Post Quantum Government Initiatives by Country and Region

The scope of this document is to provide a summary of countries with active PQC programs as context for the Post Quantum Telco analysis. This is not an exhaustive list and is intended to be indicative only. Given the rapidly evolving area for governments globally, ongoing monitoring is required to ensure consistency with strategic plans and roadmaps.

Note: This section has been updated (to 02 Mar 2025) include the latest guidance from the listed countries. For ease of reference countries have been included even if there is no update since Dec 2022.

Country	PQC Algorithms Under Consideration	Published Guidance	Timeline (summary)
Australia	NIST	ACSC-2023 ACSC-2024 ASD-2024	Complete transition to quantum resistant cryptography by 2030.
Canada	NIST	CAN-01 CAN-02 CAN-03	Start planning and inventory. Introduce standards-based PQC from 2025-26. CSE is updating detailed PQC guidance.
China	China Specific	CAICT-2023 NICCS-2025	Start Planning PQC algorithm program.
Czech Republic	NIST (but not restricted to)	NÚKIB-2023	Migrate by 2027 (key establishment, encryption). As soon as possible for firmware & software signing.
European Union	NIST Plan to select PQC EU algorithms	ENISA-2022 EC-2024 EP-2025	Start planning Define a coordinated PQC roadmap for Member States by 2026. Actions for financial services
France	NIST (but not restricted to)	ANSSI (2022, 2023)	Start planning; Transition from 2024
Germany	NIST (but not restricted to)	BSI-2021 BSI-2023 BSI-2024	Start planning
Israel		IL-2022 IL-2025	Start planning, create cryptographic inventory. Add PQC to contracts. Requirement for financial services firms to manage quantum risk, develop inventory and initial plan
Italy	NIST	IT-2024	
Japan	Monitoring NIST	JAPAN-2022	Start planning; initial timeline. CRYPTREC is preparing detailed PQC guidelines.

Netherlands	ML-KEM, Classic McEliece and FrodoKEM recommended in hybrid mode for TLS.	NL-2022 AIVD-2023 NL-2024	Draft action plan with timeframes
New Zealand	NIST	NZISM-2024	Start planning. Transition from 2026-27.
Singapore	Monitoring NIST	SG-2022 MAS-2024	No timeline available. Financial services firms required to prepare plan.
South Korea	KPQC signatures: AIMer, HAETAE. KPQC KEM: SMAUG-T and NTRU+.	KPQC-2025 MSIT-2023 MSIT-2025	PQC algorithms selected PQC Roadmap for completion 2035 Pilot transition plan 2025-2028.
Spain	NIST and FrodoKEM.	CCN.ES-2022	Four phase approach today to post-2030.
United Kingdom	NIST	NCSC-2024a NCSC-2024b NCSC-2024c	Start planning; cryptographic discovery; use only standards in production. NCSC is preparing detailed PQC guidance.
United States	NIST	NSM-10 CISA-2021 CNSA20 HR7375 CISA-2023 CISA-2024 EO-14144	Implement 2023-2033

Table 1: Summary of Guidelines provided by the Countries

Country	Key References
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China	Post-Quantum Cryptography Application Research Report, 2023 [CAICT-2023] Announcement on Launching the Next-generation Commercial Cryptographic Algorithms Program (NGCC), Feb 2025 [NICCS-2025]

Czech Republic	Minimum Requirements for cryptographic algorithms – Cryptographic security recommendations, NÚKIB, 2023 [NUKIB-2023]
EU	Post-Quantum Cryptography – Integration Study, ENISA, Oct 2022 [ENISA-2022]] Coordinated Implementation Roadmap for the transition to Post-Quantum Cryptography, European. Commission, Apr 2024. [EC-2024] Europol (2025), Quantum Safe Financial Forum – A Call to Action, Publications Office of the European Union, Luxembourg. [EP-2025]
France	ANSSI views on the Post-Quantum Cryptography transition, Jan 2022 [ANSSI-2022] ANSSI views on the Post-Quantum Cryptography transition (2023 follow-up), Dec 2023 [ANSSI-2023a]
Germany	Quantum-safe cryptography – fundamentals, current developments and recommendations, BSI, Oct 2021 [BSI-2021] "Cryptographic Mechanisms: Recommendations and Key Lengths" Version: 2024-1, BSI, Feb 2024 [BSI-2024]
G7	G7 CYBER EXPERT GROUP STATEMENT ON PLANNING FOR THE OPPORTUNITIES AND RISKS OF QUANTUM COMPUTING, Sep 2024 [G7-2024]
Israel	Organizational Cyber Readiness to the Post-Quantum Age, 2022 [IL 2022] Banking System Preparedness for Cyber Risks Arising from Quantum Computing Capabilities [IL 2025]
Italy	Crittografia Post-Quantum e Quantistica, Preparazione alla Minaccia Quantistica, ACN [ACN-2024]
Japan	CRYPTREC Cryptographic Technology Guideline – Post Quantum Cryptography [JAPAN-2022]
The Netherlands	Guidelines for Quantum-Safe Transport Layer Encryption, National Cybersecurity Center, July 2022: [NL-2022] The PQC Migration Handbook, TNO, CWI, AIVD (Netherlands National Communications Security Agency), Dec 2023 [AIVD-2023]

	Make your organization quantum secure, May 2024. National Cybersecurity Center [NL-2024]
New Zealand	Information Security Manual (Version 3.8, September 2024) Te Tira Tikai - New Zealand Government Communications Security Bureau [NZISM-2024]
Singapore	MCI Response to PQ on Assessment of Risk and Impact of Quantum Computing Technology and Efforts to Ensure Encrypted Digital Records and Communications Networks Remain Secure [65] Advisory on Addressing the Cybersecurity Risks Associated with Quantum, Feb 2024, Monetary Authority of Singapore [MAS2024]
South Korea	Selected Algorithms from the KpqC Competition Round 2, Jan 16, 2025. [KPQC-2025] [MSIT-2023] Taking the First Steps to Transform National Cryptography to Prepare for Quantum-Era Threats, Feb 2025 [MSIT-2025]
Spain	Recommendations for a safe post-quantum transition, centro criptologico nacional, Dec 2022 [CCN.ES-2022]
United Kingdom	Post-quantum cryptography: what comes next?, NCSC, Aug 2024 [NCSC-2024a] Next steps in preparing for post-quantum cryptography, version 2.0. NCSC, Aug 2024 [NCSC-2024b] NCSC Annual Review 2024 [NCSC-2024c]

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	Quantum-Readiness: Migration to Post-Quantum Cryptography, CISA/NSA/NIST, Aug 2023 [CISA-2023]
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Table 2: Key Reference by Country

Annex A   References

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ACSC-2024	n/a	Information Security Manual - Guidelines for Cryptography , Australian Cyber Security Center (ACSC) (Sep 2024) https://www.cyber.gov.au/sites/default/files/2024-09/22.%20ISM%20-

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ANSSI-2022		ANSSI views on the Post-Quantum Cryptography transition, Jan 2022 https://cyber.gouv.fr/en/publications/anssi-views-post-quantum-cryptography-transition
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AIVD-2023		The PQC Migration Handbook, AIVD (General Intelligence and Security Service, Netherlands Ministry of the Interior nad Foreign Relations), Apr 2023 https://english.aivd.nl/publications/publications/2023/04/04/the-pqc-migration-handbook
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BSI-2021	BSI-Bro21/01	Quantum-safe cryptography – fundamentals, current developments and recommendations, BSI (German Federal Office for Information Security), May 2021

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