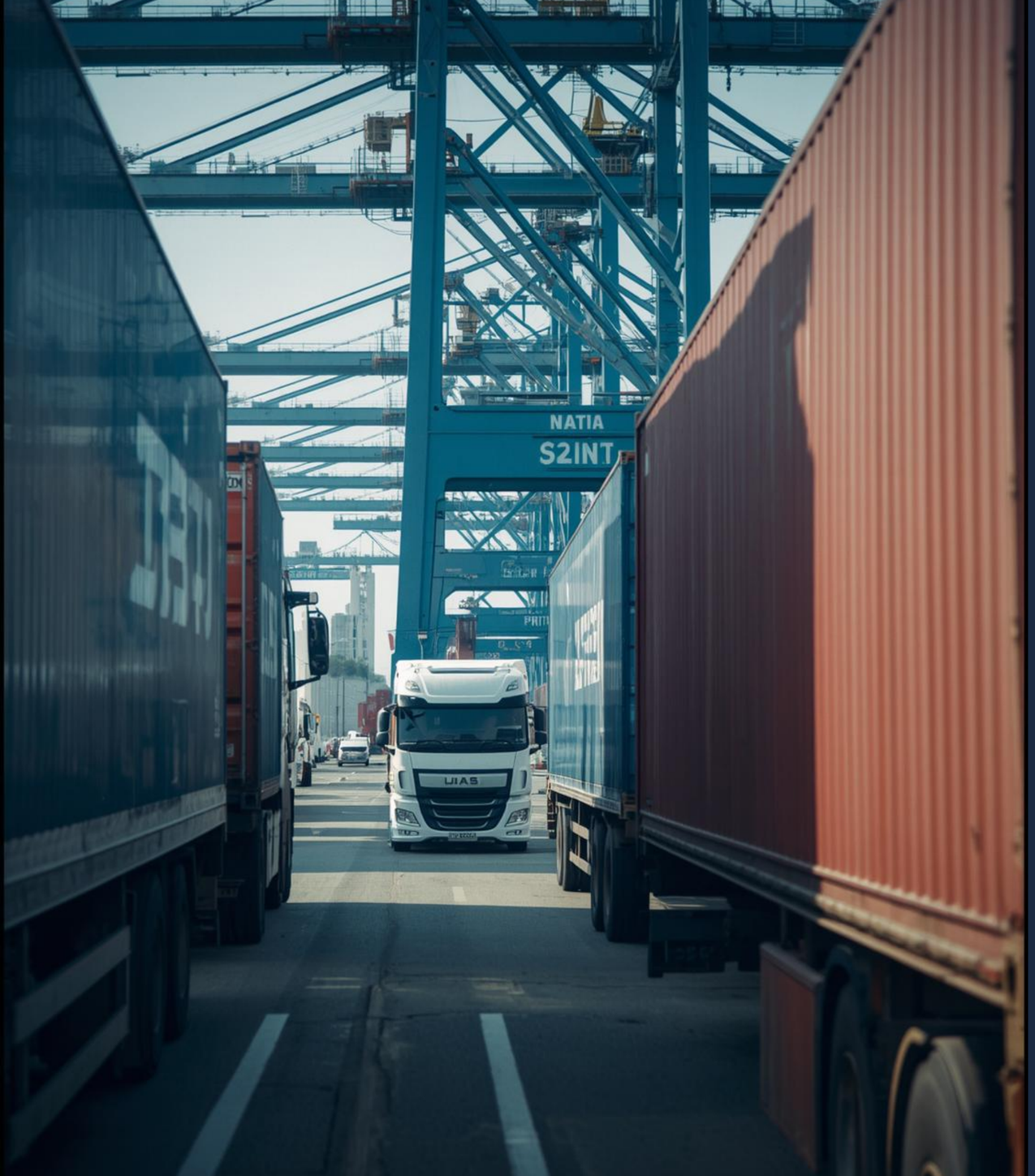


Co-funded by the European Union

eFTI Regulation

The Digital Backbone of European Freight transport

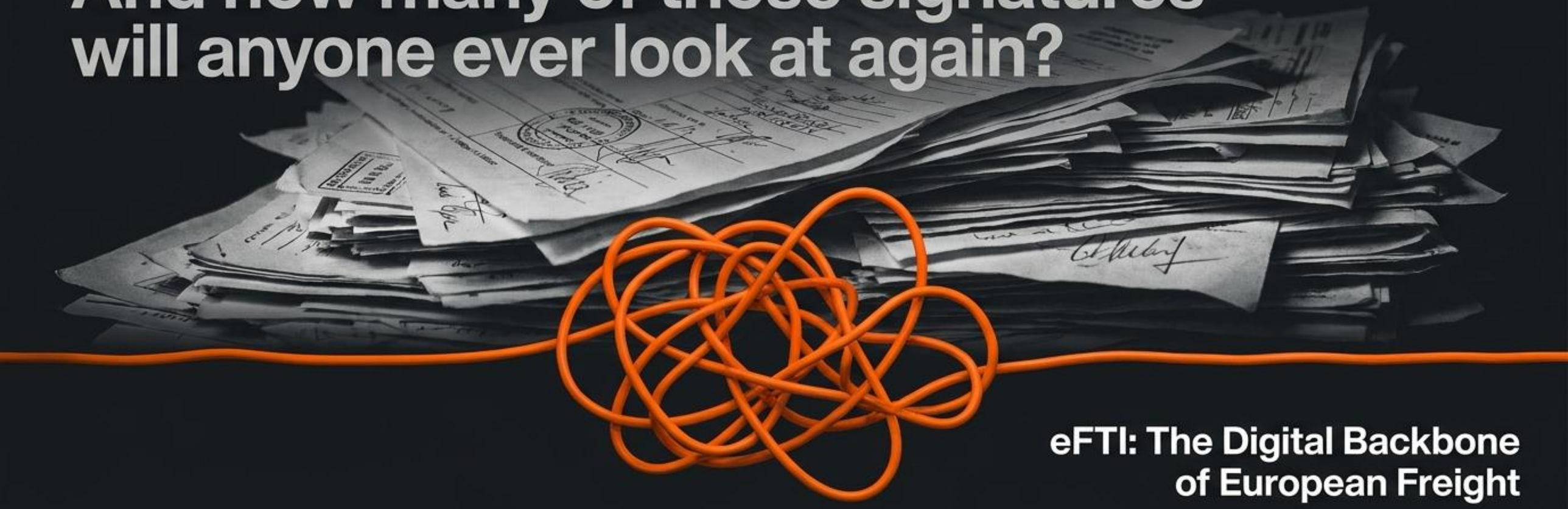
PRESENTED BY:

