From Strategy to System-Level Delivery

EUROPE'S EXECUTION GAP

Jaana Ylikoski I Execution Architecture

April, 2026

April 26

Table of Contents

1. Introduction — Execution gap

Europe has established clear strategic direction across energy, infrastructure, digital systems, and industrial transformation. Policy frameworks are in place. Capital has been mobilised at scale. Yet outcomes are not materialising at the same pace. It is the system's ability to execute under real-world conditions.

Across energy, infrastructure, industry, and digital systems, Europe's strategic direction is well defined. Major frameworks such as the **European Green Deal**, the **OECD Digital Government Policy Framework (DGPF)**, and the proposed **Horizon Europe Framework Programme (2028–2034)** establish a clear trajectory toward a modern, resource-efficient, and competitive economy. These initiatives are supported by significant investment in innovation, clean technology, and green infrastructure.

Capital has been mobilised at an unprecedented scale. From climate transition to digital regulation and industrial transformation, the foundations for change are firmly in place. Yet outcomes are not scaling at the same rate. Systems are designed for delivery, but struggle to perform under real-world conditions. Targets are defined, but implementation remains uneven across sectors and borders. The gap between what is intended and what materialises has become increasingly visible.

This is not a temporary misalignment. **It reflects a structural shift.**

For much of the past decade, the central question was whether Europe could mobilise sufficient capital and define the right policy frameworks. Today, that question has largely been answered. The constraint has moved. The challenge is no longer primarily one of inputs. It is execution—how systems translate policy and capital into real-world outcomes.

At the same time, Europe is operating in a markedly different environment. Geopolitical instability, energy system strain, infrastructure bottlenecks, financial volatility, and increasing security risks are converging. Systems are no longer operating under stable conditions, but under continuous stress. In this context, delivery cannot be assumed as a downstream consequence of policy and investment. It must be understood as an outcome.

2. Core Principle: Delivery and Execution Architecture

Delivery is the outcome. Execution architecture is what makes that outcome structurally achievable. Delivery is often treated as the final stage of policy and investment cycles—the point at which plans materialise into tangible results. In practice, however, delivery **is not a standalone phase**. It is the result of how effectively systems operate under real-world conditions.

What determines whether delivery succeeds is not only the quality of policy design or the scale of capital committed, but the presence of a functioning execution architecture. ***Execution architecture refers to the way*** *policy, capital, operational capacity, and coordination mechanisms are structured into systems that can sustain alignment over time—and under pressure.*

It is what enables systems to move from intention to outcome. **Without it, alignment may exist** at the level of design, but it does not hold in execution. **With it, delivery becomes consistent, scalable, and cumulative.**

This distinction is critical:

- Delivery is not where the problem starts
- Delivery is where the problem becomes visible

Execution architecture is where the problem is solved.

3. Evidence Across Core Systems

These patterns are observable across multiple sectors.

3.1 Energy systems

Renewable capacity is expanding, yet grid constraints and permitting delays limit deployment. Infrastructure, rather than generation, becomes the primary bottleneck.

3.2 Transport Systems

Investment in fleets and infrastructure continues, alongside tightening regulatory frameworks. However, labour shortages, interoperability challenges, and cost pressures prevent efficiency gains from scaling.

3.3. Digital and AI Infrastructure

Data centre expansion and technological capability are accelerating rapidly. At the same time, power availability, cybersecurity risks, and system complexity constrain sustainable growth.

3.4. Green and Circular Economy Systems

Sustainability frameworks are well established, and ESG integration is widespread across financial and corporate systems. Yet complexity in reporting, unclear categorisation, and misalignment between regulatory frameworks and market practices limit their effectiveness. As a result, capital allocation does not consistently translate into measurable environmental or social outcomes.

3.5. Security and Resilience Systems

Critical infrastructure is increasingly exposed to hybrid threats—combining physical disruption, cyber-attacks, and information manipulation. While regulatory frameworks and security strategies are expanding, vulnerabilities across supply chains, infrastructure, and digital systems persist. This

creates a growing gap between security requirements and the ability to maintain operational continuity under real-world conditions.

4. Structural Value Loss in European Systems

Value is not lost randomly. It is lost at predictable points within execution. These breakpoints are consistent across systems:

4.1 Translation Gaps

Policy objectives and financial commitments do not fully convert into operational delivery.

4.2 Incentives Misalignment

Stakeholders optimise for local or short-term outcomes rather than system-level performance.

