IntegraLayer
What "Open and Non-Proprietary" Mean in the ESPR · Perspective · Issue 02
Published 1 May 2026 | By Rachel Buchanan, Founder & CEO | Reading time ~4 min

What "Open and Non-Proprietary" Mean in the ESPR

Three architectural tests are written into Article 9. Most existing certification verification systems clear one. Compliance requires all three.

As the EU's Digital Product Passport registry launches July 19, 2026, three words in EU Regulation 2024/1781 carry the architectural requirement. Article 9 specifies that DPP data must be based on "open standards and interoperable formats" and must be "machine-readable, searchable and structured." The accompanying technical guidance: standards must be "open, non-proprietary international standards" operating "without dependence on any commercial technology provider."

Each is a separate test. Each binds independently. Compliance requires all three.

OPEN

Built on publicly available, internationally recognized standards. The Commission has signaled W3C DIDs, verifiable credentials, GS1 identifiers, and JSON-LD as the technical primitives. The requirement reaches into the architecture beneath the user interface.

NON-PROPRIETARY

Replicable by a third party with no business relationship using public documentation alone. A platform requiring a vendor SDK, paid API tier, or private contract fails the test. The certification body's ownership of the platform is irrelevant. The CIRPASS project is built on this principle.

MACHINE-READABLE

Software-consumable without human translation. Practical formats: JSON, JSON-LD, XML, and W3C VC payloads. A human-readable HTML page that returns "Status: Valid" satisfies neither requirement.

The regulatory boundary lives at the architecture, not the user interface.

The Four-Question Architectural Test

A compliance team running an ESPR-readiness audit can clear the requirement using four questions.

01 Can a third party with no prior relationship to the certification body retrieve verification status programmatically?

02 Is the data format documented in a public specification based on internationally recognized open standards?

03 Is the access path discoverable without contacting the certification body or its platform operator?

04 Could multiple independent clients implement verification against the same architecture using only public documentation?

Yes to all four. Any "no" means the architecture does not comply.

What compliance looks like

The architectural primitives that satisfy the standard are public and documented: W3C Verifiable Credentials, DIDs, JSON-LD, and Well-known URIs. The simplest implementation path is neutral verification infrastructure that sits above existing certification platforms, exposing the required architecture without forcing a system migration. IntegraLayer was built for that role: a neutral certificate-layer endpoint that satisfies all three requirements while leaving the certification body's authority, branding, and program intact.

For certification bodies navigating the DPP category

IntegraLayer provides neutral verification infrastructure that sits above existing certification platforms. Independently verifiable in real time via QR code and blockchain timestamping. Patent pending.
Click here to get in touch →

Trust isn't claimed. It's proven. The truth is verifiable.

IntegraLayer LLC | Patent Pending

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