Quantum Computing Cybersecurity Preparedness Act, US Congress
Aug 2023	CISA-2023	Quantum-Readiness: Migration to Post-Quantum Cryptography, CISA/NSA//NIST
Jul 2024		Report on Post-Quantum Cryptography, Office of Management & Budget
Aug 2024	NIST	FIPS-205 (ML-KEM), FIPS-204 (ML-DSA), FIPS-205 (SLH-DSA)
Aug 2024	CISA-2024	Strategy for Migrating to Automated Post-Quantum Cryptography Discovery and Inventory Tools, CISA
Dec 2024	CNSA 2.0 (revised)	Commercial National Security Algorithm Suite 2.0, NSA
Jan 2025	EO-14414	Strengthening and Promoting Innovation in the Nation's Cybersecurity, White House
Jun 2025		Sustaining Select Efforts To Strengthen the Nation's Cybersecurity, White House
Nov 2025	USA-2025	Preparing for Migration to Post-Quantum Cryptography, US DoW
Jan 2026	CISA-2026b	Product Categories for Technologies That Use Post-Quantum Cryptography Standards, CISA
Mar 2026	NCF-2026	Convening To Act, National Cryptologic Foundation
Jun 2026	NSPM-12	National Policy for the Cybersecurity of National Security Systems, White House



# GSMA Post-Quantum Task Force (PQTN)

	MWC <sup>™</sup> GSMA	MWC <sup>™</sup> GSMA	MWC <sup>™</sup> GSMA	INFOCOMM MEDIA DEVELOPMENT AUTHORITY	MWC <sup>™</sup> GSMA	MWC <sup>™</sup> GSMA	MWC <sup>™</sup> GSMA		MWC <sup>™</sup> GSMA	MWC <sup>™</sup> GSMA	
PQTN Formation	GSMA Task Force approved	1 <sup>st</sup> Post Quantum Seminar	2 <sup>nd</sup> Post Quantum Seminar	3 <sup>rd</sup> Post Quantum Seminar	4 <sup>th</sup> Post Quantum Seminar	5 <sup>th</sup> Post Quantum Seminar	6 <sup>th</sup> Post Quantum Seminar		7 <sup>th</sup> Post Quantum Seminar	8 <sup>th</sup> Post Quantum Seminar	
	Mexico City	Barcelona	Las Vegas	Barcelona	Singapore	Las Vegas	Barcelona		Doha	Barcelona	
	September 2022	February 2023	September 2023	February 2024	May 2024	October 2024	March 2025	July 2025	November 2025	February 2026	May 2026
		GSMA PQ.01	GSMA PQ.02	GSMA PQ.03 v1		GSMA PQ.03 v2	GSMA PQ.04	GSMA PQ.05		GSMA PQ.07	
	PQTN TF formed in GSMA	Telco Impact Assessment Whitepaper	Guidelines for Quantum Risk Assessment	Guidelines for Telecom Use Cases v1		Guidelines for Telecom Use Cases & Migration v2	Post Quantum Cryptography in IoT Ecosystem	Quantum-safe Cryptography for 4G and 5G Roaming		Post Quantum Cryptography for Non-Terrestrial Networks	PQC Hybrid Key Exchange for Base Station & Security Gateway

Policy / Strategy

Standards ?

Legislation

Regulation

Budget / Funding

Procurement

Convening

PQTN membership brings together operators, vendors, regulators, chip-sets

All GSMA PQTN documents are publicly available:  
<https://www.gsma.com/solutions-and-impact/technologies/security/post-quantum/>

