

Prepared by DigitalTrade4.EU



A Digital-First Approach to the Consumer Agenda 2025-2030 and the Single Market

Feedback to the EU Commission

July 2025

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/>

Web page: www.digitaltrade4.eu

EU Transparency Register: 355266197389-94

Contact person: Riho Vedler

Email: riho.vedler@ramena.ee



Executive Summary

The DigitalTrade4.EU consortium **fully supports** the European Commission's **pivotal initiative**, the "Consumer Agenda 2025-2030 and action plan on consumers in the Single Market¹," along with its accompanying **public consultation**. Our core mission is to **accelerate the seamless integration of digital trade and capital markets** across the entire European Union. We identify a **profound and strategic synergy** between the Commission's overarching vision for a **more dynamic, resilient, and globally competitive Single Market** and our own foundational objectives.

We **wholeheartedly endorse** the Commission's unwavering dedication to **alleviating administrative burdens, streamlining complex regulatory frameworks, championing innovative digital solutions, and fortifying robust consumer protection mechanisms** as cornerstones of future prosperity. This comprehensive feedback document specifically highlights the **actionable strategies** derived from our "Response to the European Commission's Savings and Investments Union Consultation" (DigitalTrade4.EU, 2025)².

We meticulously demonstrate how these strategies **directly address and align** with the Commission's stated expectations, as outlined in its call for evidence and the overarching Single Market Strategy. Ultimately, our collective recommendations are **meticulously crafted** to render the Single Market **simpler, more seamless, and robustly stronger** through the **transformative power of digitalization**, ensuring a **future-proof environment** that fosters growth and trust for both consumers and businesses.

Our proposals emphasize **interoperability, data sovereignty, and streamlined compliance**, recognizing these as fundamental pillars for a truly integrated and efficient digital Single Market that can adapt to evolving global demands.

¹ https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14514-Consumer-Agenda-2025-2030-and-action-plan-on-consumers-in-the-Single-Market_en

² https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14673-Savings-and-Investments-Union-Regulation-fostering-EU-market-integration-and-efficient-supervision/F3553852_en

2. Introduction

The European Commission's initiative, framed within the Consumer Agenda 2025-2030, represents a **critically important and timely step** towards **solidifying the consumer's central role** within the Single Market. Its ambitious aim to foster a **fairer, greener, and more transparent marketplace** is not merely an aspiration but a **fundamental requirement** for the EU's **sustained economic growth and social cohesion** in an increasingly interconnected and complex global landscape.

This strategic endeavour **resonates deeply** with the **urgent calls** for a **truly integrated Single Market**, as comprehensively articulated in the influential reports by Enrico Letta and Mario Draghi, which underscored the need for bolder steps towards economic unity. Furthermore, it **aligns seamlessly** with President von der Leyen's overarching political guidelines for achieving **sustainable prosperity, enhanced competitiveness, robust democracy, and equitable social fairness** across the Union, ensuring that economic progress is inclusive and benefits all citizens. This includes measures such as accessible digital identity wallets (eIDAS 2.0) and tiered compliance frameworks for SMEs, which directly advance the Commission's goal of equitable access to the Single Market. The current geopolitical and economic uncertainties, including supply chain disruptions and evolving trade dynamics, further underscore the **imperative to strengthen the Single Market** as a **pillar of stability and resilience** for European businesses and citizens, providing a predictable and secure environment. The rapid pace of digital transformation, marked by AI, blockchain, and other emerging technologies, demands a proactive approach to ensure that regulatory frameworks not only keep pace but actively facilitate innovation while simultaneously safeguarding consumer rights and fostering fair competition.

In parallel, the DigitalTrade4.EU consortium has **proactively developed** a **forward-looking blueprint**—the "**Digital Trade & Capital Markets Integration Roadmap**"—as outlined in our feedback titled "Response to the European Commission's Savings and Investments Union Consultation" (DigitalTrade4.EU, 2025). This comprehensive roadmap is meticulously designed to propose **concrete, implementable measures** specifically engineered to **accelerate the seamless integration of digital trade and capital markets** across the EU.