4.3 Coordination Fragmentation

Fragmentation across institutions, markets, and jurisdictions weakens alignment during implementation.

4.4 Continuity Breakdown Under Change

Projects lose coherence over time as conditions change, timelines shift, and priorities evolve.

These are not isolated inefficiencies. ***They are structural characteristics of systems operating under complexity and pressure.*** Across sectors, the pattern is consistent: The constraint is no longer ambition, capital, or policy direction. It is the system's ability to deliver, adapt, and remain coherent under continuous stress.

5. Financial System Under Stress

Europe's transition systems are not operating under stable conditions. They are being deployed into an environment defined by **continuous stress, volatility, and interdependence**. This is where execution is tested — not in design, but in reality.

In 2026, the European financial system is characterised by **layered and interacting risks**, rather than isolated shocks. As highlighted by the ***European Securities and Markets Authority***, the likelihood of market stress remains elevated despite periods of resilience.

Key pressure factors include:

- Geopolitical instability driving **energy price volatility and supply disruptions**
- Persistently high interest rates impacting **investment capacity and asset quality**
- Elevated asset valuations increasing the risk of **sudden market corrections**
- Growing exposure to **cyber and operational threats**
- Expanding private finance markets with **low transparency and complex interconnections**

- Increasing **fragmentation of global trade**, weakening economic stability

These are not independent risks. They **interact, amplify, and propagate across the system**.

5.1 Capital Behaviour Under Uncertainty

Under these conditions, the role of the financial system shifts: It is no longer only about **allocating capital efficiently**. It is about **maintaining functionality under stress**.

This creates a structural shift:

- Capital becomes **more cautious and selective**
- Risk pricing becomes **more volatile and inconsistent**
- Investment timelines become **less predictable**

As a result, even well-designed policy frameworks and funding instruments face increasing difficulty in translating into **real-world delivery**.

5.2 The Hidden Constraint: System Fragility

At the same time, structural fragmentation within the European system persists:

- Incomplete integration of capital markets
- Divergent national regulatory environments
- Uneven implementation capacity across Member States
- Sector-specific silos (energy, transport, digital, finance)

This fragmentation reduces the system's ability to:

- Absorb shocks
- Coordinate across sectors
- Scale implementation efficiently

Under stress, these weaknesses become **binding constraints**.

5.3 Market Volatility and Systemic Risk

When financial volatility, geopolitical pressure, and structural fragmentation converge, a clear pattern emerges:

- The constraint is not the absence of capital
- Nor the absence of policy ambition
- The constraint is whether systems can **operate coherently under real conditions**

This is where most transition frameworks begin to underperform.

5.4 Implication for Execution Architecture

This environment defines the role of execution architecture: Not as a theoretical framework — but as a **structural necessity**.

Execution architecture must ensure that:

- Financial flows remain connected to delivery capacity
- Systems maintain coherence under volatility
- Cross-sector dependencies are managed in real time
- Implementation does not break under pressure

In this context: **Delivery is not an output.** It is a **system property**. And execution architecture is what makes that property possible.

6. Cross-Sector Breakdown: Where Execution Fails

Under pressure, execution does not fail uniformly. It fails **at specific interfaces** — where systems must connect, align, and operate together. **Across Europe's transition agenda**, these failure points are **structurally similar**, even if they appear in different sectors.

6.1 Energy Systems: Infrastructure Constraints

Europe has made significant progress in **renewable energy deployment.** However, execution is increasingly constrained by **infrastructure limitations**.

Critical failure points:

- Grid capacity lagging behind renewable generation
- Long permitting timelines delaying transmission expansion
- Misalignment between energy production and consumption locations
- Inability to integrate new demand sources (AI, industry, electrification) in real time

Result: Energy availability becomes a **binding constraint on investment and industrial activity.** The issue is not energy policy ambition. It is the system's inability to **translate capacity into usable, reliable delivery**.

6.2 Transport & Infrastructure: Coordination Failures

Large-scale transport and infrastructure projects face persistent execution challenges, particularly in cross-border contexts.

Critical failure points:

- Fragmented national planning and funding priorities
- Delays in Trans-European Network (TEN-T) implementation
- Cost overruns driven by regulatory, technical, and geopolitical complexity
- Slow and inconsistent permitting processes

Result: Projects exist in planning and funding frameworks, but fail to **materialise on time or at scale**. This creates a widening gap between **announced infrastructure** and **delivered infrastructure**.

6.3 Digital & AI Systems: Scale Without Integration

Digital infrastructure and AI adoption are accelerating rapidly across Europe. However, execution capacity is not scaling at the same rate.