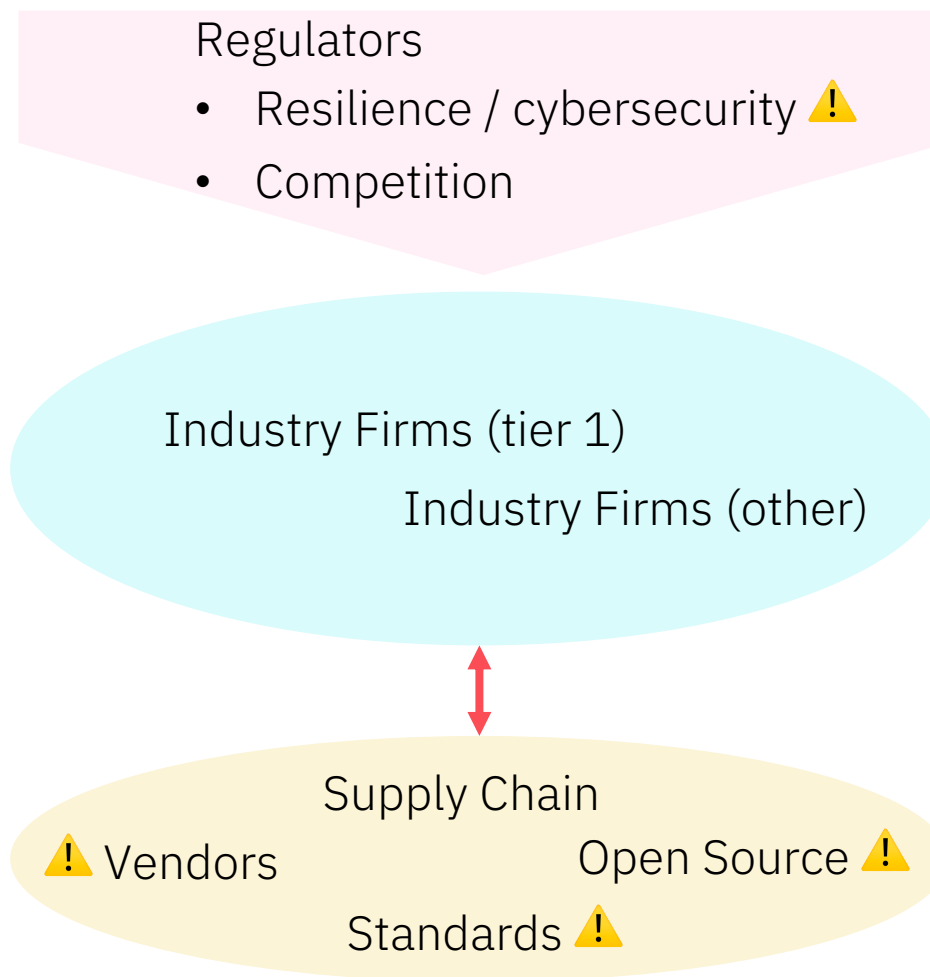
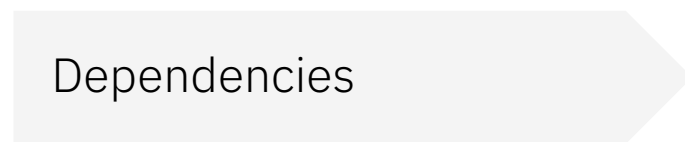
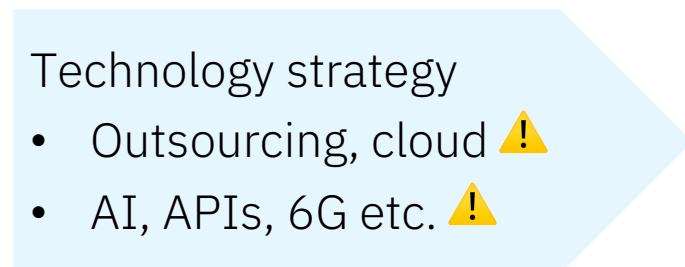
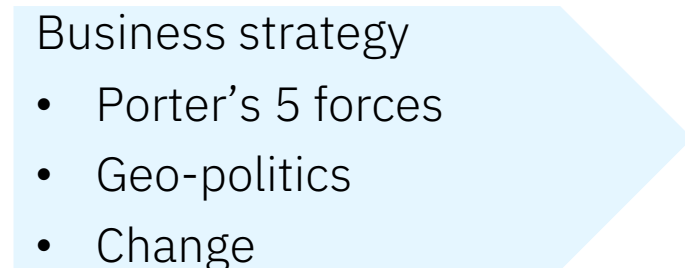




# Industry Sector Perspectives

PQC migration affects multiple stakeholders across an industry sector; focus & alignment is hard.

- Business focus [mid-2026] globally on AI
- “Next year” is the easy response ..





# Gaps in PQC Guidance (mid 2026)

Qualitative analysis based on 25+ countries, 100+ clients over 4 years

National	Industry Sectors	Emerging Risk	Business Case / Funding
National cybersecurity policy	Sector PQC working groups <ul style="list-style-type: none"><li>Exemplar: Telco, Finance</li></ul>	Quantification of loss	US OBM 1% FCEB 10 years
Clear National PQC Policy <ul style="list-style-type: none"><li>Exemplar: US</li></ul>	Sector PQC roadmap <ul style="list-style-type: none"><li>Exemplar: Finance (G7)</li></ul>	Materiality of risk (when)	<i>The 3 CEO Problem</i> – Ollie Whitehouse, NCSC
Government Systems + PQC <ul style="list-style-type: none"><li>Exemplar: NL</li></ul>	Sector PQC Handbook <ul style="list-style-type: none"><li>Exemplar: CFDIR (Can.)</li></ul>	Financial Liability <ul style="list-style-type: none"><li>Investors</li><li>Officers</li><li>Cyber-insurance</li></ul>	Informal regulation leads to 2-tier PQC migration
Regulatory clarity & signals <ul style="list-style-type: none"><li>Exemplar: UK OFGEM</li></ul>	Sector crypt standards inventory <ul style="list-style-type: none"><li>Exemplar: Telco (3GPP)</li></ul>	Responsibility of Board	
Convening power <ul style="list-style-type: none"><li>Exemplar: US NCF</li></ul>	PQC Experience Sharing <ul style="list-style-type: none"><li>Exemplar: PKI-C PQC</li></ul>	Role of cyber-insurance	
PQC Assurance <ul style="list-style-type: none"><li>Exemplar: UK NCSC</li></ul>			



# Actions and Recommendations (2026-2027)

## Government

### Regulators:

- Signal the **importance** and timeframe for PQC migration
- Signal treatment of PQC **investment** for regulatory relief
- **Clarity** of approach for regulated industry sectors. (And for other sectors.)

### National technical authorities:

- Publish PQC Migration Guidance, cryptologic specifications & standards, PQC **assurance**.
- Use convening power to create national forums for **PQC experience sharing**

### Government IT:

- Funding, PQC Migration Handbook, engagement across all **government departments**

## Industry Sectors

Formation of **industry sector groups** using the models from financial services and telecom

- Sector-specific, time-consuming; suitable venue (anti-trust, IPR)
- Identify groups to lead PQC for each industry sector

## Organisations

Identify leadership, **plan**, engage with partners and supply chain. *“Don’t Panic, Plan”*

Role for business leadership groups ? (e.g. IoD).

## Supply chain

**Leadership:** Identifying PQC focal point and strategy

**Communication:** Prepare and publish PQC roadmaps (don’t wait for clients to ask)

**Execution:** Update products to support PQC (awareness of integration time)



