

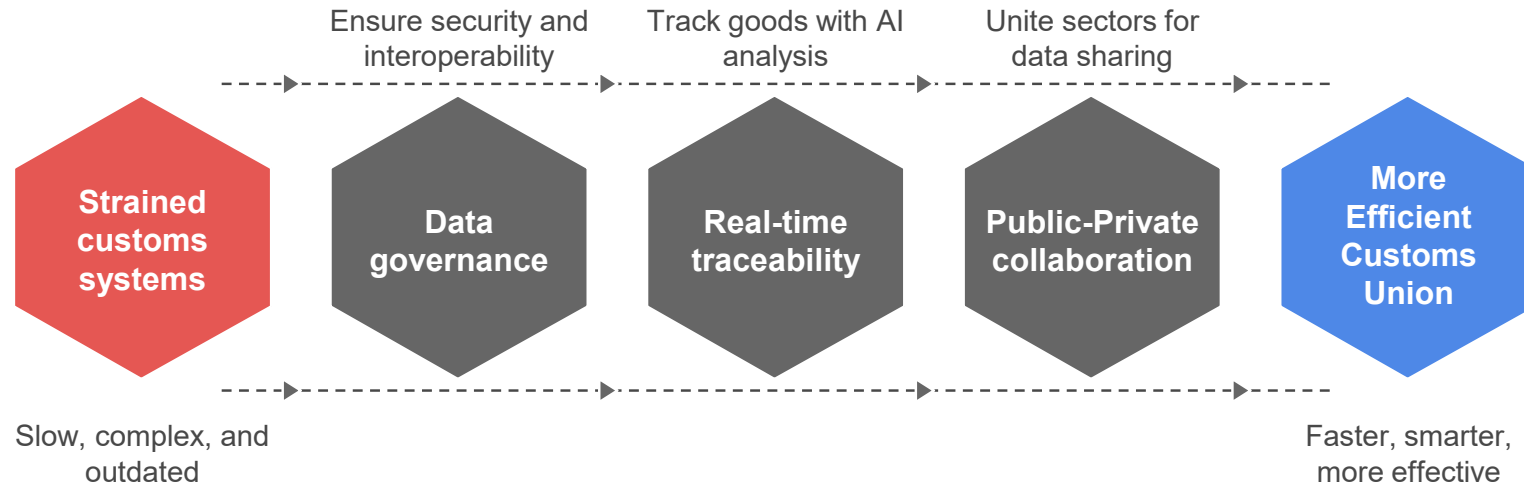
The Customs reform and the Data HUB

Data Hub and The Transition Towards the New Paradigm

FR Customs

08/10/2025

The Future of European Customs



Context & challenges

- Record seizures highlight customs' relevance (e.g. 10+ tons cocaine, €400M).
- Expanding tasks: ~400 "Prohibitions & Restrictions" - rising complexity.
- Global supply chains & e-Commerce stress existing systems.

Turning point

- Current model = "One system – one procedure" is reaching its limits.
- Need for speed, integration, and real-time data.