Critical failure points:

- Power and land constraints limiting data centre expansion
- Regulatory fragmentation affecting deployment consistency
- Cybersecurity requirements increasing system complexity
- Lack of interoperability across platforms and jurisdictions

Result: Systems scale in isolation, but not as a **coherent, integrated infrastructure layer**. This creates inefficiencies, security vulnerabilities, and operational instability.

6.4 Financial Systems: Capital Without Transmission

The **transmission of capital into real-economy outcomes remains constrained**.

Critical failure points:

- Complexity and inconsistency in sustainable finance frameworks
- Data fragmentation limiting comparability and trust
- Risk aversion under volatile macro conditions
- Weak connection between financial instruments and implementation capacity

As highlighted by the European Commission, even frameworks designed to guide capital allocation (e.g. sustainable finance disclosures) have struggled with usability, clarity, and real-world impact.

Result: Capital is available, but not efficiently translated into **scalable, measurable outcomes**

6.5 Green Systems: Policy Without Adoption

Circular economy and sustainability policies are advancing rapidly. However, adoption at system level remains uneven.

Critical failure points:

- Misalignment between regulatory frameworks and market incentives
- High upfront costs for circular models without clear return structures
- Fragmented value chains across industries and regions
- Limited operational models for scaling circular solutions

Result: Strong policy direction, but **limited system-wide transformation**. The transition remains **pilot-driven rather than structurally embedded**.

6.6 Security Layer: Fragmented Response to Systemic Risk

Security is no longer a separate domain. It is embedded across energy, digital, infrastructure, and financial systems.

Critical failure points:

- Increasing hybrid and cyber threats targeting critical infrastructure
- Fragmented security standards and response capabilities
- Interdependencies between systems creating cascading risks
- Limited real-time coordination across sectors and jurisdictions

Result: Systems become more vulnerable as they become more interconnected. Security challenges increasingly act as **execution disruptors**, not just external risks.

7. System Pattern Analysis

7.1 Fragmentation at the Point of Delivery

Under pressure, execution fails at specific interfaces—where systems must connect and operate together.

Across sectors, these failure points are structurally similar:

- infrastructure lagging behind demand
- regulatory complexity exceeding usability
- capital disconnected from implementation capacity
- fragmented coordination across borders
- misaligned incentives across stakeholders

These critical failure points are not isolated. They reflect a common structural issue: Systems are not designed to function as integrated execution environments.

7.2 Recurring Structural Failures

Despite sectoral differences, the **same structural pattern appears across all sectors**:

- Systems are **designed in isolation**
- Dependencies are **underestimated or unmanaged**
- Execution relies on **alignment that does not hold under pressure**

This leads to a consistent outcome:

- Fragmentation at the point of delivery
- Loss of value between design and implementation
- Inability to scale outcomes

What this confirms across sectors; the issue is not:

- Lack of strategy
- Lack of capital
- Lack of regulatory frameworks

The issue is structural.

7.3 Implication – Systemic Value Leakage

Delivery is the outcome.
Execution architecture is what makes it possible.

Without execution architecture:

- Policy remains intention
- Capital remains allocation
- Systems remain fragmented

With execution architecture:

- Systems align
- Constraints are managed
- Outcomes become structurally achievable

Implications for Europe:

Building capacity. This requires a shift across three dimensions:

Policy design
From comprehensive frameworks → systems
From complexity → execution clarity

Capital allocation
From availability → to effective deployment
From policy alignment → to execution alignment

System coordination
From institutional alignment → to operational alignment
From fragmentation → to integrated execution

This also implies a broader transition: **From a policy-driven union → to an execution-capable system.**

8. The Execution Gap: Formal Model

If the execution gap defines the problem, **execution architecture defines the mechanism through**

which it is resolved. It is not a framework for analysis. It is a structure for **making delivery possible under real-world conditions**.

8.1 Definition and Scope

The **execution gap** is the distance between:

- **Policy intention**
- **Capital allocation**
- **Real-world delivery**

It represents the point at which systems fail to convert at scale:

- Strategy into implementation
- Investment into outcomes
- Coordination into operational reality

This gap is not visible in planning. It becomes visible only **in execution**.

8.2 The Three-Layer Structure

The execution gap emerges across three interconnected layers:

1. Policy and Design Layer

Where objectives are defined and frameworks are created.