Heiti Mering

eFTI Experts
STUDIES & WORKS

How many of you signed a paper CMR this week?

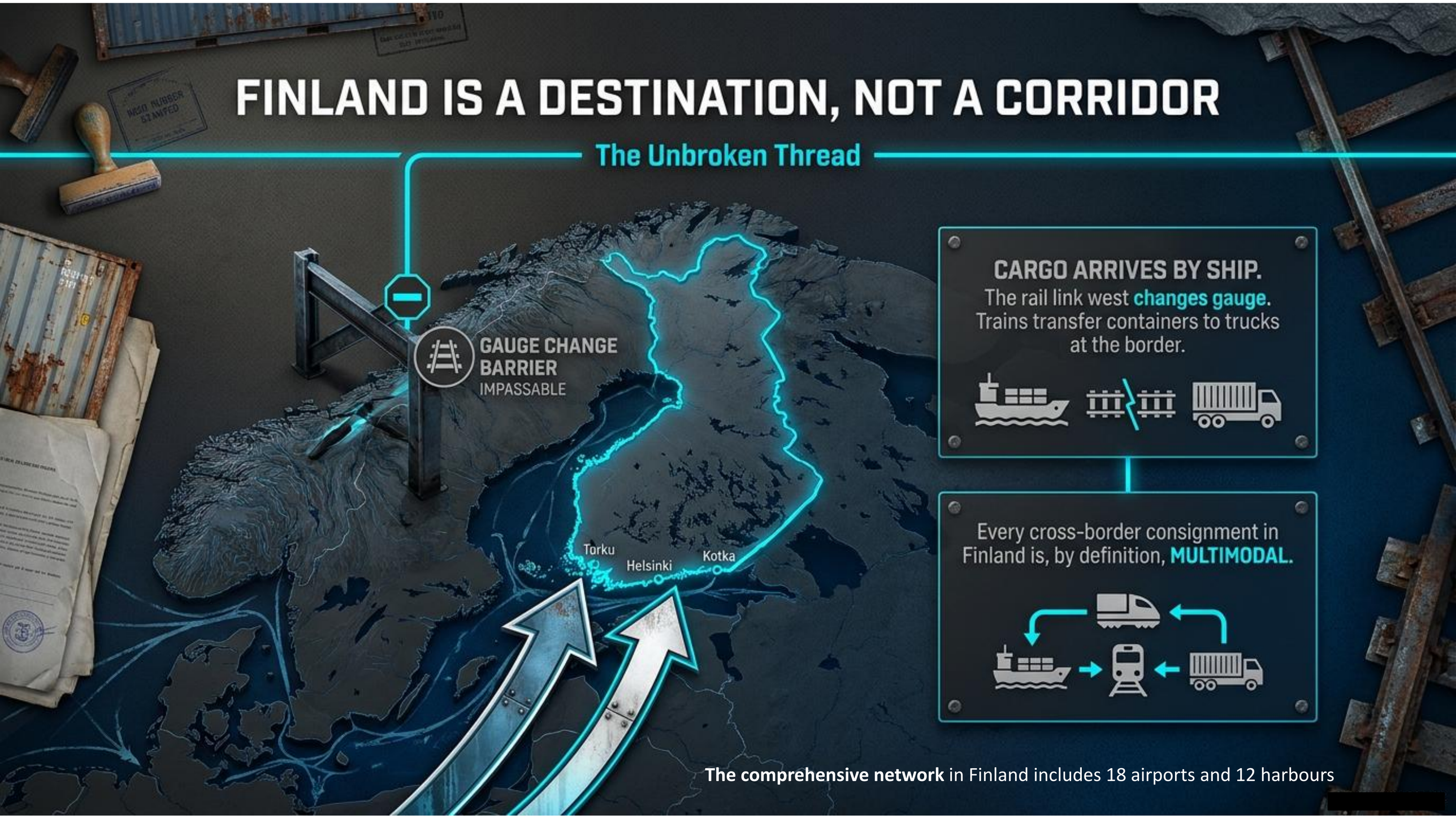
And how many of those signatures will anyone ever look at again?