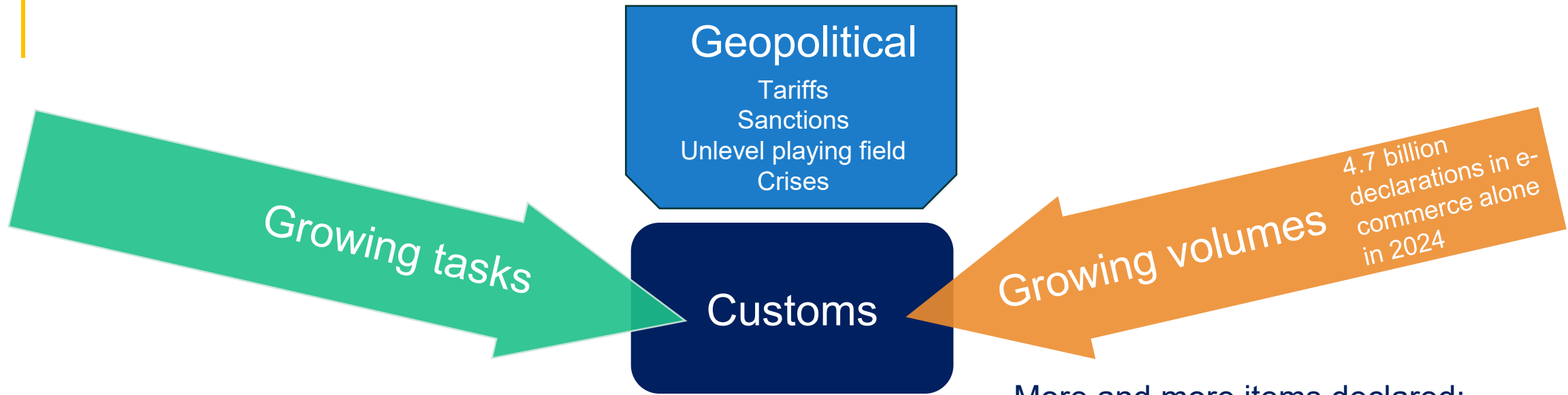
The Vision: EU Customs Data Hub

- Data at the core: governance, security, interoperability.
- Real-time traceability & predictive analysis with AI.
- Faster, smarter, more effective customs.

Strategic opportunity

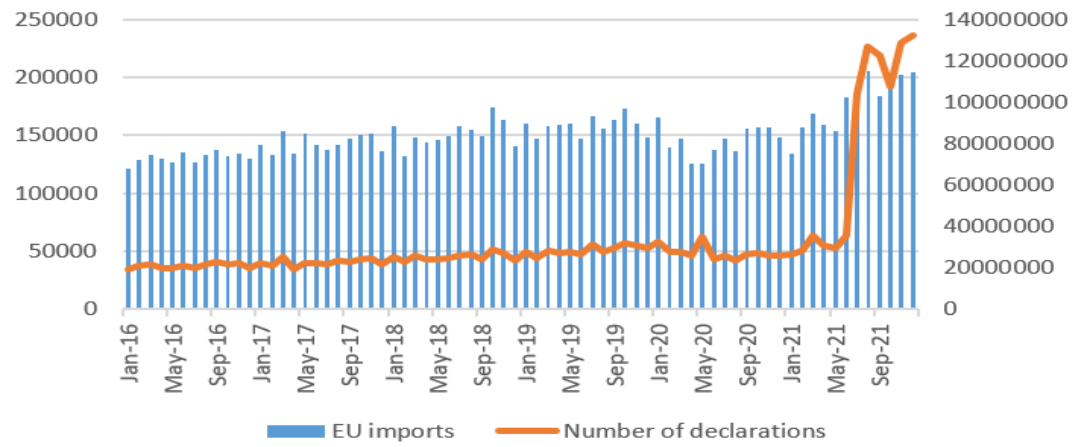
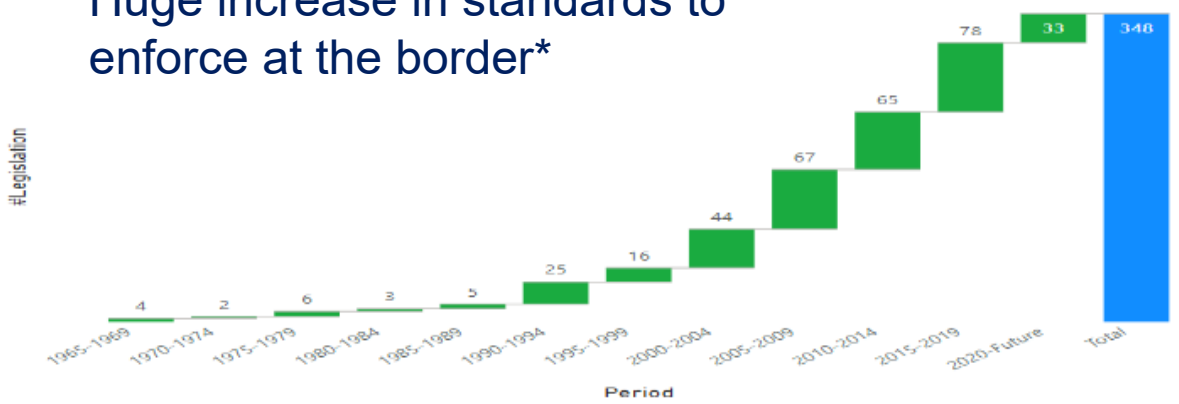
- Public & private sector collaboration.
- Shaping a future-proof, data-centric customs union.