- Strong at EU level
- Increasingly sophisticated (e.g. climate, AI, finance frameworks)
- Focused on ambition, direction, coordination, delivery, and compliance

Constraint: Design assumes alignment that does not hold in reality.

2. Capital and Allocation Layer

Where financial resources are mobilised and directed.

- Significant capital availability across EU instruments and private markets
- Growing complexity in financial frameworks
- Increasing emphasis on sustainability and risk

Constraint: Capital is allocated based on models that do not fully reflect execution conditions.

3. Delivery and Operations Layer

Where systems must function in real-world conditions.

- Fragmented across sectors, geographies, and institutions
- Constrained by infrastructure, skills, permitting, and coordination
- Exposed to volatility, risk, and interdependencies

Constraint: Delivery capacity is not structurally aligned with design or capital.

8.3 Interface Failures Between Layers

The execution gap does not sit within these layers. It forms **between them**.

Specifically:

- Between **policy design and capital allocation**
  - misaligned incentives, unclear translation mechanisms
- Between **capital allocation and delivery systems**
  - financing not matched to operational realities
- Between **delivery systems and policy objectives**
  - outcomes that fail to meet intended impact

This creates a system where:

- Alignment exists on paper
- Misalignment dominates in practice

8.4 The Role of System Pressure

Under stable conditions, these gaps may remain partially hidden. **Under real-world conditions — volatility, geopolitical pressure, system stress — they expand.**

As highlighted in EU-level risk assessments from institutions such as *the European Central Bank*, increasing uncertainty, financial fragility, and operational risks amplify system-level vulnerabilities.

This has a direct effect:

- Small misalignments become **system-level failures**
- Delays become **structural bottlenecks**
- Fragmentation becomes **non-functional systems**

8.5 From Gap to Structural Constraint

At scale, the execution gap becomes more than a problem. It becomes a **constraint on European competitiveness and transition capacity**.

This is visible in:

- Delayed infrastructure deployment
- Underutilised capital
- Slower-than-expected transition outcomes
- Increasing divergence between ambition and delivery

Why Existing Approaches Do Not Close the Gap. Most current approaches focus on:

- More policy
- More funding
- More regulation
- More coordination initiatives
- Delivery without execution

However: These act **within layers**, not **between them**.

As a result:

→ They increase system complexity
→ But do not resolve structural misalignment

Reframing the Problem

The execution gap is not a failure of effort. It is a failure of **system structure**. The key question is not: How do we design better policies? or How do we mobilise more capital?

The question is: **How do we ensure systems hold together under real conditions of execution?**

Implication: The Need for Execution Architecture

This is where execution architecture becomes essential.
Execution architecture operates:

- **Across layers**, not within them
- **Between systems**, not inside silos
- **Under real conditions**, not theoretical assumptions

Its role is to:

- Align policy, capital, and delivery structures
- Manage interdependencies across sectors
- Ensure systems remain coherent under stress
- Make outcomes structurally achievable

Core Principle

At the center: **Delivery is the outcome. Execution architecture is what makes it possible.**

8.6 Core Functions

The role of execution architecture is to **stabilise the interfaces** where systems typically fail.

Specifically, it addresses:

- The translation of policy into actionable structures
- The alignment of capital with real operational conditions
- The integration of infrastructure, markets, and institutions
- The management of dependencies across sectors

In practical terms: It converts **alignment in theory** into **alignment in operation.**

8.7 Structural Components

Execution architecture consists of four core components:

1. Alignment Structures

Mechanisms that ensure policy objectives, financial incentives, environmental, and operational realities are consistent.

- Clear translation from policy → implementable actions
- Incentive structures that reflect delivery conditions
- Defined roles across institutions and actors

2. Interface Design

The design of how systems connect across boundaries.

- Between public sectors
- Between financial systems and infrastructure
- Between national and EU-level frameworks

This is where most execution failures occur.

3. Feedback & Adaptation Loops

Systems that allow continuous adjustment under real conditions.

- Real-time data flows
- Performance monitoring tied to outcomes
- Mechanisms to adapt policy and capital allocation based on delivery reality

Without this: Systems become rigid and fail under changing conditions

4. Constraint Management

Explicit identification and management of bottlenecks.

- Infrastructure limits (e.g. grid capacity, permitting)
- Capital deployment constraints
- Skills and labour shortages
- Security and geopolitical risks

Instead of ignoring constraints, execution architecture: builds around them.

