

QUANTUM CORE INSTITUTE

Post-Quantum Capability Register

Specification: inclusion criteria, listing format and review

Field	Value
Document ID	QCI-R1
Version	V2.0 – September 23, 2026. Clause references are QCI requirement identifiers from QCI-QS1 v2.3 (September 23, 2026).
Applies to	QCI-5.4-03 (vendor CBOM evidence), QCI-7.2-02 (attestation), QCI-7.2-03 (adequacy), QCI-4.8-03 (assurance records); Annex C sections A to G; companions QCI-QS1-C1 and C2
Status	Public specification for a register the Quantum Core Institute intends to operate. Listing criteria are public so that suppliers can submit against them. The register lists facts suppliers attest to; it ranks nothing and endorses nothing.
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Publisher	Quantum Core Institute Inc.

1 Purpose

Companions C1 and C2 list tools and providers by domain, unranked, and go stale with every release. The register sits beside them: a supplier lists a product release by submitting, against public criteria, the facts that Annex C sections A, C and D ask for, with the evidence the standard requires of a supplier claim, so that an organization applying QCI-QS1 can read one attested record instead of requesting the same facts fifty times.

The register does not evaluate products. It records what a supplier attested, with the evidence reference, the date and the review date after which the entry lapses. Its value is that the attestation is on the record, under a named officer's signature, in a form an assessor can cite under QCI-4.8-03 as a supplier assertion, distinct from testing, validation or acceptance.

WHAT A REGISTER ENTRY DOES FOR GATE G70, AND WHAT IT DOES NOT

G70 requires a current, adequate, product- and deployment-specific response and authorized attestation for every critical supplier (QCI-6.3-01), assessed by the organization under QCI-7.2-03. A register entry supplies the product facts for sections A, C and D and the supplier's attestation of them. It does not supply the deployment-specific parts, sections B, E and F, or the organization's own adequacy determination and customer relevance check. A register entry shortens the request; it does not pass the gate by itself.

2 What is listed

Field	Content	Rule
Supplier and product	Legal entity; product or service; exact release or firmware string; deployment models covered	One entry per release; "current" is not a release
Annex G domains	Domains the product serves	At least one
Cryptographic functions and profiles	Each function with algorithm and parameter set by FIPS name (ML-KEM-768, ML-DSA-65, SLH-DSA-SHA2-128s, LMS, XMSS), protocol or construction and version; hybrid constructions with components, combiner and authentication stated separately	Pre-standard names alone are not accepted; key establishment and authentication recorded separately (QCI-4.5-03)
Posture	Available, default, enabled-by-configuration, and what the supplier can show a customer to confirm deployed use	Required (Annex C A3)
Validation and testing	CAVP certificate numbers for the PQC algorithms; CMVP or FIPS 140-3 certificate, status, covered configuration and caveats; sector validation where relevant; independent reviews	"Compliant" without a number is recorded as no validation; algorithm testing is never recorded as module or system validation
CBOM	A scoped CBOM meeting QCI-5.4-03: generation method, schema and version, authorized producer, production date, release scope, omissions and limitations	Checked with QCI-T1 at review; where it fails the omitted-scope element the entry says so
Agility and upgrade path	Profile selection, rollover, key migration, rollback, legacy retirement; changes requiring hardware replacement or outage	Required (Annex C C1)

Field	Content	Rule
Roadmap	Dated milestones for profiles not yet supported, with owners; commitments separated from estimates	Optional; dates and owners required if present
Attestation	The Annex C authorized attestation form, unedited, signed by an officer or equivalently authorized signatory, with as-of date and reliance group “any organization relying on register entry (ID)”	Required; unsigned or edited forms are not listed
Review date	Twelve months from attestation or earlier if the supplier sets one; earlier on material cryptographic change	Entry lapses on the date unless renewed

3 Inclusion criteria

1. The release is available to customers. Prototypes, previews and roadmap-only products are not listed; a roadmap may accompany a listed release.
2. Every algorithm claim carries a FIPS name and parameter set, and every protocol claim a construction and version.
3. Every validation claim carries a certificate number that resolves on the issuing body’s public list at review, with its covered configuration.
4. The CBOM, where provided, is checked with QCI-T1; where it fails an element, the entry says which.
5. The attestation is on the Annex C form, unedited, at officer level.
6. The supplier accepts that the entry is public, that QCI may annotate it with review findings, and that it lapses on the review date.

4 Review

A submission is reviewed against the criteria before listing and at its review date or on notified material change. Review confirms that the checkable items check: certificate numbers resolve with the stated configuration, releases exist, the CBOM passes QCI-T1. Review does not test the product. Where an item does not check, the entry is annotated and the supplier has thirty days to correct it before removal.

Trigger	Action
Review date passed, no renewal	Entry marked lapsed for thirty days, then removed
Certificate number does not resolve, or covered configuration differs from the claim	Entry annotated; thirty days to correct; then removed
CBOM fails a QCI-T1 element	Entry annotated with the failed element; entry stays
Credible dispute from an organization applying the standard	Supplier asked to respond within thirty days; entry annotated with both positions until resolved
Supplier requests removal	Removed; the fact of prior listing is retained in the register’s history

5 Use by organizations applying QCI-QS1

- A current register entry may be cited as the supplier's answer to Annex C sections A, C and D for that release. Sections B, E and F, and G where applicable, are still requested, and the organization still makes its own adequacy determination under QCI-7.2-03 and its customer-relevance check.
- An entry is a supplier assertion under QCI-4.8-03. It is evidence for the facts it records, cited by entry identifier and date; it is not module validation or system acceptance.
- A register CBOM is evaluated by the receiving organization under QCI-5.4-03 for relevance to its own deployment.
- Companions C1 and C2 will cite register entries where they exist.

6 What the register is not

- Not a ranking, a recommendation, a certification or a test result.
- Not a substitute for the organization's own Annex C request, exception register or decision records, and not by itself a pass of gate G70.
- Not a statement that a listed product is suitable for any organization's use.

The register is expected to open after QCI-QS1 v2.3 is issued and companions C1 and C2 have been in circulation for a quarter.