New Challenges for Customs...



More and more items declared:

Huge increase in standards to enforce at the border*



*Recent examples of policies decided at EU level: CBAM, Deforestation, Digital Product Passport / Ecodesign, Product Safety directive, Firearms, Digital Services Act

New challenges and opportunities for Customs Digital Landscape

Data Fragmentation

Customs data spread across multiple platforms, and international systems

Data Quality

Enabling collection of high-quality trade data is a long challenging process

Scalability

The volume of trade data is exponentially growing, making real-time analysis difficult

Security

Customs data is sensitive requiring **cybersecurity & GDPR compliance**

Trust, sovereignty concerns, and **geopolitical tensions**

Fraud Detection

Identifying **illicit trade, smuggling, counterfeit goods..** in real-time is a challenge

AI Adoption

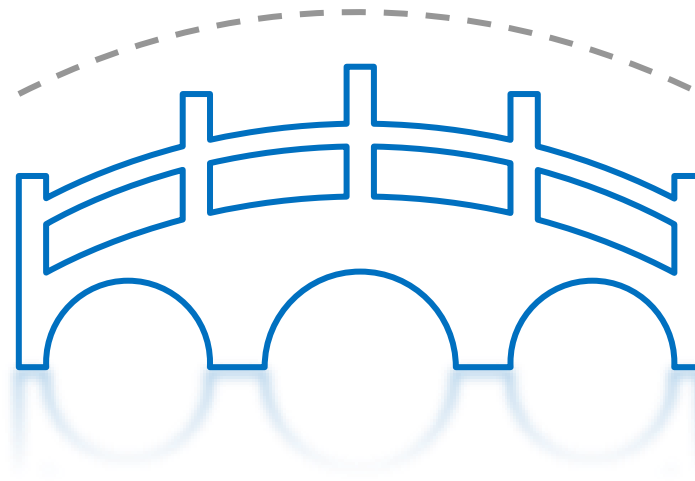
Slow adoption of **AI and predictive analytics**

From decentralized systems to a Data-Centric Customs Union



Decentralized Systems

Inconsistent data hinders trade.



Data-Centric Customs Union

Seamless trade with accessible, consistent data.



Past: decentralized, Slow Rigid

- UCC model: system built per procedure
- 27 MS + Commission - ~4 years time-to-market
- Heavy law-based technical requirements (~1000 pages)



Present needs: Agility & Adaptability

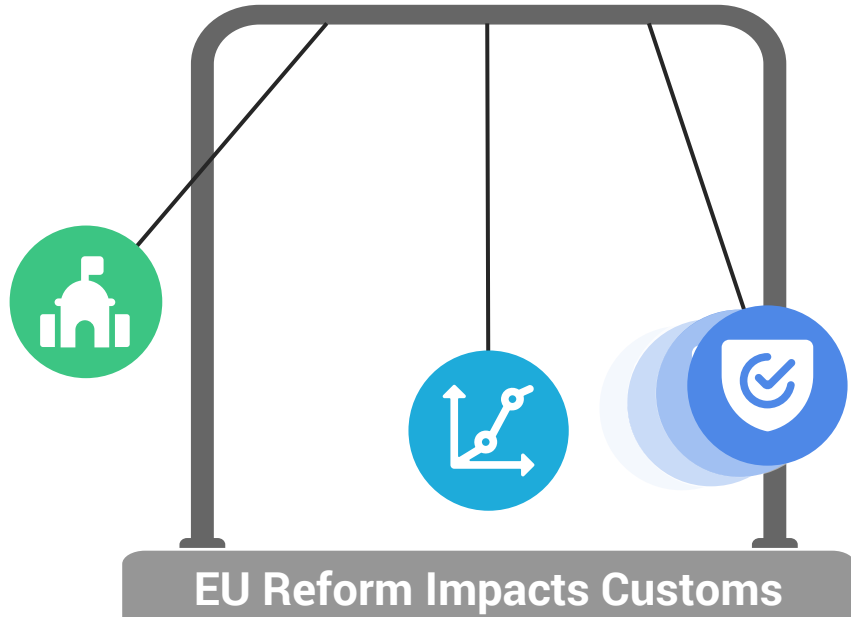
- World changing daily, geopolitical shifts
- Cannot afford multi-year rigid projects
- Need flexible, real-time, tech-enabled approach