Measuring the Execution Gap — The Mobility Delta Model

To make the execution gap measurable, this paper introduces the *Mobility Delta Model*, a framework for quantifying the difference between system inputs and realised outcomes. The model is not expanded here, but establishes a basis for future measurement of delivery performance across sectors. The execution gap remains largely invisible in traditional metrics.

The Mobility Delta Model measures the difference between:

- inputs (policy, capital, commitments)
- outcomes (delivered systems, real impact)

This “delta” represents **systemic value leakage**

- Makes performance comparable
- Identifies bottlenecks
- Enables better capital allocation

If execution architecture enables delivery, the Mobility Delta Model makes its absence visible.

9. Operationalising Execution Architecture

Execution architecture does not replace existing systems. It **orchestrates them**.

It creates:

- Coherence across fragmented structures
- Continuity between planning and implementation
- Stability under volatile conditions

This is particularly critical in the European context, where multiple institutions, jurisdictions, and markets must operate together.

9.1 System Integration Across Sectors

Across the EU, major initiatives — from the European Commission to regulatory frameworks such as the EU AI Act and sustainable finance reforms — are increasing in sophistication and scope.

However: Their success depends not only on design, but on the system's ability to **execute across layers**.

Execution architecture provides the missing structure to:

- Translate regulation into operational systems
- Align financial flows with real implementation capacity
- Enable cross-border and cross-sector coordination

9.2 Why It Matters Now

The need for execution architecture is increasing due to:

- Rising system complexity (AI, energy, infrastructure interdependencies)
- Increasing geopolitical and security pressures
- Capital abundance combined with delivery constraints
- The urgency of climate and industrial transitions

In this environment: Fragmented execution is no longer viable

9.3 Coordination between Institutions and Markets

Execution architecture is not only a way of thinking. It is a **capability** that must hold across:

- Institutions
- Financial systems
- Infrastructure operators
- Policy environments

This requires a shift: From designing systems to ensuring they **function under real conditions. Delivery is the outcome. Execution architecture is what makes it possible.**

10. Maintaining Coherence Under Stress

Europe's challenge is no longer defining ambition. It is **delivering outcomes at scale under real-world conditions**. Across energy, infrastructure, finance, security, and industrial policy, the core constraint is increasingly clear: **Execution capacity, not strategic intent.**

10.1 From Fragmentation to Structural Constraint

Fragmentation within Europe's systems is well recognised:

- National regulatory differences
- Disconnected financial markets
- Infrastructure misalignment
- Uneven implementation across Member States

Efforts such as the Single Market, Capital Markets integration, and sectoral frameworks aim to address these issues. However: Fragmentation is not only a structural characteristic. It becomes a **binding constraint** when systems are required to deliver under pressure.

11. The Cost of the Execution Gap

When execution architecture is absent, the consequences are systemic:

- Capital is allocated but not fully deployed
- Infrastructure projects face delays and cost overruns
- Policy objectives fail to translate into measurable outcomes
- Market signals become distorted
- Delivery timelines extend beyond strategic relevance

This creates a compounding effect: The more complex the system, the greater the loss between ambition and outcome

11.1 Increasing System Pressure

Current conditions amplify these dynamics:

- Geopolitical instability affecting energy, trade, and security
- Financial market volatility and rising systemic risks
- Rapid technological change (AI, digital infrastructure)
- Accelerating climate and industrial transition requirements

Institutions such as the *European Securities* and *Markets Authority* and the *European Central Bank* have highlighted growing vulnerabilities related to market stress, operational risks, and systemic interdependencies.

Under these conditions: Systems that are not structurally aligned **fail faster.**

11.2 System Level Ineffiencies

To remain competitive, Europe must shift from:

- Policy excellence
- Regulatory leadership
- Capital mobilisation

toward: **Delivery as a core strategic capability**

This implies:

- Building systems that function across borders and sectors
- Aligning incentives with real implementation conditions
- Reducing the distance between decision-making and execution
- Ensuring continuity between planning and operational reality
- Understanding delivery as outcome, and its enablers

11.3 Reduced Policy Effectiveness

For policymakers, this requires a shift in approach:

From:

- Designing comprehensive frameworks
- Expanding regulatory scope
- Increasing funding instruments

To:

- Ensuring implementability from the outset
- Embedding delivery constraints into policy design
- Creating feedback loops between execution and regulation
- Prioritising coherence over complexity

11.4 Underutilised Capital

For financial systems and investors:

- Capital must be aligned with execution conditions, not only policy signals
- Risk assessment must incorporate delivery capacity and system constraints
- Investment structures must reflect long-term operational realities

