Feedback on the Future of Response to the Call for Evidence on Regulation (EU) 2019/1148 and Strategic Input on Securing the Digital Single Market

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About Us

The **DigitalTrade4.EU consortium** envisions a **seamlessly interconnected Europe** and **neighbouring regions** powered by harmonized standards for the digitalisation of trade documents and processes. By fostering the digital transformation of trade, we aim to promote economic integration, enhance cooperation, and ensure long-term trade facilitation across borders.

Our consortium is made up of **experts in their field**, including **107 full partners**—trade associations, logistics providers, shipping lines, banks and insurances, technology innovators, etc.—**from 17 European Union countries** (*France, Belgium, Netherlands, Austria, Estonia, Finland, Italy, Latvia, Spain, Germany, Sweden, Poland, Luxembourg, Lithuania, Slovenia, Denmark, Bulgaria*) and **22 non-EU countries** (*United Kingdom, Switzerland, Montenegro, Japan, Singapore, Hong Kong, Australia, New Zealand, India, Nepal, Canada, United States of America, Cameroon, Morocco, Egypt, Kenya, Pakistan, Nigeria, Brazil, Uzbekistan, Turkey, Ukraine*).

Our consortium is already **aligned with the fundamentals** of the **EU Competitiveness Compass**. Learn more:

- How DigitalTrade4.EU Can Help Achieve the Objectives of the EU Competitiveness Compass (February 2025)

  https://www.digitaltrade4.eu/how-digitaltrade4-eu-can-help-achieve-the-objectives-of-the-eu-competitiveness-compass/

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Executive Summary

The European Commission's initiative to evaluate and revise Regulation (EU) 2019/1148 on the marketing and use of explosives precursors is a critical step in enhancing the Union's security. However, the evolving threat landscape, characterized by the use of **alternative chemicals** and circumvention tactics, demonstrates the limitations of a static, list-based control system. A paradigm shift is required towards a more **dynamic, digital, and data-driven** approach to supply chain security.

DigitalTrade4.EU proposes a solution centred on the principles of **digital trade transformation** that aligns security objectives with the EU's broader strategic goals for a **simple, seamless, and strong Single Market**. We advocate for the implementation of a **Digital Product Passport (DPP)**[1] system for high-risk chemicals. A **DPP** is a digital twin of a **physical product** that contains **standardized, machine-readable data** about its **lifecycle**, including **origin, composition, custody chain,** and **compliance certifications**. By embedding this data in **secure, immutable records** (e.g., **blockchain** or **distributed ledger systems**), the DPP ensures **tamper-proof traceability** across **borders** and **stakeholders**. This would create **end-to-end traceability** and transparency, enabling real-time monitoring and automated detection of suspicious transactions.

This approach not only provides a more robust solution to the specific problems identified by the Commission but also fosters **international interoperability** through legal framework like **UNCITRAL Model Law on Electronic Transferable Records (MLETR)**[2] and the new **eIDAS Regulation (eIDAS 2.0)**[3]. By embedding security within a digital framework, we can protect citizens, create a **level playing field** for businesses, reduce administrative burdens, and reinforce the EU's leadership in global **green-digital trade**.

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[1] European Union. EU's Digital Product Passport: Advancing transparency and sustainability (September 2024) https://data.europa.eu/en/news-events/news/eus-digital-product-passport-advancing-transparency-and-sustainability

[2] UNCITRAL. Model Law on Electronic Transferable Records https://uncitral.un.org/en/texts/ecommerce/modellaw/electronic_transferable_records

[3] European Commission. Discover eIDAS https://digital-strategy.ec.europa.eu/en/policies/discover-eidas

Introduction

DigitalTrade4.EU welcomes the opportunity to provide feedback on the Commission's "Public Consultation" regarding explosives precursors and to offer a strategic perspective aligned with the vision outlined in *"The Single Market: our European home market in an uncertain world" (COM(2025) 500 final)* [4]. Our consortium, comprising over 100 partners from across the EU and beyond, is dedicated to fostering a seamlessly interconnected Europe powered by **harmonized digital standards**. **Harmonized digital standards** refer to **universally adopted protocols** for **data formats, verification processes,** and **interoperability frameworks** (e.g., **ISO 20400**[5] for **sustainable procurement**, **GS1 standards** for **supply chain visibility**). These standards ensure **seamless data exchange** across **systems**, regardless of **national or sectoral differences**

We believe the challenge of controlling high-risk chemicals should not be viewed in isolation. It is fundamentally a matter of **supply chain integrity**, a core component of the Single Market. The current system's vulnerabilities highlight the urgent need to move from a fragmented, document-based system to a **unified, data-based Single Market**. Our recommendations aim to provide a concrete pathway to achieve this, turning a security imperative into a catalyst for digital innovation and enhanced competitiveness.

