A Strategic Guide for European Retail Supply Chains

Your Guide to Compliant, Reliable Supply Chains

Locus

WHITEPAPER

Executive Note

Across European retail, one thing is clear: rules now expect proof in motion, not paperwork after the fact. This calls for clean data first, proof along the way, and less friction later. For retail, two forces push in the same direction: the Digital Product Passport (DPP), which attaches product-lifecycle details to the item or parcel, and an updated VAT/IOSS approach that asks sellers to get their customs and tax data right at the start. In both cases, the shift is the same: from fixing problems at the border to preventing them at induction.[1][2]

This paper explains what we mean by turning rules into reliable operations. It's the shift from "document later" to "enforce now," carried out through three practical ideas with the help of Locus: a single operational record everyone works from, in-plan validation so bad data doesn't reach the dock, and real-time execution so rules trigger real actions—not just alarms.

Sector Blueprint: Europe Retail

Data-clean, zone-aware, and OOH-dense

Three realities will shape 2026 retail logistics in Europe. First, DPP under ESPR will push more product-life-cycle data into labels and parcel data. The retailer's PIM and the logistics data model must agree (or labels and customs data will drift).[1]

Second, Zero-Emission Zones (ZEZs) are spreading across European cities, which means routing and asset choice need to be ZEZ-aware by default.[3][4]

Third, OOH is no longer niche. Across Europe, parcel lockers and PUDO networks keep expanding, with operators and industry bodies documenting reductions in failed first attempts and last-mile emissions.[5]

Returns: A growing cross-border challenge

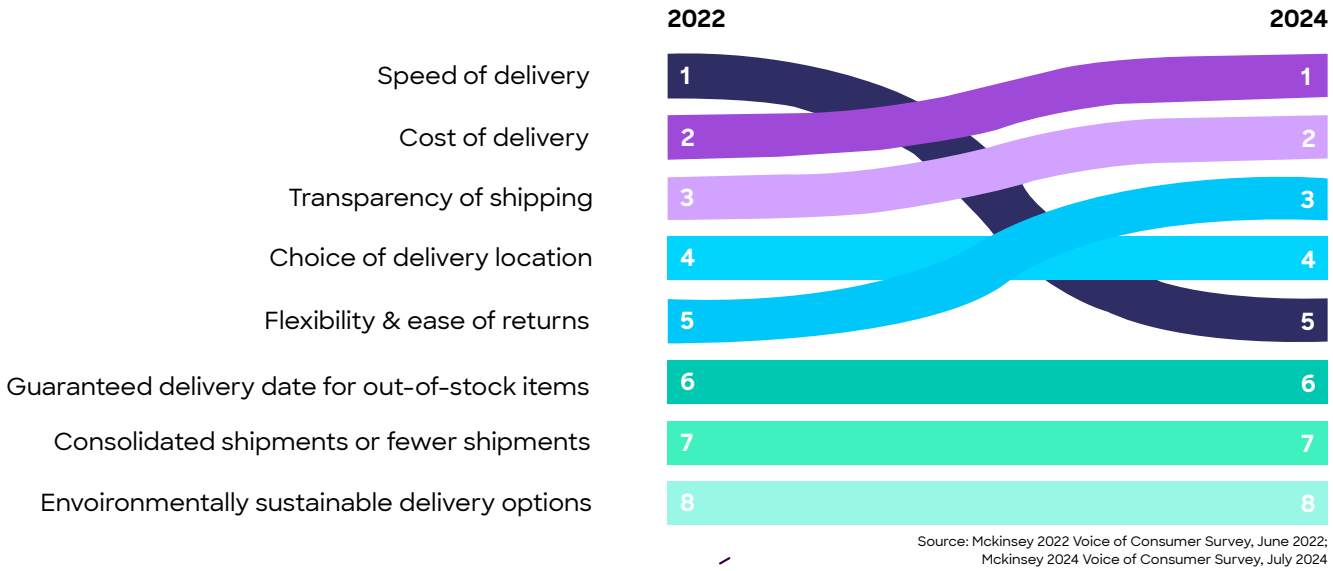
NRF pegs 2024 returns at $890B in the U.S. and highlights the persistent gap between online and overall return rates – a signal for European retailers too, as cross-border returns grow.[6]

A return path that is guided, local, and margin-aware is no longer optional. As cross-border volumes increase, the cost of unmanaged reverse logistics compounds across currencies, carriers, and customs boundaries.

Margins are tight while expectations rise

Consumer preferences have shifted in recent years, placing less emphasis on delivery speed and more emphasis on flexibility. Cost of delivery, transparency of shipping, and ease of returns now rank alongside speed as the primary factors shaping purchase decisions.

Consumer preferences have shifted in recent years, placing less emphasis on delivery speed and more emphasis on flexibility



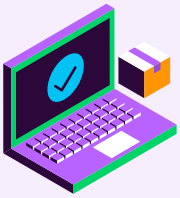
Source: Mckinsey 2022 Voice of Consumer Survey, June 2022; Mckinsey 2024 Voice of Consumer Survey, July 2024

The technology is ready, adoption is the gap

Modern planning engines, digital documents, and routing tools are already here. What often fails is the handoff between insight and action: a rule violation shows up on a dashboard, but it doesn't change the route, asset, or slot in time. In 2026, leaders stand out by making sure trusted data automatically changes how work is executed, and that each change leaves proof behind.