Without this: Capital efficiency declines despite increasing availability

11.5 Delayed Infrastructure Delivery

At EU level, coordination must evolve from:

- Institutional alignment to **Operational alignment**

This includes:

- Cross-border infrastructure synchronisation
- Standardisation where necessary, flexibility where required
- Integration of digital, energy, and industrial systems
- Alignment between public and private actors

12. Toward an Execution Union

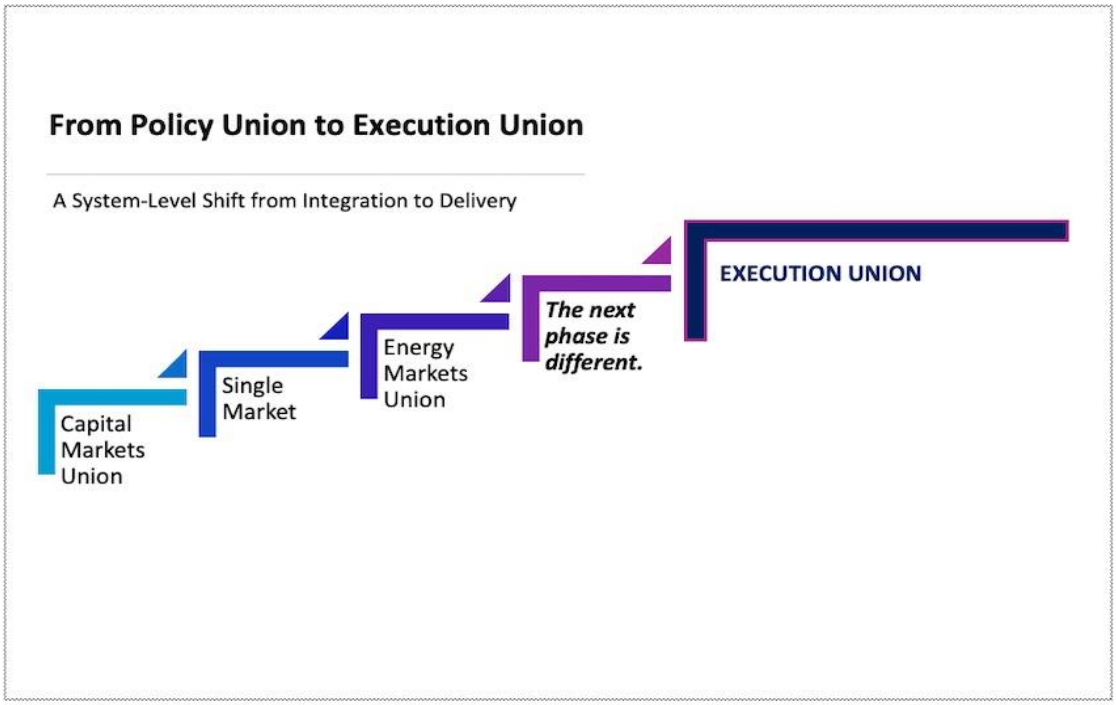
Europe has made progress toward:

- Energy Union
- Capital Markets Union
- Digital Single Market Union

However, the next phase requires something different: **An Execution Union**
Not as a formal institution, but as a **functional capability** across systems.

This means:

- Systems designed to work together under real conditions
- Delivery capacity embedded across all major initiatives
- Reduced reliance on ad hoc coordination
- Integrated Execution enabling the outcomes



From Policy Union to Execution Union. Jaana Ylikoski. 2026

12.1 Strategic Consequence

Without strengthening execution architecture:

- Europe risks remaining strong in design
- But constrained in delivery

Execution as Functional capability:

- Policy ambition becomes actionable
- Capital becomes effective
- Systems become resilient
- Outcomes become measurable

What Europe now requires is not another policy framework, but an* Execution Union *— a system capability that ensures delivery across sectors and borders.

13. Conclusion – From Direction to Outcomes

Europe has demonstrated its ability to define direction. **The challenge now is to ensure that this direction translates** into outcomes that are consistent, scalable, and resilient under real-world conditions. **The execution gap highlights** where this fails to convert at scale. **Addressing it does not require more ambition, nor fundamentally new policy frameworks**. It requires strengthening the structures through which existing ambition is realised.

Delivery is not the starting point of the problem. It is the outcome. Execution architecture is what makes that outcome possible. In the current operating environment, it is no longer optional — it is a structural necessity.

Jaana Ylikoski - Author I Systems Strategist I Policy-Execution Alignment I Execution Architecture