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APPLIED QUANTUM

THE APPLIED QUANTUM CCF INSTRUMENT BOARD REPORT TEMPLATE



The institution-level figure with its companions, limitations and maturity gate

Version 1.0-RC – August 2026

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The reference implementation and canonical test vectors publish separately under Apache-2.0 on the Applied Quantum GitHub. Neither licence reads onto the other.

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The regulatory instruments, certification records, standards and vendor capabilities referenced in this document reflect the state of the landscape as of August 2026, and that landscape moves. Readers should verify current status against primary sources (regulators and supervisory authorities, NIST, EMVCo and PCI SSC, the CycloneDX specification, public certification listings, vendor documentation) before making decisions.

References to specific vendors, products or tools are for illustrative purposes and do not constitute endorsement.

This is a v1.0 release candidate: v1.0 final publishes in November 2026 after a pilot cycle. Open items are public on the roadmap at CCFramework.org, and corrections are published as dated entries on its errata page.

ABOUT THIS DOCUMENT

Document type	CCF instrument – board report template
Parent document	The Cryptographic Concentration Framework – Universal – v1.0-RC (August 2026)
Intended audience	Second-line functions reporting to boards and risk committees
Assumed knowledge	The Universal Framework's reporting phase and the five mandatory companions
Scope	The institution-level figure with its companions, limitations and maturity gate.
Status	Version 1.0-RC – release candidate; v1.0 final November 2026 after

	pilot
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VERSION HISTORY

Version	Date	Changes
1.0-RC	August 2026	First published.
1.0-RC	8 September 2026	Companion 1 reads “at or above 8,100”, in line with Universal C.4; companion 5 includes standalone primary units and names its endpoint; decision-summary fields added beneath the one-page structure. Prose revised throughout.

HOW TO USE THIS DOCUMENT

This template reports the institution-level figure with its five mandatory companions. It pairs with the Universal Framework’s reporting phase, and the limitations and the maturity gate are not optional furniture: reporting the figure without them is non-conformant.

ACCOMPANYING RESOURCES

The framework family publishes at CCFramework.org: the Universal Framework, the Payments and Financial Services extensions, the payments whitepaper, the CBOM Conformance Statement, the Technical Companion and the instruments, together with the public roadmap, the errata and corrections page, the provenance survey and the frontier-census methodology.

Every canonical figure in the family comes from the reference implementation, with ten canonical test vectors that fix each one exactly. Both are open under Apache-2.0 on the Applied Quantum GitHub, and any implementation that reproduces the fixtures is conformant.

The Applied Quantum CBOM Profile, the input data contract, publishes at CBOMProfile.org. The Applied Quantum PQC Migration Framework, whose sector taxonomy the extensions follow, publishes at PQCFramework.org. Practitioner background and adjacent analysis sits on PostQuantum.com, as further reading rather than a normative source.

TABLE OF CONTENTS

1. Use and reporting gate 5

2. The one-page structure 5

 Optional additions to the one page..... 6

3. Presenting the finding behind the figure 6

4. Reporting controls..... 7

5. Action record 8

Used in Phase 7 of the [CCF Universal Framework](#) v1.0-RC. It structures the institution-level figure of Universal C.7 so that the analyst reports the figure only with its companions, its limitations and the M3 gate.

1. USE AND REPORTING GATE

Use this template after the service-level calculations and material determinations have been challenged. The audience should be able to identify the decision required, the services that drive it, and the evidence limitations that could change the conclusion. The template is designed as a short decision summary with the service matrix attached.

The institution-level indicator is **withheld below M3**. The figure line must read "withheld below M3", never remain blank, and the report must lead with the heat map and the five companions. This gate concerns the assessment as a whole and is independent of CCF data levels. Even at M3 or above, an unsupported weighting population or materially incomparable scope may require withholding. Report the service-level findings and decisions rather than filling the headline with an unqualified subset mean.

Do not present a denominator to the board on the basis of a coverage claim that second line has not challenged.

Use the declared service-exposure-weighted mean when a roll-up is supported. It is not a deduplicated enterprise-asset index. Layer 1 is a separate baseline; where no applicable quantum-vulnerable material remains, report "no remaining applicable assets" rather than a baseline of 10,000 or zero.

2. THE ONE-PAGE STRUCTURE

Cryptographic concentration – board report

[Institution], [date], assessment [ref]

Maturity: [M1–M5] · Conformance: [CCF-1, CCF-2 or CCF-3, EC marker] · Discovery coverage: [per Section 4 of the Data Request] · Evidence tiers: [distribution]

Institution-level figure: [value, or range where any input is a range, or "withheld below M3"], computed over [n] of [m] services, with [k] layers not assessed. Layer 1 baseline: 10,000 by construction until migration completes, declared alongside and never inside the figure.