Future: data-centric Customs Union

- Collect data once at source, re-use everywhere
- Decouple data from processes
- Lower costs of change, faster delivery
- EU Customs Data Hub is a central enabler for:
 - Lower admin costs
 - Stronger EU risk management
 - Better access & use of data

Why the eCommerce Data Hub matters



EU Reform

Single data-driven hub

Scalability limits

Overcoming decentralized systems

Fraud reduction

Mitigating risk of non-compliance

Global eCommerce growth: exponential increase in cross-border parcels.

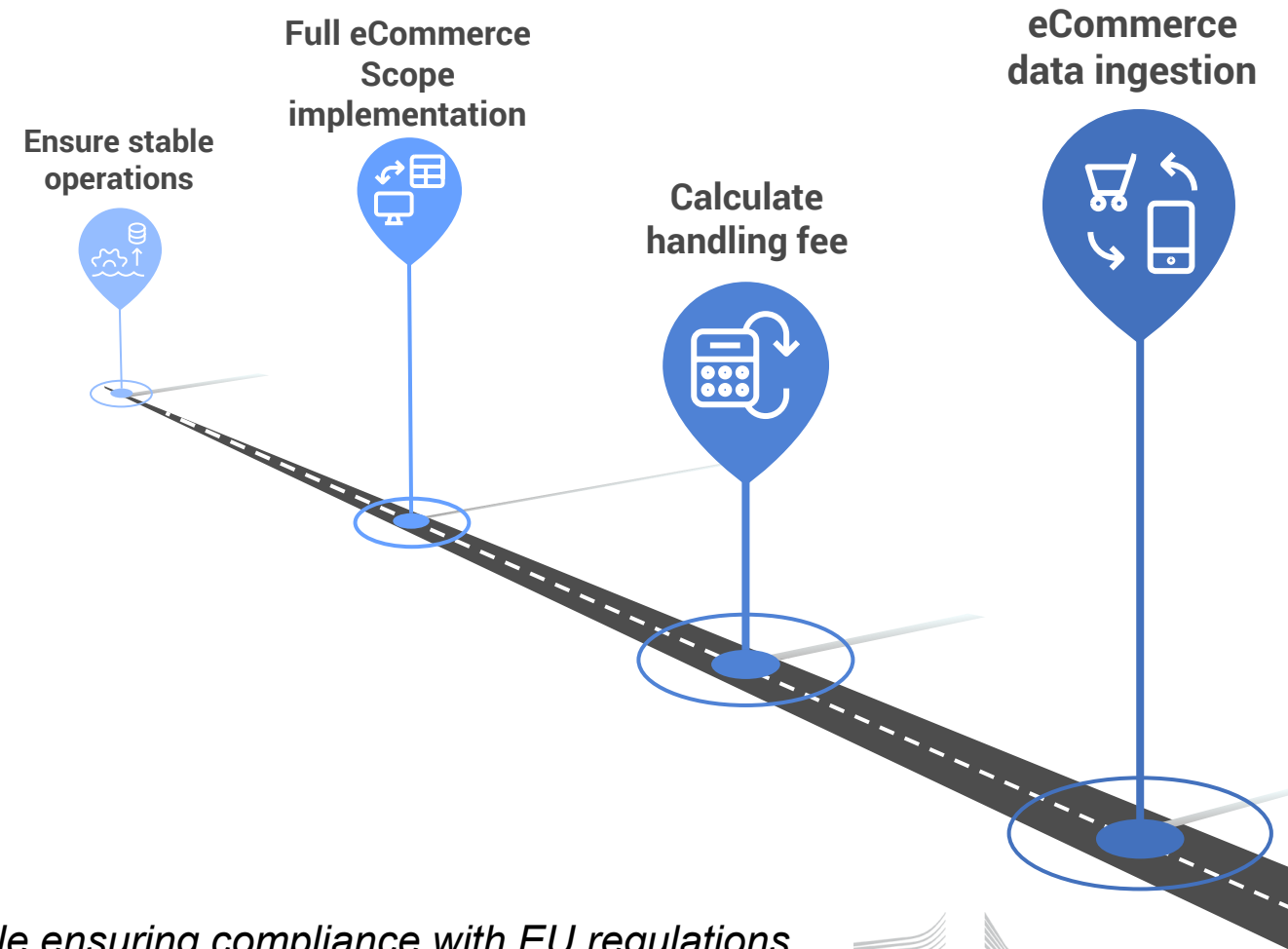
Customs challenges today: procedure-based systems, scalability limits, risk of fraud & non-compliance.