What “Good” Looks Like In Action

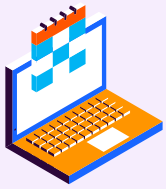
A retail network that operates with proof demonstrates four habits consistently. Together, they are the operational expression of the model.



Traceability with proof:
Every unit or delivery has a searchable trail of identity, custody, and condition; each handoff is visible to the partner that needs to see it. In retail, this includes parcel and label data that travels cleanly across systems and borders. The audit trail is produced by the run itself, not reconstructed from emails.

Exception prevention at the edge:
When a route crosses a Zero-Emission Zone, the optimizer prefers compliant vehicles and streets by default. When a home delivery looks risky, the system prefers OOH lockers or PUDO to protect cost/parcel and first-attempt success.

One plan that updates with reality:
Contact centers, planners, stores, depots, and field teams share the same live state. A decision made in planning is visible to the store. A proof captured by a driver is visible to the call center. Disputes and duplicate effort shrink.



Right-first-time documents and labels:
Declarations, labels, and required fields (including DPP fields, HS codes, and VAT/IOSS) are generated from governed truth and validated before release. If anything is missing or out of spec, the job does not go to the dock or the border. This prevents terminal holds and late-stage rework.

Three Moves That Make Compliance Practical

(EU retail operating model)

Move 1: Unify data to decide action

Start with a single operational record that connects orders, product truth (SKU, batch/lot), compliance fields (DPP, VAT/IOSS), partners, assets, and lanes. Make planning the actuator of compliance: if the declaration is incomplete, the plan doesn't release; if a label fails validation, no tender goes out. Decisions are then executed inside the run, and the system keeps the proof.[1][2]

Move 2: Prevent exceptions at the edge

Place verification where work happens. Before movement, run digital checks for declarations, HS/VAT/IOSS, and DPP fields. During movement, apply policy actions that actually change the route or asset, not just trigger an alert. ZEZ compliance must be built into the routing default, not checked after the fact.[1][2][3][4]

For cross-border flows, performance depends on data correctness early. That means getting HS codes, product origin, VAT/IOSS identification, and DPP fields right at label time, not at the airport. Doing so reduces clearance variance, lowers the odds of random inspection, and stabilizes cost-to-serve.[1][2]

As OOH locker and PUDO density keep rising across Europe, let the policy choose the delivery mode automatically when a home delivery carries an elevated failure risk.[5]