The five companions, never separated from the figure:

1. Services at or above 8,100: [count]
2. Lowest Effective Coverage across services: [value]
3. Services recorded NOT MAPPED: [count]
4. Supplier disclosure response rate, where requests were issued: [rate]
5. Largest failure-domain reach across services, layers 2 to 6, including standalone primary units: [value, bound, node or bounded design, service]

Movement since last cycle (from the second assessment onward): headline $[\Delta]$, of which real movement $[\Delta]$ and measurement effect $[\Delta]$, per Universal C.8; common-estate share [value]. Never a bare delta.

Three limitations, stated every time:

- A mean conceals the worst service, which is the one that will fail.
- An institution that has mapped its estate poorly scores better than one that has mapped it well. Improving discovery can raise the figure, and that is the assessment working. C.8 separates the effects.
- Asset-count weighting under-weights critical key material, and the flagged-only indices are the compensating view.

Primary output: the heat map, attached. This page summarises it and does not replace it.

Decision requested: [the appetite threshold, remediation mandate or supervisory submission this assessment informs, per Phase 0]

Optional additions to the one page

Scope: [services, entities and functions; assessed versus intended population; complete maxima or computed-layer maxima]

Assessment maturity: [M1–M5 and material exceptions]

Data sufficiency: [CCF levels and EC markers by service, or reference]

Discovery coverage: [scoped fractions and unquantified classes; no unsupported blended completeness claim]

Evidence position: [material claim-level limitations and unresolved boundaries]

Companion 1 – threshold crossings: [confirmed count; possible additional crossings; unresolved scope]

Companion 2 – coverage minimum: [value/interval and service, or not established; separately label a "minimum over known values"]

Companion 4 – disclosure response rate: [numerator: full + partial disclosures; denominator: requests issued; as-of date and pending count, or not applicable because no requests were issued]

Material findings: [the service effects and action drivers, not only the highest score]. Include [Fail scenarios, upper-bound Fail scenarios, Not assessable cells, and criticality results].

Coverage shortfall: [affected functions, principal blocking/peer/contractual actions and population programmes]

Actions and acceptance: [owner, intended effect, delivery/review date and decision authority]

Primary evidence: [attached service heat map, findings, determination-log references and calculation revision]

3. PRESENTING THE FINDING BEHIND THE FIGURE

Name the failure mechanism and the service consequence. For example, "Generation-point CCI 4,748; the largest point's own design has 63.1% known reach against a 100% design bound, and the replacement scenario exceeds the approved threshold" is more useful than "Layer 6 is concentrated". The 63.1% is the largest point's own design, a floor by construction, not evidence that two points share a design. Where common membership is unconfirmed, label the bounded scenario rather than presenting a hypothetical whole-service dependency as an evidenced fact.

Show criticality explicitly when it changes the priority. A service may have a dispersed overall trust-root distribution while most qualifying signing assets depend on one anchor. The decision should identify that function and the reissuance or integrity consequence, not imply that an issuer's symmetric master key is certified by a scheme CA.

An exact zero EC result on a completely mapped population means every assessed asset has at least one required path or function established below target. Some of those assets may also have other paths at target; no asset satisfies the complete requirement. An uncomputable EC result means the required scope or evidence is missing. Those lead to different actions and must not be displayed with the same red "0%" cell.

The largest-reach companion includes standalone primary units as well as additional upstream nodes. It must not become smaller than an evident dominant custody or generation point simply because only a short list of ancestor records was considered.

4. REPORTING CONTROLS

Do not publish the institution-level figure without its five companions, qualifications and service-level matrix. A figure published alone can be quoted out of context for years. If one companion is not computable, state that explicitly. A low minimum over known EC values cannot be described as the institutional minimum while other services are unmeasured.

No monetary translation is permitted anywhere in the report. The framework produces no loss estimate, and a report that converts an index into currency is non-conformant. Do not convert the CCI, its bands or reach into a probability or regulatory compliance verdict. Any separate modelling must have its own assumptions and governance and be clearly distinguished.

Do not publish a cross-institution benchmark without the comparability note in Universal C.7. Institutions that map services more finely weight shared assets more heavily, so figures built on different mappings are not comparable. Cross-institution benchmarking requires comparable service definitions, denominators, layer scopes and evidence perimeters.

Do not claim remediation from a bare delta. Remediation credit comes only from real movement, which Universal C.8 separates from the measurement effect. Evidence improvement can narrow a bound without changing the estate; a supplier switch can change the primary distribution while leaving a shared ancestor unchanged. Report the benefit actually established and the limitation that remains.

5. ACTION RECORD

Finding / service	Decision and intended effect	Owner	Target or acceptance review date	Dependency / evidence needed	Status
[reference]	[action or acceptance]	[owner]	[date]	[conditions]	[status]

The accountable forum approves the action or residual acceptance, not merely the circulation of the report. Retain the approved report and its supporting calculation/determination revisions so that subsequent changes can be traced.