We **firmly believe** that the **practical solutions** outlined within our roadmap **directly address and offer effective remedies** to many of the **pressing challenges and systemic issues** that the Commission has meticulously identified in its various analyses. These include, but are not limited to, the **complexities and emerging risks** associated with the rapid expansion of e-commerce, the **profound impact** of rapidly evolving new technologies and data-driven commercial practices on market dynamics and consumer behaviour, and the **persistent administrative burdens** that continue to impede businesses, particularly small and medium-sized enterprises (SMEs), from fully realizing their potential within the Single Market.

Our collaborative vision is to **transform these challenges into opportunities for growth and efficiency** through **comprehensive digitalization**, thereby ensuring the EU remains at the **forefront of global trade innovation** and can effectively compete on the world stage while upholding its values.

***Note:** In this document, the terms **Small and Medium-sized Enterprises (SMEs)** and **Micro, Small and Medium-sized Enterprises (MSMEs)** are used interchangeably and carry the same meaning and weight. This clarification is important because different sources and contexts may refer to these groups using either acronym, but both encompass the full range of smaller business categories critical for economic development.*

3. Expectations from the Commission's Side: The Objectives

The Commission's call for evidence outlines **key problems** hindering consumers and businesses from **fully benefiting** from the Single Market:

- **Cross-border obstacles:** Restrictions in **e-commerce delivery and payments**, and **limited cross-border service provision** (e.g., financial services).
- **E-commerce challenges:** **Unsafe products** from outside the EU, and difficulties in ensuring **consumer protection and fair competition** (especially for non-EU traders).
- **New technologies' impact:** **Undermined consumer choice** via **dark patterns**, **misleading marketing**, and **addictive digital product design**.
- **Regulatory gaps:** **Uncertainty** in applying existing consumer laws digitally, **hindering consumer protection**.
- **Vulnerable groups:** **Specific challenges** for older people and those with disabilities in accessing essential services and adapting to new technologies.
- **Administrative burdens:** **Complex requirements** hindering efficiency and competitiveness for businesses, especially SMEs.
- **Lack of coordination:** **Difficulties in cooperation** among authorities enforcing various laws (consumer protection, product safety, customs, data protection, digital services).

The Commission aims to develop a **shared vision and framework** for consumer policy until 2030, to **strengthen consumer protection, support well-being, and promote a level playing field**. Key initiatives include a **Digital Fairness Act** to tackle unethical digital practices and a review of the Consumer Protection Cooperation Regulation to **strengthen EU consumer law enforcement**.

These objectives are closely connected to the EU's existing legal and enforcement instruments such as the **Consumer Rights Directive (2011/83/EU)**, the **Unfair Commercial**

Practices Directive (2005/29/EC), and the Alternative Dispute Resolution (ADR)³ and Online Dispute Resolution (ODR) frameworks. Moreover, cross-border cooperation through the **Consumer Protection Cooperation Regulation (EU) 2017/2394** plays a key role in market surveillance and enforcement, particularly in the digital domain. Our proposals build upon and aim to enhance the effectiveness of these existing tools through technological innovation.

³ European Commission. Alternative dispute resolution for consumers
https://commission.europa.eu/live-work-travel-eu/consumer-rights-and-complaints/resolve-your-consumer-complaint/alternative-dispute-resolution-consumers_en

