



VISA Technical Whitepaper
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Compliance-Aware Routing Engine (CARE)

Deterministic Pre-Execution Compliance Infrastructure for Agentic and Cross-Border Commerce

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1. Executive Overview

CARE (Compliance-Aware Routing Engine) is a new category of digital infrastructure that embeds deterministic, pre-execution compliance control directly into transaction architecture.

Today, most regulated digital transactions are executed first and checked later. Payment processors, marketplaces, and platforms typically complete settlement before applying compliance controls, or hard-code jurisdiction-specific logic into individual products.

As cross-border, multi-party, instant, and increasingly AI-initiated transactions scale, this reactive model creates systemic risk:

- Unlawful flows may already have occurred before detection
- Compliance logic becomes fragmented across platforms
- Regulatory updates require continuous engineering rewrites
- Autonomous systems lack bounded execution authority

CARE introduces a structural shift.

It inserts a mandatory pre-execution compliance boundary between transaction intent and settlement. For every transaction, the engine evaluates contextual metadata against dynamically updateable jurisdiction-specific rule sets and deterministically generates a permitted or restricted execution state.

Execution authority becomes conditional on validated legality.

If compliance cannot be verified, the transaction defaults to a lawful outcome through controlled fallback logic rather than executing unlawfully.

2. Architectural Innovation

The core technical innovation lies in separating compliance decisioning from execution infrastructure and transforming it into a reusable governance layer.

Instead of embedding regulatory logic within each product or payment flow, CARE externalises it as compliance-as-data:

- Jurisdictional rules
- Tax and withholding logic
- Sanctions and AML constraints

- Licensing and custody requirements
- Sector-specific obligations

These rule-sets are processed in real time and enforced before funds move.

This enables one engine to govern multiple regulated use cases without bespoke redevelopment.

Core Principle

Execution Authority = Validated Compliance State

Routing topology, fund allocation, settlement progression, and release of funds are conditionally dependent on that state.

CARE does not replace payment rails.
It governs them.

3. Why This Matters Now

Global financial infrastructure is undergoing a structural inversion.

Historically, compliance has operated downstream of execution.
Regulatory direction across multiple jurisdictions is now moving toward transaction-path accountability.

At the same time:

- Instant settlement reduces post-execution intervention windows
- Cross-border digital commerce scales from day one
- Platform liability regimes are expanding
- Real-time tax remittance models are increasing
- AI agents are beginning to initiate regulated transactions autonomously

In agentic commerce environments, post-settlement monitoring is insufficient. Platforms must demonstrate that legality was validated before execution occurred.

CARE provides that execution boundary.

4. Reference Validation Environment

The project validates CARE through a high-regulatory-density reference implementation in:

- Digital fundraising
- Creator-commerce and multi-party payout flows

These environments require:

- Lawful fund-splitting between charitable and non-charitable components
- Jurisdiction-aware routing
- Custody controls
- Cross-border rule enforcement

By demonstrating deterministic pre-execution compliance in these contexts, CARE proves the portability of the architecture across regulated transaction domains

5. Integration Model

CARE integrates via a lightweight pre-execution API call.

Workflow:

1. Transaction intent generated
2. CARE evaluates contextual metadata
3. Jurisdictional rule-sets applied
4. Compliance state returned
5. Execution permitted, restricted, or conditionally routed
6. Settlement proceeds via existing payment rails

No rebuild of core payment infrastructure is required.

6. Strategic Alignment with Visa

Visa is actively exploring infrastructure for programmable and AI-enabled commerce.

CARE aligns directly with:

- Agentic commerce safety frameworks
- Cross-border transaction governance
- Real-time compliance validation
- Platform liability mitigation

CARE can operate as a compliance plug-in within Visa-enabled merchant ecosystems, providing deterministic pre-execution governance for autonomous transaction flows.

As programmable commerce expands, enforceable execution boundaries become foundational.

7. Infrastructure-Level Impact

CARE addresses a clear market weakness: the absence of scalable infrastructure capable of enforcing jurisdiction-specific compliance before transaction execution.

By relocating compliance from post-settlement monitoring to transaction-layer governance, CARE:

- Reduces strict liability exposure
- Lowers compliance engineering overhead
- Enables faster international expansion
- Supports sovereign and instant settlement rails
- Provides bounded authority for AI-initiated transactions

The innovation is not an incremental compliance tool.

It is a new transaction-governance architecture designed to make regulated digital flows legal-by-design at the point of execution.

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