eFTI: The Digital Backbone of European Freight

FINLAND IS A DESTINATION, NOT A CORRIDOR

The Unbroken Thread



The comprehensive network in Finland includes 18 airports and 12 harbours

Where the information actually breaks

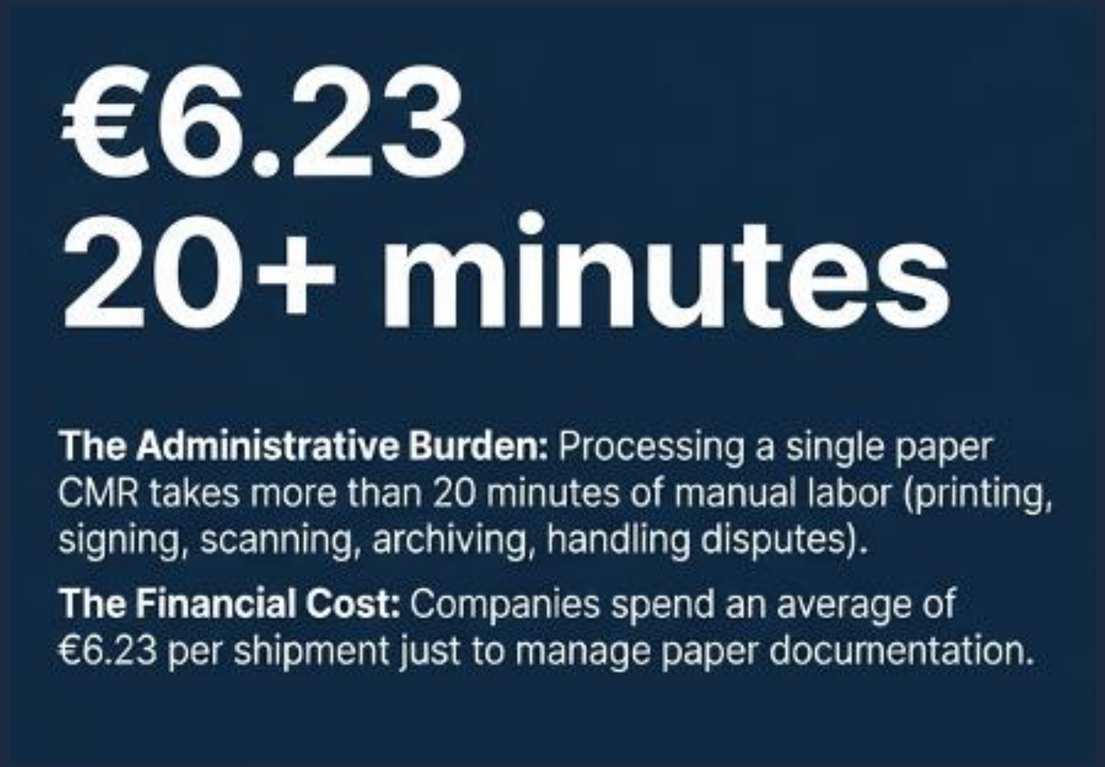
The Physical Journey

The Data Thread

Four handovers. Four IT systems. Four chances for data to die.

The cargo owner asks one question:
Can I trust the ETA, or do I need to replan?

The Absurdity in Numbers



PAPER CONSUMPTION

The European Union produces **8 billion** sheets of paper annually for freight, leading to an unsustainable burden on resources and contributing significantly to deforestation.

RESOURCE DEPLETION

Annually, **ab 1 000,000 trees** are consumed due to freight-related paperwork, showcasing the severe environmental impact and emphasizing the urgent need for digital solutions.

WASTED LABOR

Approximately **100 million work hours** are wasted each year on administrative tasks, highlighting inefficiencies that can be drastically reduced through the adoption of electronic freight transport information.

Human Capacity Limits

EXPONENTIAL GROWTH

Data generation has skyrocketed, reaching approximately **180 zettabytes** by 2025, overwhelming our current processing capabilities and demanding a shift towards more efficient digital solutions.

IOT EXPLOSION

The number of connected **IoT devices** is projected to reach **41.6 billion** by 2025, generating vast amounts of data that humans struggle to process effectively in real-time.

KNOWLEDGE DOUBLING

Knowledge is now doubling every **12 hours**, complicating the already overwhelming task of data management in the freight industry, which requires timely and accurate information processing.

NEED FOR DIGITIZATION

The urgency for digitization has never been clearer; relying on paper for data management is becoming increasingly **inefficient** and unsustainable in the face of rapid technological advancements.