4. Strategic Alignment of Digital Trade & Capital Markets Roadmap with the EU Consumer Agenda 2025–2030

Activity	Objective	Relevant Consumer Agenda Priority (2025–2030)	Contribution to EU Consumer Policy	Tools / Enablers
1. Establish EU Trade Document Registry (ETDR)	Centralised, secure cross-border trade & ESG data registry	Improve enforcement, transparency, and oversight of Single Market transactions	Ensures better fraud prevention, trusted transactions, and reduces information asymmetry for consumers and SMEs	Zero Trust Architecture & cross-border verification (e.g., blockchain-based systems like EBSI), MLETR-compliant systems, PSD3-PSR/FiDA APIs, LEI / vLEI
2. Digitalise Tax & Customs Interfaces	Integrate trade, tax, and customs data flows	Reduce administrative burdens and enhance market accessibility for businesses and consumers	Faster border clearance and reduced VAT fraud benefit cross-border consumers; helps SMEs offer goods/services more easily	EU Customs Data Hub, Single Window for Customs, VAT in the Digital Age (ViDA), vLEI for trader authentication, eFTI/eCMR linkages
3. Adopt MLETR + eIDAS 2.0	Legally recognized digital negotiable instruments and identities	Tackle legal fragmentation and empower consumers in the digital environment	Strengthens legal certainty, supports secure e-signatures, and enhances consumer trust in digital services	MLETR framework, eIDAS 2.0 digital identity wallets, EU legal harmonization tools
4. Develop RegTech Supervision Tools	Real-time ESG and financial market oversight using AI	Enhance digital consumer protection and supervision of unfair practices	Improves monitoring of unethical practices and ensures compliance with consumer rights in real-time	AI/ML dashboards, Legal Sandboxes, ETDR-linked reporting systems
5. Digital Bonds & Convertibles	ESG-linked, automated finance products	Enable transparent green finance and informed consumer choices	Facilitates investment in sustainable products, indirectly benefiting ethically-conscious consumers	ETDR registry, smart contracts, DPP/ESG data integration, eIDAS 2.0 authentication
6. SME-friendly Compliance Frameworks	Reduce digital transition costs for SMEs	Support smaller market actors and reduce barriers to entry	Encourages SME participation in the Single Market, boosting consumer choice and competition	Tiered compliance thresholds, Green-Digital Trade Academy, Erasmus+ grants
7. Pilot CBAM-DPP Corridors	Link tariffs and trade finance to verifiable ESG data	Promote sustainability and empower consumers to make informed environmental choices	Enables traceability of carbon content, supports green consumption, and rewards sustainable suppliers	Digital Product Passports (DPPs), IoT carbon trackers, CBAM rebate schemes, CBAM certificate registry integration, EU Customs Single Window
8. Harmonise e-Document Laws	Eliminate cross-border legal inconsistencies in digital trade documents	Simplify cross-border transactions and improve consumer confidence	Consumers benefit from consistent rights and recognition of digital documents across borders	EU Transport Law updates (e.g. eFTI, eCMR), UN/UNECE protocols, Legal Harmonization Sandboxes
9. ESG-linked Finance Incentives	Reward sustainable supply chains with cheaper capital	Support the green transition and align finance with sustainability values	Drives more sustainable product offerings, aligning with growing consumer environmental concerns	InvestEU guarantees, FinTech platforms, CSRD-aligned reporting templates

Table 1. The DigitalTrade4.EU Roadmap offers a concrete, technically mature, and policy-aligned foundation to deliver the priorities outlined in the Consumer Agenda 2025–2030. By embedding these solutions into EU consumer policy, the Commission can realise a truly fair, green, and digitally empowered Single Market.

The DigitalTrade4.EU Roadmap (2025) is a targeted response to many of the systemic challenges identified by the European Commission in its preparatory work for the Consumer Agenda 2025–2030. These challenges—ranging from administrative complexity and fragmented legal frameworks to inadequate digital consumer protections and sustainability gaps—require not only policy adjustments but the deployment of technical solutions and interoperable infrastructure.

Our roadmap proposes a series of interlinked, scalable initiatives that complement and operationalise the Commission’s consumer priorities. These initiatives are specifically designed to strengthen consumer protection, foster legal certainty in digital environments, reduce market barriers for SMEs, and promote sustainable consumption. This section details how our approach aligns with the seven core problem areas identified by the Commission.

4.1 Enabling a Transparent and Secure Digital Environment

The Commission highlights legal uncertainty and a lack of enforcement tools in the digital marketplace—particularly against unfair practices such as dark patterns, misleading influencer marketing, and addictive digital design. DigitalTrade4.EU responds to this with:

- **Adoption of UNCITRAL Model Law on Electronic Transferable Records (MLETR)⁴ and eIDAS 2.0⁵:** These frameworks establish legal equivalence for electronic transferable records and digital identities across borders. They provide the foundation for secure, authenticated digital transactions, enhancing trust for consumers engaging in e-commerce, financial services, and cross-border purchases.
- **RegTech Supervision Tools:** Real-time AI-powered dashboards and legal sandboxes support authorities in detecting unethical commercial behaviour before harm is widespread, especially on digital platforms. These tools empower regulators to respond proactively to new digital risks.