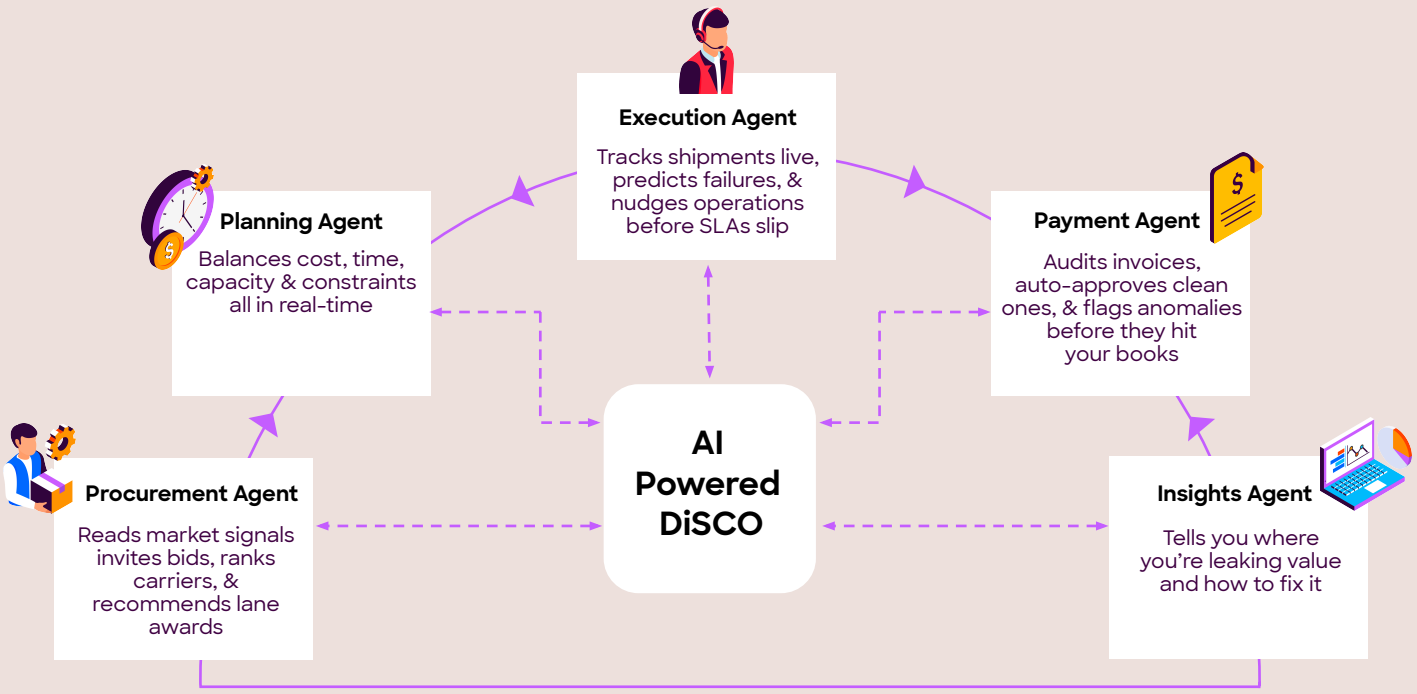
Move 3: Design adoption so it sticks

Change that adds dashboards but doesn't remove work will stall. Roll out in narrow waves with clear definitions of done. Give managers and field teams the same live view and a small, stable KPI set: first-attempt success, cost/parcel, clearance-time variance, auto-resolved exceptions, returns recovery. Train against the top failure modes until responses are reflexive.

How Locus Turns Policy into Proof in Motion

Locus connects orders, product truth, compliance fields, partners, assets, and lanes into one live record, validates labels/tax/DPP before release, and enforces rules while work is moving. DiSCO (Digital Supply Chain Officer) is the agentic AI that powers this run, sensing issues, deciding the next best move, and acting in the tool, with an audit trail by default.

The platform's agents bring structure and adaptability across the run: procurement (bids and lane awards), planning (balancing cost/time/capacity/constraints), execution (tracking live, predicting failures, nudging ops before SLAs slip), payment (auditing invoices), and insights (showing where value leaks and how to fix it).



For retail operations specifically, Locus:

- **Orchestrates procure-to-pay on a modular TMS:** one place to plan, execute, and prove.
- **Validates documentation pre-tender** (labels, HS codes, VAT/IOSS, and DPP fields) so bad data never ships, and non-compliant parcels never reach the border.
- **Automates ZEZ-aware routing by default,** with live policy enforcement; reroutes and asset swaps when zone rules or thresholds are breached.
- **Optimizes OOH/PUDO redirection** when home delivery carries elevated failure risk, protecting cost/parcel and first-attempt success.

- **Optimizes fleet mix across captive/3PL/crowd** and reallocates orders intelligently during spikes
- **Handles customer reschedules via natural-language prompts,** keeping operations and communications in sync.

What locus delivers in practice

8-12%	40%	10-15%	15%
reduction in freight costs	**faster** planning cycles	**SLA** improvement	**lower** emissions

Automation builds structure; agentic AI adds judgment and adaptability.

A Future-Focused Operational Outlook

The policy arc is clear. DPP plus VAT/IOSS will keep pushing retail data quality earlier in the flow. City access rules will tighten (ZEZs are expanding), and OOH networks will spread, because they reduce failed attempts and emissions without hurting customer experience.[1][2][3][4][5]

The imperative is equally clear. Winners won't be those with the most dashboards; they'll be those whose decisions reach the dock in time and leave a clean trace. That is the essence of turning rules into reliable operations. With a single operational record, in-plan validation, and edge-executed policies, policy becomes action, and action becomes proof.

References

[1] European Commission. "Digital Product Passport (under ESPR) 2025 consultation & workplan." Apr–Jul 2025.
[2] European Commission (DG TAXUD). "New approach to VAT for e-commerce imports (IOSS)." May 15, 2025.
[3] Transport & Environment. "State of Transport 2025 – Cities." 2025.
[4] EU Urban Mobility Observatory. "The Netherlands leads Europe's transition to zero-emission freight zones." Oct 20, 2025.
[5] Last Mile Experts. "Out-of-Home Delivery in Europe 2025." Jun 25, 2025.
[6] National Retail Federation & Happy Returns. "2024 Retail Returns Total $890B." Dec 5, 2024.
[7] McKinsey & Company. "What do US consumers want from e-commerce deliveries?" Feb 13, 2025.

Locus

Battle-tested in 350+ deployments across 30+ countries, Locus is an agentic TMS for all-mile, all-channel, trusted by enterprises like Unilever, Nestlé, CP Axtra and many more.

The platform unifies orders, capacity, and carriers into a living plan, with AI co-pilots guiding real-time decisions to protect SLAs and reduce waste.

In 2025, *Locus joined Ingka Group* (IKEA Retail), accelerating its mission to build faster, smarter, and greener supply chains.

Since 2015, Locus has powered billions of deliveries with measurable savings and sustainability impact. Headquartered in Bangalore with teams across the U.S., U.K., UAE, and SEA, its 170+ experts are redefining how the world moves goods across all channels and all miles.

1.5B+
Total deliveries optimized

17M+ KGs
Reduction in GHG emissions

$320M+
Savings in logistics costs

GROWTH, DELIVERED.

Know more