Why Freight Is Different

01 5 to 15 parties touch each consignment

Shipper, forwarder, carrier, terminal, customs, port, rail, last-mile, receiver, bank, insurance — each built its own IT view of the same shipment. Data dies at every handover.

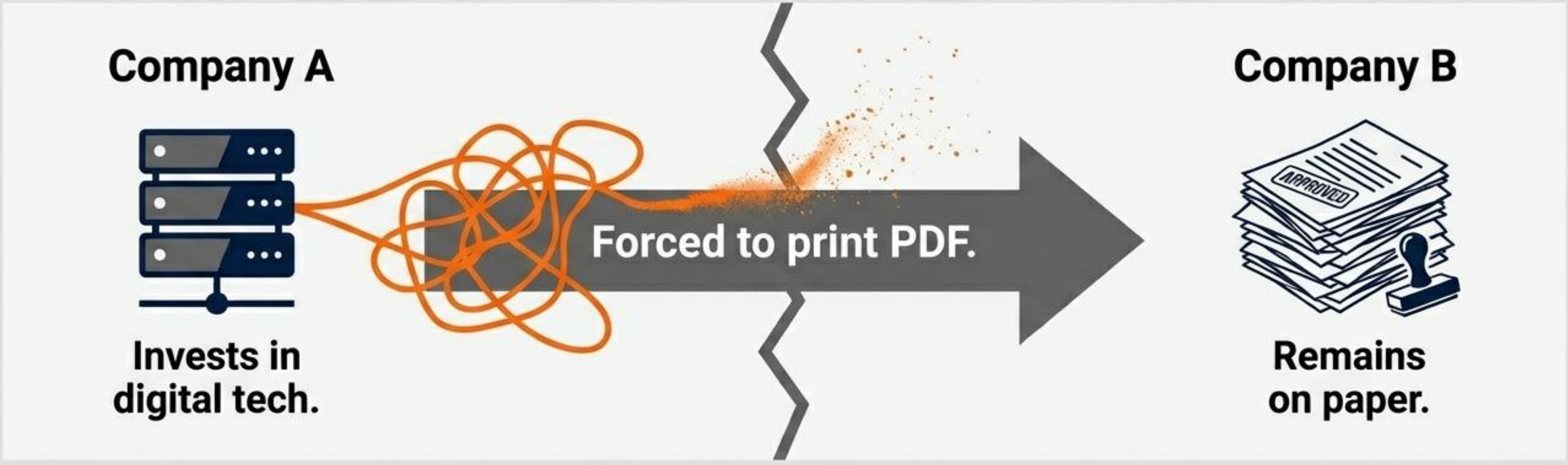
02 Vertical integration has failed

Maersk's TradeLens shut down in 2022 — competitors refused to put their data on a competitor's platform. No single carrier exceeds 5% of global market share.

03 eFTI: same shift as SWIFT and TCP/IP

eFTI is the first time freight asks: what if the consignment owned its own data? Same architectural shift as SWIFT for banking (1973) and TCP/IP for the internet (1983). The consignment becomes a data subject, not a data object.

The Coordination Trap.



Even a schoolkid knows AI is everywhere. But the freight industry runs on paper because the first mover always loses if the network doesn't move with them.

"Let the market sort it out" has failed for thirty years.

Regulation (EU) 2020/1056

August 2025

Every competent authority across the EU must accept freight transport information in electronic form through certified platforms.

Not optional. **Not a pilot.** **Law.**

The Three Pillars of eFTI.

National Access Points (eFTI Gates)
— Built by Governments.

Certified Private Software
(eFTI Platforms) — Built by IT Vendors.

The Shared Language
(eFTI Data Model) — Built by the EU.

The Train Has Left the Station.

EU

Implementing acts:
Adopted.

Infrastructure

eFTI4EU/4ALL/4LIVE projects:
Building production infrastructure. First national gates (Estonia, Austria) operational.

Local

Finland's eFTI Gate
Status: In Active Development.

~~We are waiting for the rules to be finalized and for GDPR clarity.~~

The Strategic Mistake of Waiting

The data model is stable.	**GDPR is entirely solved by the certified gates.**
The architecture is published.	**You already share this data on paper every day.**

Waiting is no longer caution. It is a surrender of market advantage.