For example, eIDAS 2.0’s digital identity wallets enable consumers to verify the authenticity of online sellers, reducing fraud risks, while MLETR ensures that electronic bills of lading and invoices are legally recognized across borders, preventing disputes. These tools directly support the

⁴ UNCITRAL. Model Law on Electronic Transferable Records
https://uncitral.un.org/en/texts/ecommerce/modellaw/electronic_transferable_records

⁵ European Commission. Discover eIDAS
<https://digital-strategy.ec.europa.eu/en/policies/discover-eidas>

enforcement of existing consumer law, including the **CPC Regulation**, by improving authorities' ability to detect and prevent infringements in real time and across jurisdictions.

4.2 Reducing Administrative Burdens and Supporting SMEs

The Roadmap aligns with the Commission's goal to simplify the Single Market and reduce regulatory fragmentation. Our focus is particularly strong on helping **SMEs** overcome disproportionate compliance burdens, thereby expanding consumer choice and competitiveness.

- **SME-friendly Compliance Frameworks:** These include tiered obligations, cost-reduction mechanisms, and access to training via the *Green-Digital Trade Academy*.
- **Digitalised Tax and Customs Interfaces:** By linking trade, tax, and customs data through platforms like the EU Customs Data Hub and eFTI, we reduce paperwork and compliance costs while accelerating market entry for SMEs.

These efforts empower smaller market actors to serve consumers more effectively—delivering better service, lower costs, and greater innovation.

4.3 Empowering Sustainable Consumer Choices

Consumers today want to make sustainable choices, but frequently lack access to reliable, verifiable product data. The Commission's concern that environmental concerns are not always reflected in consumption behaviour is directly addressed by:

- **Digital Product Passports (DPPs):** These passports enable consumers to view a product's environmental footprint, origin, and end-of-life recyclability. By ensuring transparency and traceability, they support the Commission's sustainability goals.
- **CBAM-DPP Corridors & ESG-linked Finance:** These mechanisms create direct financial incentives for sustainable goods and supply chains. For consumers, this means lower prices for greener products and clearer signals about environmental performance.

The combined effect is a market that *rewards sustainability and empowers informed decisions*—a cornerstone of the Commission's vision for the green transition.

4.4 Harmonising Legal Frameworks Across Borders

Legal fragmentation remains a key barrier to a fully functional Single Market. Consumers face inconsistent recognition of digital documents and signatures, especially in cross-border transactions. To address this:

- **Harmonisation of e-Document Laws:** We propose EU-wide mutual recognition of transport, customs, and trade documents using MLETR principles and UNECE protocols.
- **EU Trade Document Registry (ETDR):** A centralised registry enhances transparency and verification of ESG and trade documents. For consumers, this fosters trust, legal certainty, and reduces fraud risks.

By reducing complexity and increasing legal clarity, consumers gain **confidence in cross-border digital commerce**—a precondition for a truly integrated market.

4.5 Inclusion and Accessibility for Vulnerable Groups

The Commission rightly identifies digital exclusion risks for elderly people, persons with disabilities, and other vulnerable consumers. DigitalTrade4.EU ensures inclusiveness through:

- **Digital ID wallets (eIDAS 2.0) with accessibility standards**
- **Simplified authentication (LEI / vLEI)**
- **Training via public-private programmes under Erasmus+**

Our roadmap promotes *universal design principles* and capacity-building that allow every citizen to benefit equally from the digital Single Market.

5. Policy Recommendations

To fully unlock the benefits of the Consumer Agenda 2025–2030, the European Commission should prioritise a consumer-centric digital Single Market that is technologically advanced, legally harmonised, and socially inclusive. The DigitalTrade4.EU consortium proposes the following recommendations to help translate the Commission’s vision into an actionable framework that delivers tangible results for consumers and businesses across Europe.

5.1 Mainstream Digital Trade Infrastructure into Consumer Policy

The Commission should explicitly integrate digital trade infrastructure into its upcoming action plan on consumers in the Single Market. Instruments such as the **EU Trade Document Registry (ETDR)** and harmonised frameworks under **MLETR and eIDAS 2.0** are not only enablers for trade and capital markets, but also essential components for **consumer trust, transaction security, and legal clarity**. Their implementation would eliminate fragmented cross-border documentation, enabling consumers to confidently engage in e-commerce, access financial services, and assert rights across jurisdictions.

Recommendation: Include legal digital document recognition (e.g., e-bills of lading, e-invoices) and digital identity tools (e.g., vLEI) as part of the consumer protection infrastructure in the Single Market action plan.