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[4] European Commission, Internal Market, Industry, Entrepreneurship and SMEs. The Single Market: our European home market in an uncertain world (May 2025)
https://single-market-economy.ec.europa.eu/publications/single-market-our-european-home-market-uncertain-world_en
[5] ISO. ISO 20400:2017
https://gpp.golocal-ukraine.com/wp-content/uploads/ISO_20400_2017E-Character_PDF_document.pdf

Expectations from the Commission's Side:
The Objectives

We understand the Commission's evaluation is driven by clear and pressing concerns, as outlined in the Call for Evidence. DigitalTrade4.EU's proposed solutions are designed to directly address these challenges:

- **Problem 1, The Use of Alternative Precursors:** The current Regulation is being circumvented by criminals using alternative, uncontrolled chemicals. This demonstrates that a static list of substances cannot keep pace with evolving threats.

- **Problem 2, An Uneven Playing Field:** Divergent interpretations and uneven application of the Regulation across Member States have failed to create a fully harmonized single market, creating legal uncertainty and disproportionate burdens on businesses.

- **Problem 3, Gaps in Regulating High-Risk Chemicals:** The absence of harmonized EU rules for other chemicals that can be used to manufacture lethal devices represents a significant security gap.

The Commission's overarching objective is to establish a legal framework that **effectively prevents** criminals from accessing these materials while **ensuring the proper functioning of the single market**. This goal is at the heart of our recommendations.

Approach and Recommendations

A modern security threat requires a modern solution. Instead of merely updating lists of controlled substances, we propose building a resilient, intelligent, and interoperable digital framework.

1. A Digital-First Solution: The Digital Product Passport for High-Risk Chemicals

The core of our recommendation is to apply the **Digital Product Passport (DPP)** concept to the entire supply chain of explosives precursors and other high-risk chemicals. The **DPP system** aligns with **ISO 20400 standards** for **sustainable procurement** by ensuring that **environmental, social,** and **economic impacts** are assessed throughout the **supply chain**. This integration would enable businesses to meet both **security** and **sustainability objectives** simultaneously.

- **How it Works:** Every package or consignment of a designated chemical would be assigned a secure, unique digital passport. This DPP would contain **verifiable, real-time data** on the product's identity, origin, quantity, chain of custody, and intended, legitimate use. This creates an **immutable record** from manufacturer to end-user.

- **Addressing the Threat:** This system directly tackles the problem of **alternative precursors** (Problem 1) by shifting the focus from *what* is being shipped to *who* is shipping and receiving it, and whether the transaction is legitimate. It creates a transparent environment where illicit diversion becomes significantly more difficult.

2. Creating a Seamless and Secure Single Market

A standardized digital system is the most effective way to achieve the **level playing field** the Commission seeks (Problem 2).

- **Harmonized Compliance:** A single, EU-wide digital system for DPPs eliminates the need for fragmented national reporting and verification processes. It provides **legal certainty** for economic operators and simplifies compliance, especially for **SMEs**.

- **International Interoperability:** To avoid creating new trade barriers, this system must be built on **global standards**. By aligning with frameworks like the **MLETR**, **eIDAS 2.0**

for digital identity, and **UNECE Recommendation No. 49 ("Transparency at Scale")**[6], the EU can ensure its system is interoperable with those of its international partners. This reinforces the EU's role as a global standard-setter.

3. A Risk-Based, Automated, and Scalable Framework

A digital system enables a smarter, more efficient approach to enforcement.

- **Automated Anomaly Detection:** Instead of relying solely on manually reported "suspicious transactions," a data-driven system can use AI to automatically flag anomalies in real-time. For example, machine learning algorithms could analyse historical transaction patterns to detect deviations, such as sudden spikes in orders from a previously low-volume buyer, or shipments rerouted to jurisdictions with weak chemical control regimes. These alerts would be cross-referenced with sanctions lists and verified against the DPP's embedded compliance data.

  This includes unusual order volumes, re-routing of shipments, or purchases by unverified entities. This allows authorities to focus resources where the risk is highest.

- **Scalability for All High-Risk Chemicals:** The DPP framework is inherently flexible and can be easily extended to cover the broader category of **high-risk chemicals** identified by the Commission (Problem 3). This provides a single, unified solution that avoids creating multiple, overlapping regulatory systems.

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[6] United Nations Economic and Social Council. Recommendation No. 49: Transparency at Scale – Fostering Sustainable Value Chains (March 2025)
https://unece.org/sites/default/files/2025-05/ECE-TRADE-C-CEFACT-2025-03E.pdf

Conclusion and Next Steps

The need to strengthen controls on explosives precursors presents a strategic opportunity to pioneer a **next-generation model for supply chain security**. This model should be digital-by-default, data-driven, and globally interoperable. It is the only way to build a system that is both more secure and more efficient, strengthening our **strategic autonomy** while fostering a competitive Single Market.