Use Case 1: Cross-Border eCMR

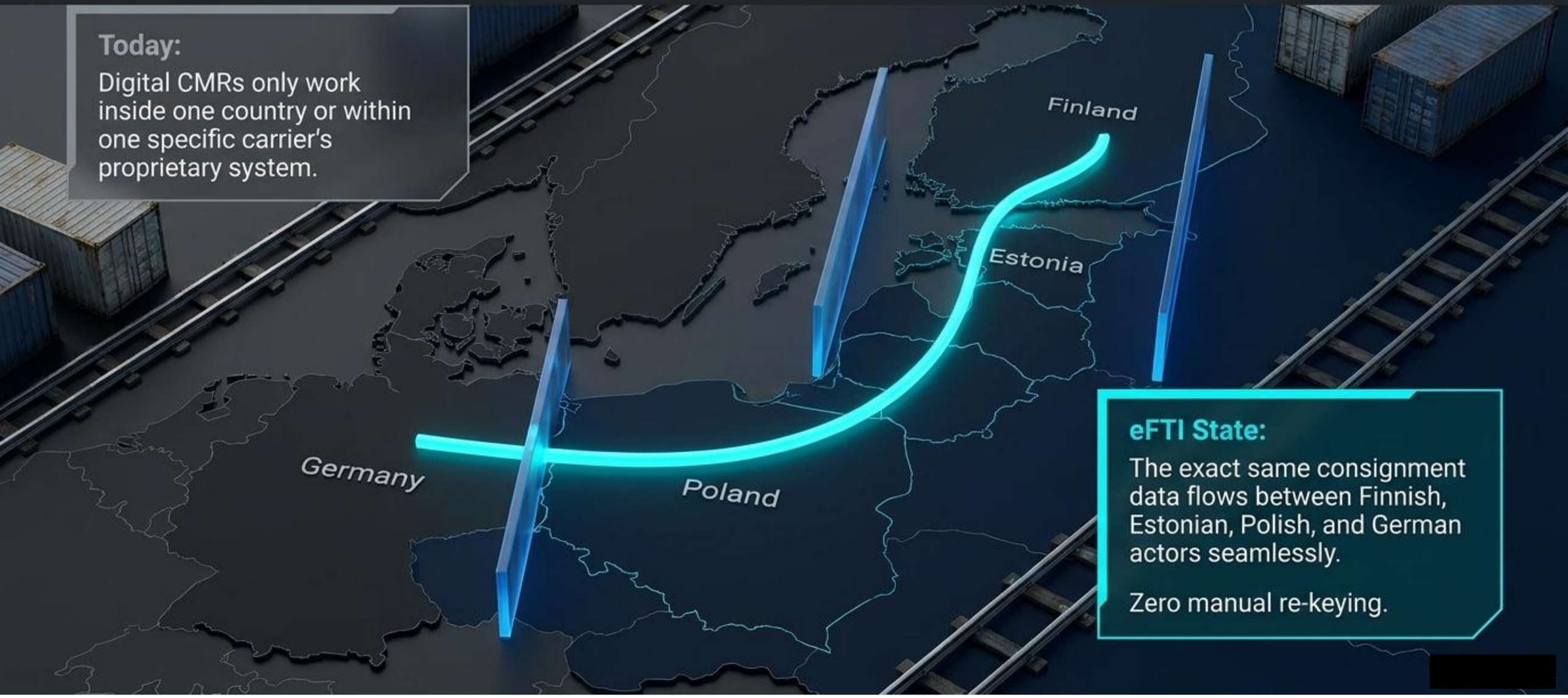
Consignment data flows between Finnish, Estonian, Polish, and German actors without re-keying.

Use Case 2: Zero-Stop Authority Checks

Customs and inspectors read the dataset dynamically. No roadside paper hunts

(Proven by Estonia's EE-EXCISE pilot).

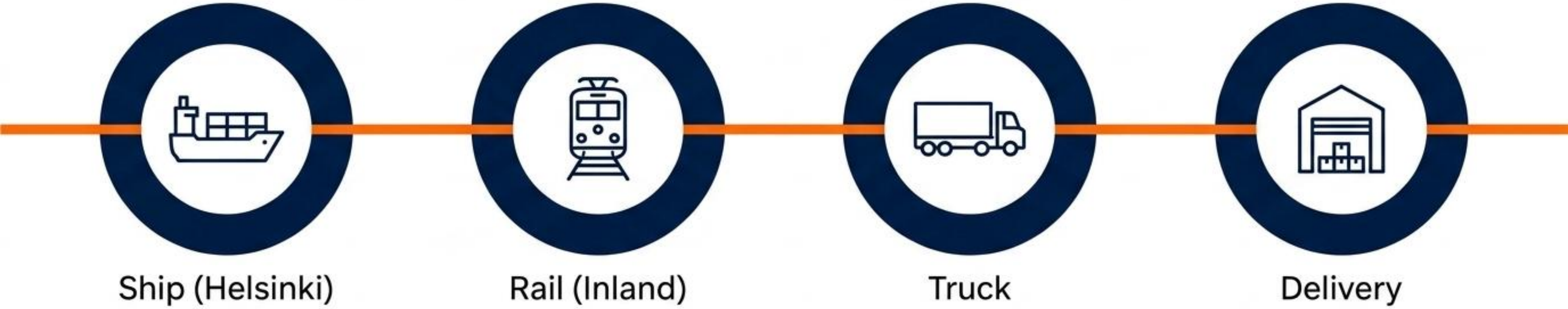
Cross-border eCMR without re-keying



eCMR provides the data; eFTI provides the digital highway

- Electronic Freight Transport Information (eFTI) is the overarching European architecture.
- It guarantees that digital documents like the eCMR are recognized, routed, and accepted by regulatory authorities seamlessly across borders.
- eFTI ensures cross-border interoperability so a digital waybill created in Estonia is perfectly readable by highway police in Spain or France.