5.2 Reduce Complexity and Compliance Burdens for SMEs

A thriving SME ecosystem is critical for consumer choice and market diversity. However, many SMEs face disproportionately high compliance costs, which limit their ability to offer goods and services across borders. DigitalTrade4.EU recommends the implementation of **tiered compliance thresholds, standardised ESG templates, and access to digital upskilling tools** (e.g., through a Green-Digital Trade Academy).

Recommendation: Embed SME support measures (e.g., simplified digital compliance regimes and Erasmus+ for trade digitalisation) into the Consumer Agenda to ensure that small businesses can benefit from digital transition and contribute to consumer access and innovation.

5.3 Enhance Enforcement of Consumer Protection through RegTech

Given the rise of algorithmic marketing, cross-border platforms, and real-time consumer interactions, enforcement bodies need modern tools to detect and respond to violations. The Consumer Protection Cooperation (CPC) Regulation already provides the legal basis for coordinated EU-wide action against rogue traders. However, it requires technological reinforcement to monitor digital environments at scale. The deployment of **RegTech supervision tools**, such as **AI-powered dashboards**, can support national authorities in identifying dark patterns, abusive pricing models, and non-compliant ESG claims.

Recommendation: Establish pilot programmes for real-time regulatory technologies (RegTech) under the Consumer Protection Cooperation (CPC) framework to strengthen enforcement and prevent harm before it reaches scale.

5.4 Foster Informed and Sustainable Consumer Behaviour

Consumers are increasingly willing to make environmentally responsible choices but lack reliable information. The rollout of **Digital Product Passports (DPPs)** and ESG-linked financial incentives can help bridge this gap. DPPs offer transparency about product origin, carbon footprint, and end-of-life options, while financial mechanisms such as **CBAM-DPP corridors** can reduce costs for sustainable goods.

Recommendation: Integrate DPPs into the Consumer Agenda as a tool for **product transparency**, and coordinate with DG GROW and DG TAXUD to link DPP use to **green incentives**, ensuring consumers are rewarded—not penalised—for making sustainable choices.

5.5 Promote Legal Harmonisation to Build Cross-border Consumer Trust

Despite a shared market, consumers still encounter legal uncertainty when dealing with foreign digital service providers. This undermines trust and creates friction. Harmonising recognition of **digital contracts, e-signatures, and identity credentials** can dramatically simplify transactions and increase confidence in cross-border digital purchases.

This approach complements ongoing updates to EU consumer law, such as the **Digital Services Act (DSA)** and **Digital Markets Act (DMA)**, which aim to regulate digital platform behaviour and ensure

a fairer digital environment for consumers. Interoperability of digital identity and documentation frameworks will strengthen consumers' ability to assert their rights consistently across the Single Market.

Recommendation: Coordinate updates to EU transport, customs, and consumer law to ensure **mutual recognition of digital documents**, as envisioned under MLETR and eIDAS 2.0, while promoting their use through awareness campaigns and co-funded national pilots.

5.6 Support Vulnerable Consumers and Inclusive Access

Digital consumer tools must be inclusive by design. The Commission should ensure that older persons, persons with disabilities, and people with limited digital skills can benefit from the same rights and protections as any other EU citizen. The use of **accessible digital identity wallets**, **multilingual interfaces**, and **low-tech access points** must be standardised.

Recommendation: Incorporate **inclusive design standards** into all digital consumer services, and fund **capacity-building programmes** for vulnerable groups as part of the Consumer Agenda's implementation phase.

5.7 Connect Consumer Policy to the EU's Global Digital Strategy

Finally, the EU must align its internal consumer protection goals with its external trade and digital diplomacy agenda. The Commission should promote European consumer data standards, sustainability rules, and legal norms in international forums and bilateral agreements (e.g. DEPA, EU-Singapore DTA). This could involve integrating EU digital standards into trade agreements (e.g., requiring interoperability with eIDAS 2.0 for cross-border payments) and funding capacity-building programs in partner countries to adopt EU-aligned frameworks for Digital Product Passports (DPPs).

Recommendation: Leverage the Consumer Agenda as a platform to **export EU consumer standards globally**, ensuring coherence with the Digital Services Act, Digital Markets Act, and EU trade policy priorities.