EU Reform response: build a single, scalable, data-driven Hub as the backbone of customs transformation.

Progressive Implementation towards a full eCommerce Data Hub

Incremental rollout – phased reform **avoids** “big bang” risks.

- **End of 2026** - Start ingestion of eCommerce platform sales data; calculation of union handling fees (UHF).
- **End of 2028** - Full scope implementation under the EUCA, ensuring stable operations and interconnection across Member States.



*Each phase builds **capabilities and trust** while ensuring compliance with EU regulations.
Cloud-ready architecture supports scalability throughout the transition.*

A Single, Scalable, and Secure Data Hub for EU Customs

Event-Based supervision

Shift from declaration to **event-driven data exchange**.
Supports adaptability and near real-time supervision.

Cybersecurity

Zero-trust approach with granular access controls.
Protects sensitive trade and customs data end-to-end.

Consolidated interfaces

One gateway for **Trade, Customs, and other Authorities**. Eliminates multiple, fragmented entry points.

Trader Accounts & Identity

eIDAS2 - based IDs & credentials (wallets) for trusted trader interactions.
Simplify compliance and authentication.

Integrated functions

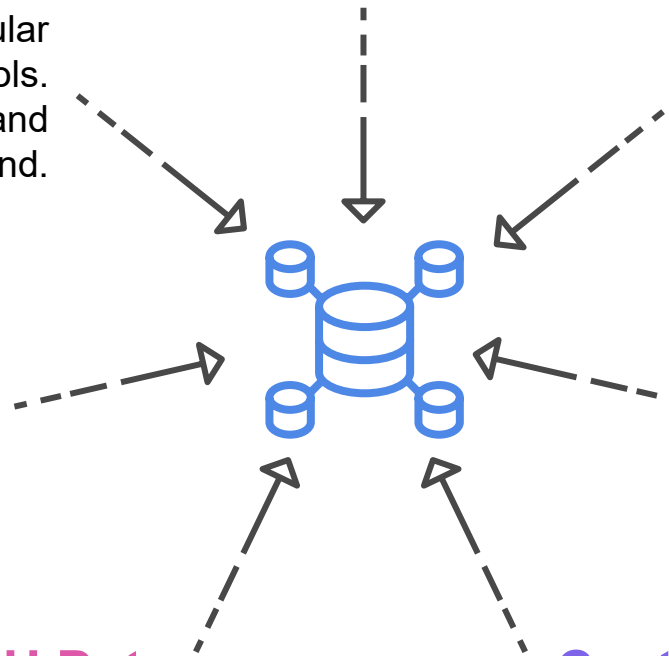
No process or system silos.
Holistic view across customs, taxation, safety, and compliance.