The DigitalTrade4.EU consortium stands ready to assist the Commission in turning this vision into a reality. We propose the following next steps:

1. **Launch a Pilot Project:** We recommend the Commission establish a targeted pilot project to test the implementation of a **DPP system for a selected number of high-risk chemicals**. The pilot project should involve multidisciplinary collaboration with academia, civil society, and international organizations (e.g., INTERPOL, UNODC) to address technical, legal, and ethical considerations. This would ensure the system balances security imperatives with safeguards against data misuse or overreach.

2. **Champion Global Standards:** The Commission should continue to leverage its leadership in forums like the G7, WTO, and UNECE to promote a **global, standards-based approach** to supply chain security, ensuring the interoperability of digital trade systems.

3. **Collaborate on Implementation:** DigitalTrade4.EU offers its extensive network and deep expertise in digital trade, logistics, and technology to partner with the Commission in designing and implementing this transformative initiative.

By embracing a bold, digital-first strategy, the EU can create a safer future for its citizens and a more prosperous, resilient, and competitive European home market.

EU Green-Digital Trade Leadership Roadmap (DigitalTrade4.EU, 2025)

activity	objective	indicative metrics	tools/enablers
1. EU-Singapore DTA & Expand DEPA Partnerships	Strengthen digital trade diplomacy in Asia through high-standard agreements.	- 5+ new digital trade agreements with key Asian partners (e.g., Japan, India, ASEAN) by 2030 - 15% increase in EU-Asia digital services trade by 2028	DEPA framework, EU-Singapore DTA, Global Gateway Initiative, eIDAS 2.0
2. Implement Digital Product Passports (DPPs)	Ensure traceable, sustainable supply chains aligned with EU Green Deal.	- 50% adoption of DPPs by 2030 - 20% reduction in supply-chain carbon intensity by 2030	EU Sustainable Products Initiative, CBAM incentives, UNECE Recommendation 49
3. Fund Secure Digital Corridors in Asia	Build interoperable digital infrastructure for EU-Asia trade.	- ~€2B allocated via NDICI-Global Europe - 10+ blockchain-based traceability pilots by 2027	NDICI-Global Europe, ASEAN digital customs systems, EU Customs Data Hub
4. Harmonize Digital Standards (MLETR/eIDAS 2.0)	Enable cross-border recognition of e-documents and digital identities.	- 90% mutual recognition of e-signatures by 2028 - 70% SME adoption of eIDAS wallets	MLETR framework, eIDAS 2.0, EU Transport Law updates, UN/UNECE protocols
5. Launch Green-Digital Trade Academy	Upskill SMEs and officials on DPPs and carbon accounting.	- 40% increase in SME participation by 2027 - 60% cost savings for SMEs	Erasmus+ grants, COSME programme, tiered compliance thresholds
6. Integrate ESG into Trade Finance	Link trade finance to sustainability metrics for cheaper capital access.	- €10B/year unlocked for green trade finance - 30% lower Scope 3 emissions by 2030	InvestEU guarantees, CSRD-aligned reporting, FinTech platforms
7. Enforce Platform Interoperability	Prevent vendor lock-in and empower SMEs.	- 100% compliance with CJEU rulings by 2026 - 50% reduction in platform dominance	Court of Justice of the European Union (CJEU) Case C-233/23, DEPA, eIDAS 2.0, Digital Markets Act (DMA)
8. Global Digitalisation Projects with EU Standards	Extend EU digital infrastructure and norms globally.	- 20+ co-funded projects by 2030 - 80% interoperability with EU systems	Digital Europe Programme, CEF funding, EU-Asia Digital Standards Taskforce
9. Advance UNECE Transparency Protocols	Globalize EU sustainability standards for supply chains.	- 100% alignment with UNECE Rec. 49 by 2028 - 30% reduction in greenwashing claims	UNECE CEFACT, W3C Verifiable Credentials, EU CBAM registry
10. Pilot CBAM-DPP Corridors	Link trade finance to verifiable ESG metrics for tariff incentives.	- 20% CBAM compliance cost reduction - 50% DPP adoption by 2030	IoT carbon trackers, CBAM rebate schemes, EU Customs Single Window

Table 1. The roadmap above, DigitalTrade4.EU's input to the European Commission's "International Digital Strategy" operationalises the recommendations outlined in this document. For instance, Activity 1 (EU-Singapore DTA & Expand DEPA Partnerships) directly supports the harmonisation of international digital standards, while Activity 8 (Global Digitalisation Projects with EU Standards) aligns with efforts to promote dual-use infrastructure globally. These activities collectively reinforce the EU's ability to leverage digital trade diplomacy as a tool for both economic growth and strategic security.