Use Case 3: The Multimodal Handover

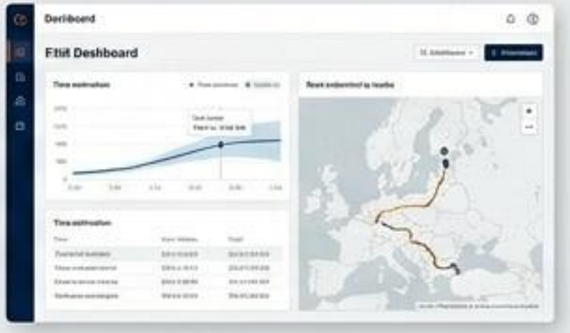


One Consignment ID. One continuous data thread across sea, rail, and road.

The ETA updates automatically at every handover. The cargo owner gets one answer to one question.

Use Case 4: Unlocking the Data You Already Have.

ETA Prediction Algorithms



Capacity Matching

Emissions Reporting (CSRD)

eFTI doesn't ask you to generate new data. It asks you to stop throwing it away at every modal boundary.

Start Today: 3 Concrete Moves mes for Q2.

Audit

Map which of your current systems already produce eFTI-compatible XML data.

Interrogate

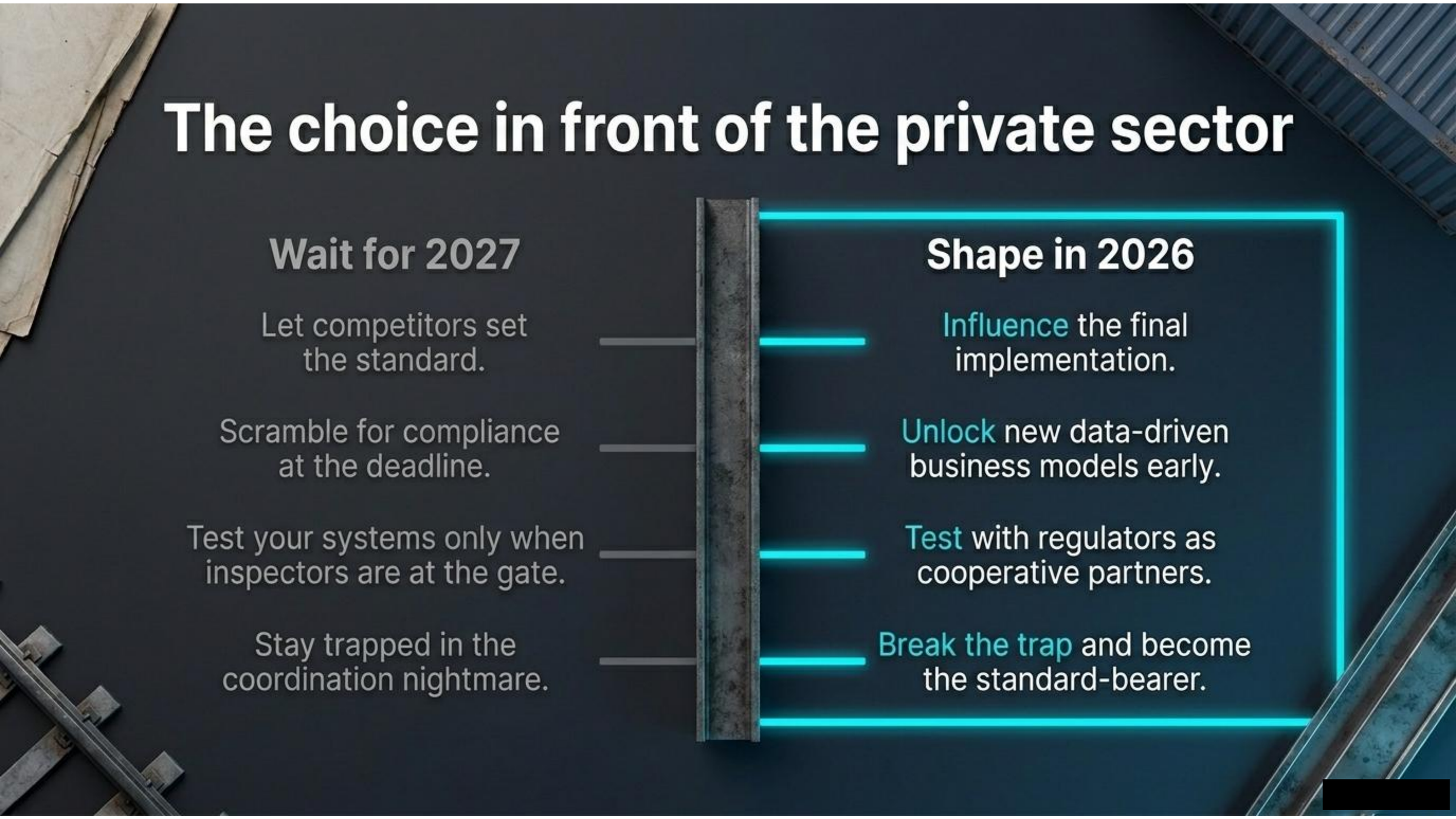
Talk to your TMS/IT vendor about their eFTI roadmap. If they don't have one, treat it as a massive red flag.

Engage

Join an active national pilot to test data flow before it becomes mandatory.