Integrated EU Data

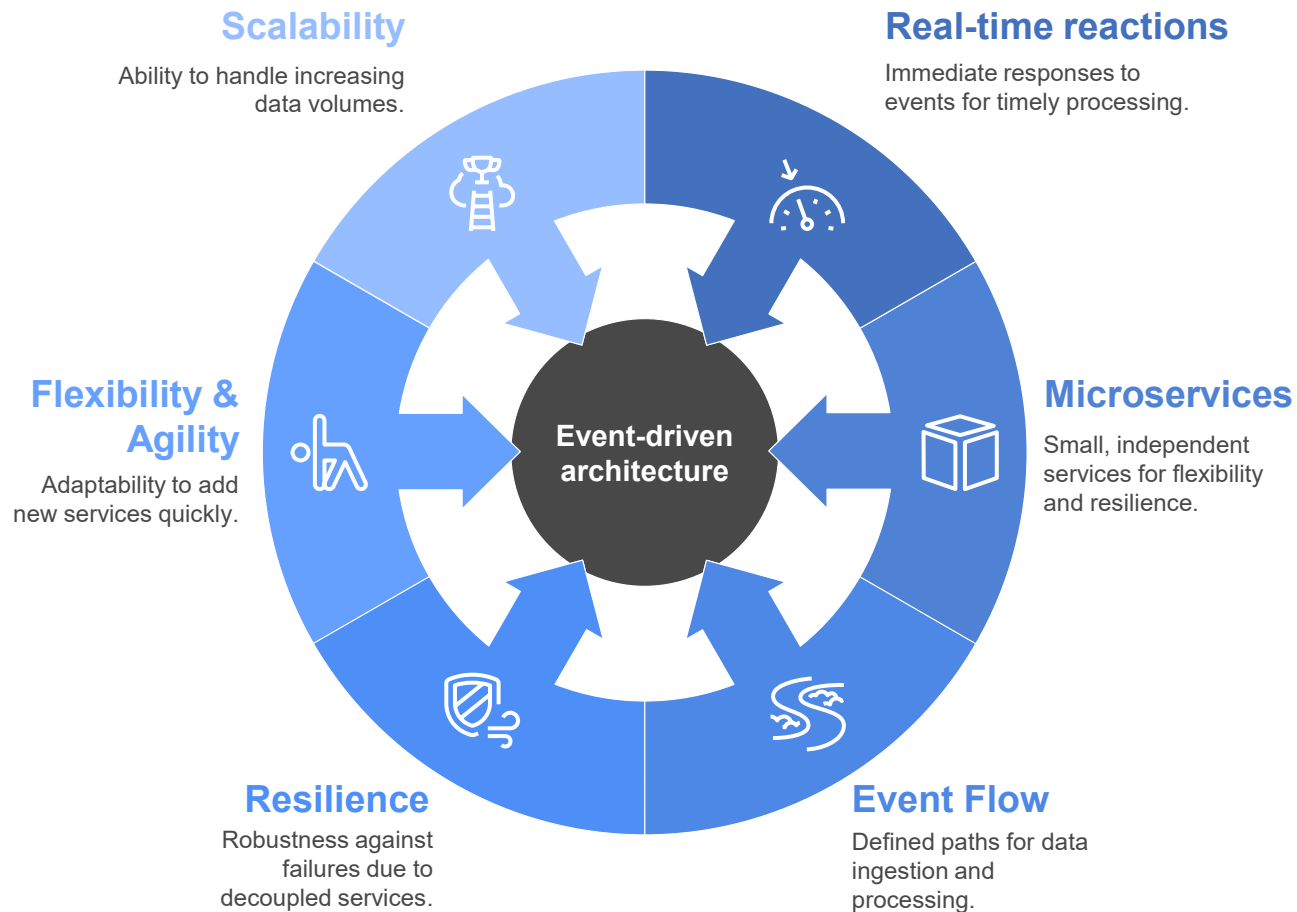
Secure data use, re-use, and sharing across authorities.
Enable analytics and risk management at EU level.

Centralization

A single system and unified data at disposal of both the EUCA and the member states.
Ensure consistency and scalability across Member States.



Event-Driven Architecture for the EU Customs Data Hub



What it is

- Real-time reactions to events (e.g. sales transaction, consignment registered, arrival at border)
- Microservices respond to events - no monolithic systems
- Event flow defines when & how data is ingested and processed

Benefits

- Real-time processing by default
- Resilience: small, decoupled services
- Flexibility & agility to add new services
- Scalability by design

Challenges

- Higher technical complexity “under the hood”
- Data management issues:
 - Fragmentation
 - Quality (incomplete, inconsistent, fraudulent data)
 - Rights (who provides, sees or modifies data)