5.8 Measuring Tangible Consumer Benefits in a Digital-First Single Market

To ensure that digital transformation efforts translate into real and measurable gains for EU consumers, it is essential to define clear indicators of success. The effectiveness of the Consumer Agenda 2025–2030 must be judged not only by policy alignment or infrastructure deployment, but by the **direct impact on consumers' daily lives**—especially in terms of affordability, fairness, accessibility, and trust.

DigitalTrade4.EU proposes the following key consumer-centric indicators to accompany the rollout of digital infrastructure and regulatory tools:

1. **Reduction in Consumer Prices and Transaction Costs.** Digital automation of customs, tax reporting, and regulatory compliance (e.g., via the EU Customs Data Hub, eFTI, and DPPs) can reduce overheads for businesses—particularly SMEs. These cost savings can be passed on to consumers in the form of lower prices, especially for cross-border goods and services.
2. **Faster Dispute Resolution Times.** The integration of real-time RegTech tools and interoperable documentation systems (e.g., MLETR and ETDR) enables quicker verification of transactions and legal documents, reducing the time needed to resolve complaints and disputes across borders.
3. **Improved Access to Reliable Product Information.** Digital Product Passports (DPPs) offer consumers structured, easy-to-access environmental and safety data, helping them make informed decisions. This increases confidence in product claims and reduces the risk of greenwashing or misleading marketing.
4. **Increased Use of Secure Digital Identity for Safer Online Transactions.** Adoption of eIDAS 2.0 digital wallets and vLEIs empowers consumers to verify merchant identity, reducing fraud and enabling secure e-signatures for purchases and contracts.
5. **Greater Inclusion of Vulnerable Consumers.** The rollout of inclusive digital tools—such as simplified interfaces, multilingual support, and low-tech access options—can be tracked by usage rates among elderly citizens, persons with disabilities, and low-digital-literacy groups.
6. **Expanded Consumer Choice Through SME Participation.** Measurable increases in the number of SMEs participating in cross-border e-commerce and offering sustainable products are strong indicators of market diversity and improved consumer options.

7. **Transparency and Timeliness of Market Surveillance.** AI-based real-time supervision tools enable authorities to flag and act on unsafe or non-compliant products more quickly. This results in fewer harmful goods reaching consumers and faster enforcement of their rights.

Recommendation: The Commission should integrate a set of quantifiable consumer benefit indicators into the implementation and monitoring phases of the Consumer Agenda 2025–2030. These metrics should be tracked at both EU and Member State levels, and tied to performance-based funding and stakeholder accountability.

By embedding consumer outcome metrics into policy delivery, the EU can ensure that digitalisation remains not only a tool for innovation but a primary driver of **consumer empowerment, safety, and fairness** across the Single Market.

Many of these metrics—especially on transparency, sustainability, and product traceability—can be directly supported by the practical deployment of Digital Product Passports, as demonstrated in the following section.

6. Digital Product Passport Use Cases

Digital Product Passports (DPPs) are emerging as a cornerstone for the European Union's twin transition towards a green and digital economy. The following use cases, derived from various projects and initiatives, and specifically from the **DPP4EU Conference ABSTRACT BOOKLET**⁶, demonstrate how DPPs are being implemented across diverse sectors to enhance transparency, traceability, sustainability, and consumer trust, directly supporting the objectives of the EU Consumer Agenda 2025-2030.

6.1. Enhancing Circularity and Sustainability Across Industries

DPPs are instrumental in fostering a circular economy by providing comprehensive, verifiable data throughout a product's lifecycle, enabling informed decisions for reuse, repair, remanufacturing, and recycling.

1. **Low-Carbon, Circular Construction (RECONSTRUCT Project).** The RECONSTRUCT project develops a DPP tailored for the construction industry. This DPP tracks material composition, environmental data (e.g., carbon footprint), and information on repairability and recyclability of construction products like alkali-activated cement and precast concrete panels.

Contribution to Consumer Agenda: Empowers consumers and stakeholders with transparent information on the environmental impact and circularity potential of construction materials, supporting informed choices for sustainable building and reducing waste.

2. **Battery Lifecycle Management (BASE, eWAVE, BatWoMan Projects).** Projects like BASE, eWAVE, and BatWoMan are developing Digital Battery Passports (DBPs) to enhance sustainability, traceability, and circularity within the battery industry. These DBPs ensure end-to-end data exchange from raw material sourcing to end-of-life management, incorporating performance indicators, circularity metrics (Reduce, Repair, Reuse, Recycle), and ESG (Environmental, Social, Governance) indicators.