Border Flow
Authority Checks
Trusting the ETA without human intervention.
Multimodal Handover
Extracted Data
Four modes of application. One unified operational reality.

The choice in front of the private sector



EU Projects Overview

Co-funded by the European Union

eFTI4EU

This project, spanning 2023 to 2026, involves nine Member States, including Finland, focusing on creating a reference implementation to make eFTI a reality with a budget of €28.4 million.

eFTI4ALL

Launched in 2024, eFTI4ALL has over €30 million allocated, engaging six Member States to enhance multimodal transport, particularly for dangerous goods, fostering industry collaboration and innovation.

eFTI4LIVE
Certify. Connect. Trust.

With a budget of €48 million from 2025 to 2029, this project focuses on certification and operational readiness for 19 Member States, driving the implementation of eFTI in 2027.

The Cost of Waiting

Each month of waiting equals real money out the door, plus competitor learning curve, plus your IT vendor saying 'not yet ready'. In July 2027, the question is brutally simple: who is ready, and who is panicking?

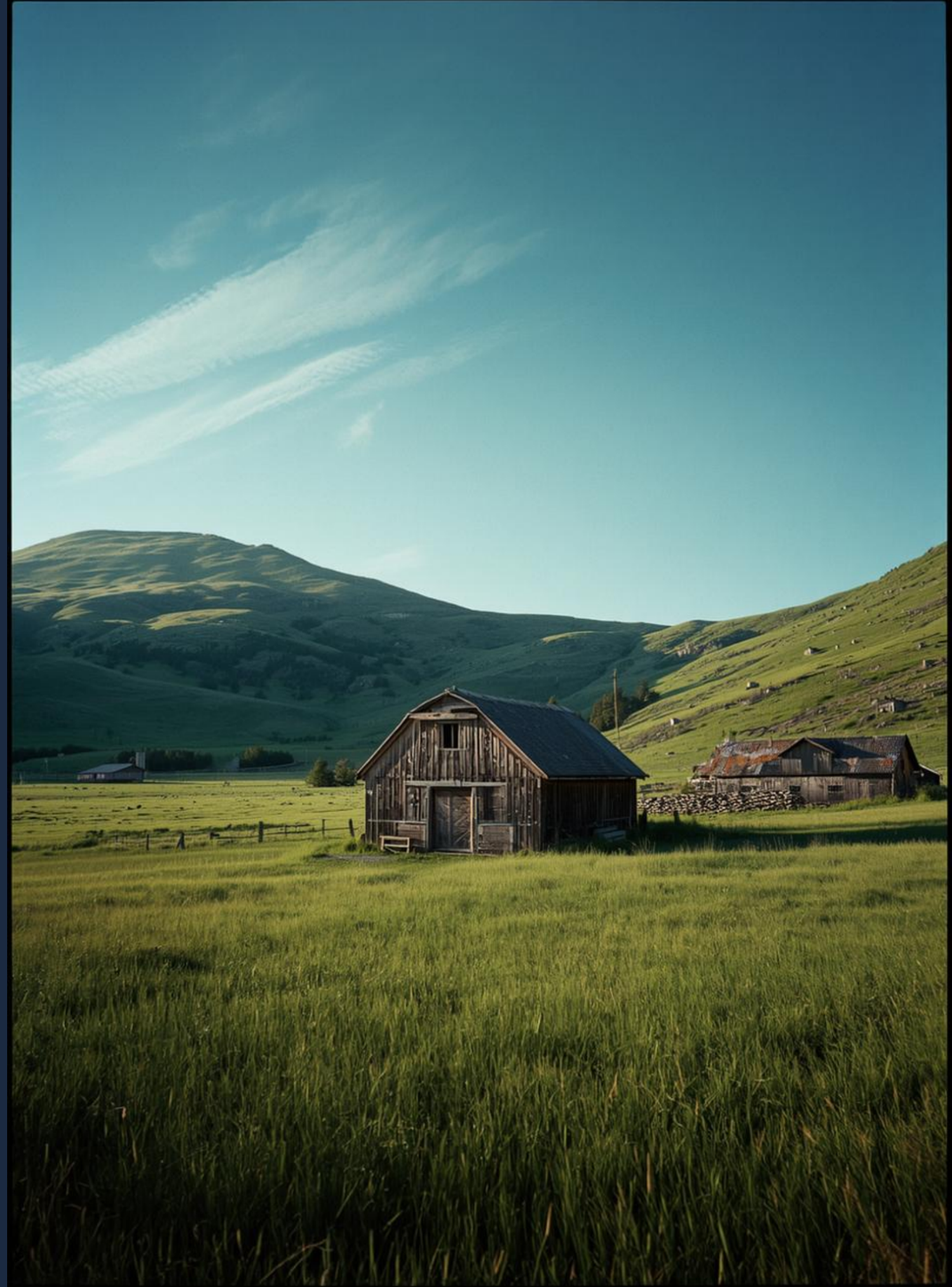
A €33.7B European Investment

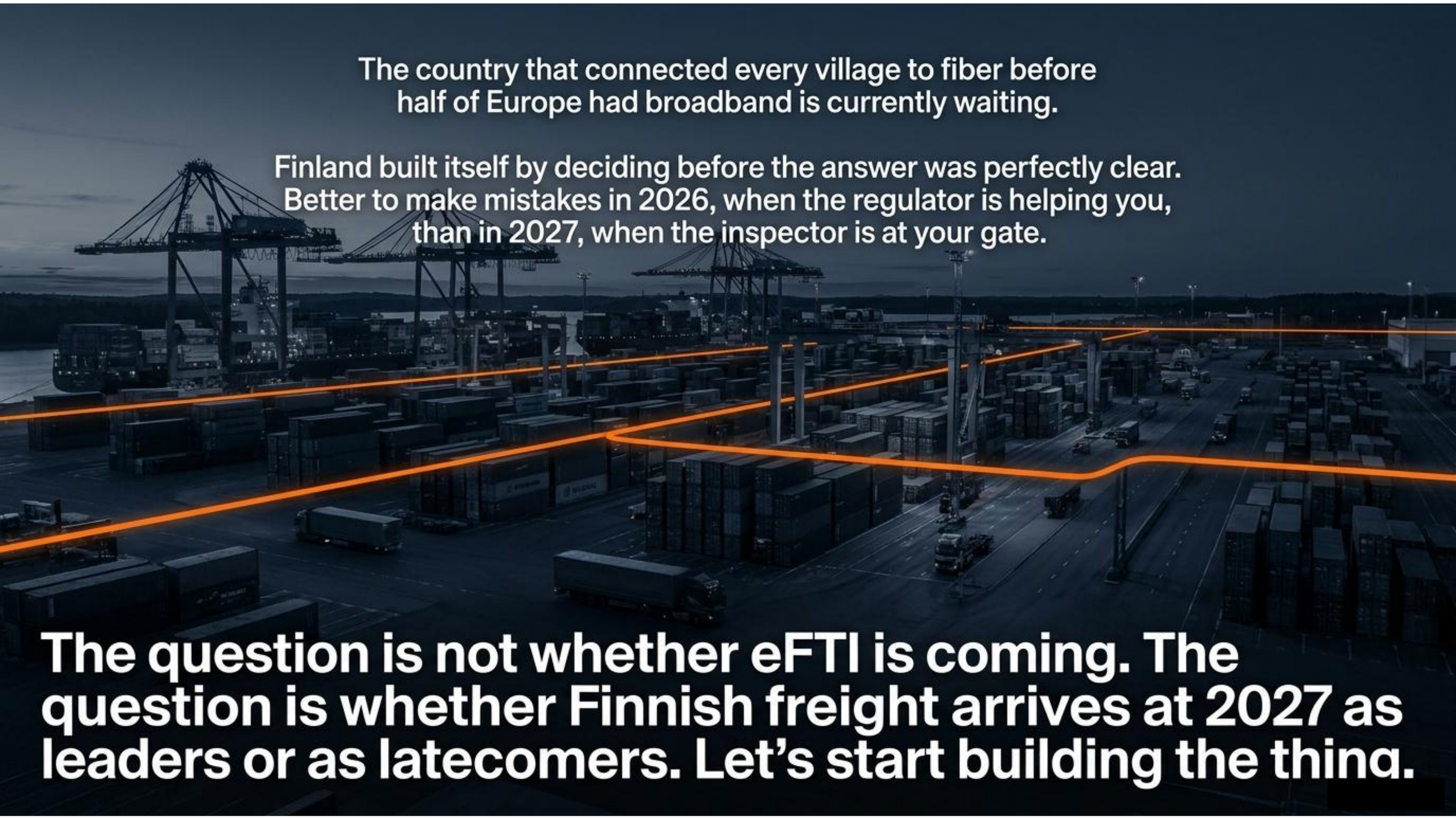