Reform pillars



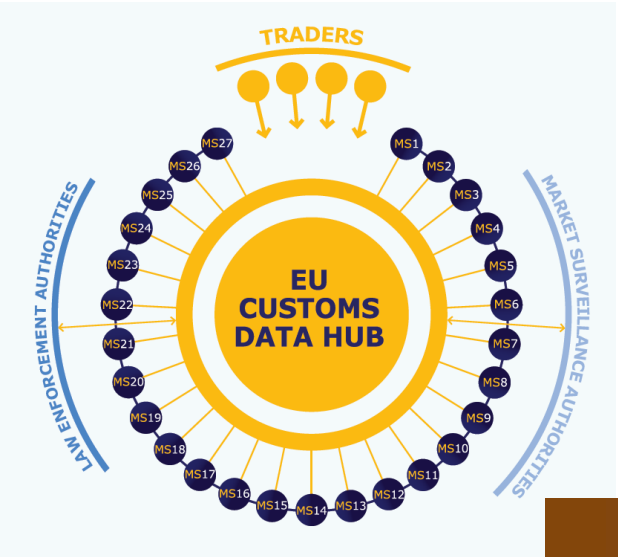
Reduced compliance costs through simpler procedures

Tailor-made **e-commerce** regime

Better protection of Single Market due to **EU risk management**

Create a **true Customs UNION** – acting as one across the external border

Key enablers



Conclusions and key messages

Immediate next steps

- **Market Survey** - open until **10 Oct '25**

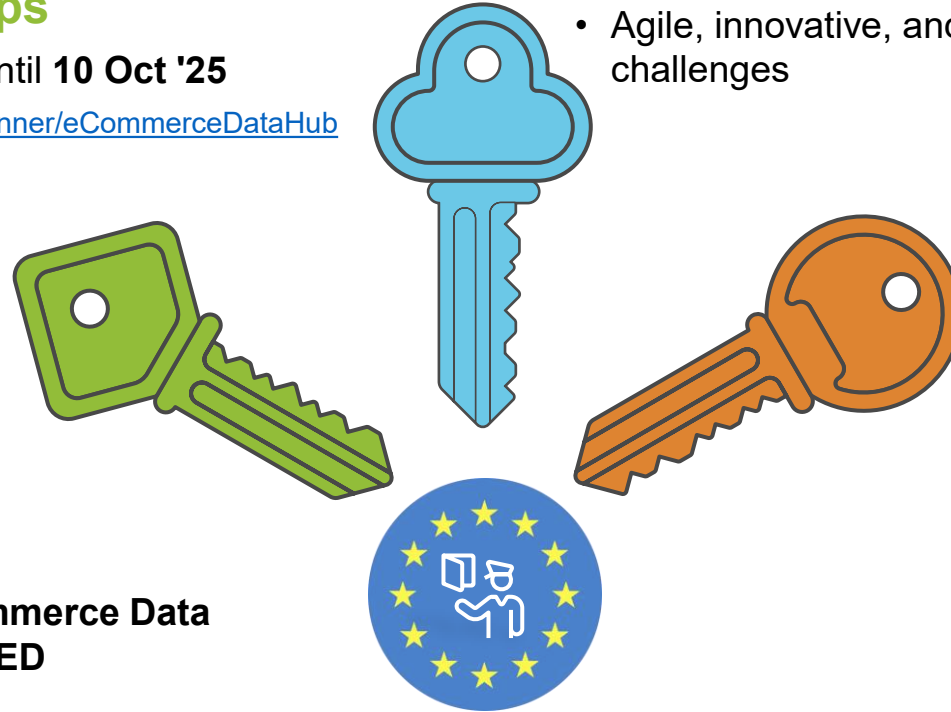
<https://ec.europa.eu/eusurvey/runner/eCommerceDataHub>



- **Procurement for e-Commerce Data Hub** - coming soon on **TED** (ted.europa.eu)

Long term vision

- **Integrated, secure & fully digital** Customs Union
- Agile, innovative, and fit for future challenges



EU Customs Data Hub

- **Sovereign**, data-driven platform
- Not a single mega-system
- **Backbone** of the new Customs Union
- Foundation for **collaboration & innovation**

Benefits for stakeholders

- **Businesses** - less admin, faster procedures
- **Citizens** - safer products, stronger protection, secure Single Market
- **Administrations** - real-time data, better risk management, stronger cooperation
- **High-Tech Industry** - opportunities in Cloud, AI, data analytics, cybersecurity

Q & A