Contribution to Consumer Agenda: Provides consumers with transparent information on

⁶ DPP4EU Conference. Abstract Booklet (July 2025)
<https://digipassforum.eu/wp-content/uploads/2025/06/DPP4EU-1.pdf>

battery provenance, performance, and end-of-life options, fostering trust in sustainable products and supporting the transition to a greener energy sector. It also facilitates "second life" applications for batteries, promoting resource efficiency.

3. **Textile and Clothing Circularity (CISUTAC Project).** The CISUTAC project aims to increase circularity and sustainability in textiles by providing standardized data to software platforms for customized product information retrieval. This includes data enabling sorting, reuse, repair, and recycling of textile products.

Contribution to Consumer Agenda: Empowers consumers to make more sustainable choices by providing clear information on the circularity potential of textile products, encouraging reuse and repair, and reducing environmental impact.

6.2. Ensuring Data Integrity, Interoperability, and Compliance

DPPs leverage advanced technologies and standardized frameworks to ensure data authenticity, secure exchange, and compliance with evolving regulations, building trust across the value chain.

1. **Verifiable Credentials and EU Business Wallet (National Project IDunion & EWC).** This initiative presents a DPP system powered by Verifiable Credentials (VCs), designed for interoperability, scalability, and regulatory alignment. It supports seamless, cryptographically verifiable data exchange across diverse stakeholders and product types, aligning with eIDAS 2.0 for secure authentication.

Contribution to Consumer Agenda: Strengthens consumer confidence in digital services and products by ensuring the authenticity and integrity of product data, promoting secure e-signatures and enhancing trust in the digital environment.

2. **Harmonizing Standards (CLC-SDPP Project).** The CLC-SDPP project supports the timely delivery of harmonized standards for DPPs, covering IT architectures and information content (e.g., raw materials, product carbon footprint).

Contribution to Consumer Agenda: Ensures consistency and reliability of DPP data across different product categories, simplifying consumer understanding and comparison of sustainable products.

3. **Test Environment for Battery Passports (BatteryPass-Ready Project).** This project develops a test environment for Digital Battery Passports to allow distributors and service providers to check their individual solutions for conformity with standards during the development phase.

Contribution to Consumer Agenda: Ensures that battery passports are reliable and compliant with EU regulations, thereby providing accurate and trustworthy information to consumers about battery characteristics and sustainability.

4. **Cross-Pilot Interoperability (CIRPASS-2 Project).** CIRPASS-2 supports 13 pilot deployments of DPP-enabled circular B2B use cases across textiles, electronics, tires, and construction, aiming to demonstrate DPP interoperability between different pilots.

Contribution to Consumer Agenda: Facilitates a seamless flow of product information across diverse sectors, ultimately benefiting consumers by ensuring consistent access to reliable sustainability data for a wide range of products.

5. **Digital Quality Infrastructure (QI-Digital Project).** This initiative aims to digitalize the entire Quality Infrastructure (QI) process chain, transforming metrology, standardization, accreditation, conformity assessment, and market surveillance into a fully digital, interoperable ecosystem. It provides machine-readable data formats for certificates and verifiable digital credentials for QI actors.

Contribution to Consumer Agenda: Enhances consumer trust by ensuring the quality, safety, and sustainability of products through a transparent and verifiable digital infrastructure, making compliance information readily accessible.

6.3. Empowering Informed Decisions and Market Transformation

DPPs provide granular information that empowers consumers and businesses to make more sustainable choices, driving market transformation towards greener products and practices.

1. **SME Preparedness (Regional Knowledge Hub in Halland).** This feasibility study explores establishing a regional knowledge hub to support SMEs in preparing for and leveraging DPPs to enhance competitiveness and sustainability.

Contribution to Consumer Agenda: By enabling SMEs to adopt DPPs, it increases the availability of sustainable products in the market, boosting consumer choice and competition.

2. **High Granularity Information (THESEUS Project).** The THESEUS project develops dynamically updated DPP schemes to provide high granularity information to industries, territories, and regions. This includes material flow analysis, improved logistics, matchmaking for synergies, and feeding critical data into LCA, prediction, and optimization tools.

Contribution to Consumer Agenda: Provides consumers with detailed insights into product lifecycles and environmental impacts, enabling more informed purchasing decisions and supporting regional circular economy initiatives.