eFTI: €100M+ across 4EU/4ALL/4LIVE • EMSWe (maritime): mandatory since Aug 2025, saves €62–72M/year • EU-Rail JU: €245M latest call, Digital Automatic Coupler • EMDS: data spaces, 16 use cases in 9 EU countries • IATA ONE Record: air cargo. Same logic, four modes, one digital language. Finland is in all of them — and you can be inside it or outside it.

Where Did Finnish Sisu Go?

Finland built itself by deciding before the answer was clear. The country that electrified its forests, built Nokia from a paper mill, connected every village to fiber.

Are you ready to contribute in thinking about how each party can recognise the same shipment in the dataset, that is available and made by initial party - Shipper.




The country that connected every village to fiber before
half of Europe had broadband is currently waiting.
Finland built itself by deciding before the answer was perfectly clear.
Better to make mistakes in 2026, when the regulator is helping you,
than in 2027, when the inspector is at your gate.
The question is not whether eFTI is coming. The question is whether Finnish freight arrives at 2027 as leaders or as latecomers. Let’s start building the thing.

Paperless logistics is no longer a future concept; it is the present standard.

The eFTI Regulation is the catalyst, but operational excellence is the true reward.

By embracing the eCMR data model today, the European supply chain moves toward a connected, transparent, and frictionless future.

eFTI Experts
STUDIES & WORKS

www.eftiexperts.eu