3. **Chemical DPP for Sustainable Circular Economy (Chem-X Project).** The Chem-X project suggests DPPs to manage material flows and ensure information interoperability in the chemical industry, vital for the green transition and recycling processes.

Contribution to Consumer Agenda: Supports the development of more sustainable products by ensuring traceability and transparency of chemical components, fostering a circular economy and reducing environmental impact.

6.4. Addressing Emerging Technologies and Future Developments

DPPs are evolving with emerging technologies like AI, IoT, and blockchain to offer real-time tracking, enhanced security, and new functionalities.

1. **AI for Circular Value Chains (ENCIRCLE Project).** ENCIRCLE leverages AI-driven innovation and blockchain-enabled DPPs to securely manage product traceability, lifecycle data, and sustainability metrics in industries like steel and home appliances. It includes an AI-supported DPP wallet mobile app for consumers.

Contribution to Consumer Agenda: Empowers consumers with personalized offers for product recycling, resale, or refurbishment, and provides real-time sustainability insights through AR, enhancing engagement in the circular economy.

2. **DPPs for Manufacturing Machines (AIDEAS Project).** AIDEAS develops DPPs for manufacturing machines, integrating real-time sensor input, maintenance records, and performance data to enable predictive maintenance and traceability. It explores integrating Large Language Models (LLMs) and Retrieval-Augmented Generation (RAG) systems.

Contribution to Consumer Agenda: Indirectly benefits consumers through more efficient and sustainable manufacturing processes, leading to higher quality and more durable products.

3. **Decentralised Traceability Platform (DigInTraCE Project).** DigInTraCE develops a novel transparent and interoperable decentralised traceability platform using dynamically updated DPPs, integrating RFID and smart sensors for real-time tracking.

Contribution to Consumer Agenda: Enhances transparency and traceability of products

throughout their lifecycle, providing consumers with verifiable information on product origin, composition, and environmental impact.

4. **Digital Bio-product Passport (ARGONAUT Project).** ARGONAUT is developing a blockchain-enabled Digital Bio-product Passport (DBP) to accurately assess the environmental impacts of bio-based products throughout their value chains.

Contribution to Consumer Agenda: Provides consumers with verifiable information on the environmental footprint of bio-based products, enabling them to make more sustainable and informed choices.

6.5. Fostering Collaboration and Ecosystem Development

The success of DPPs relies on robust collaboration among stakeholders and the development of cohesive data ecosystems. Without coordinated governance, DPPs risk becoming siloed systems with inconsistent data formats. DigitalTrade4.EU recommends establishing a centralized EU DPP governance body to oversee standardization and resolve interoperability disputes

1. **Coordinating the European DPP Ecosystem (DigiPass CSA).** DigiPass CSA acts as a strategic enabler for aligning and accelerating DPP implementation across European sectors, fostering collaboration and harmonizing frameworks for interoperability, standardization, and data governance.

Contribution to Consumer Agenda: Ensures a consistent and trustworthy DPP ecosystem across Europe, simplifying consumer access to reliable product information and promoting a level playing field for businesses.

2. **Global Framework for Sustainability Data (DPIS Global Framework).** This framework aims to harmonize product sustainability data systems globally, promoting global consensus on data categories, high-level principles on data governance, and technology architecture.

Contribution to Consumer Agenda: Reduces trade barriers and increases inclusivity, benefiting consumers by providing access to a wider range of sustainable products with harmonized and transparent data.

3. **Creating, Exchanging, and Using DPPs in Industrial & Manufacturing Data Ecosystems (FACTORY-X).** This project aims to develop technologies to enable data ecosystems, with DPP exchange and management mechanisms. It integrates manufacturing process data like CO2 emissions, water usage, and waste generation into the DPP.

Contribution to Consumer Agenda: Drives sustainability in industrial production, leading to greener products and processes that ultimately benefit consumers and the environment.

4. **DPPs and Circular Manufacturing Data Spaces (Circular TwAIIn).** This project demonstrates that DPPs represent an evolution in B2G and B2C directions of existing B2B Circular Data Spaces, integrating Data Spaces and AI-based Digital Twins for a more circular and environmentally responsible EU Manufacturing Industry.

Contribution to Consumer Agenda: Promotes a more circular and sustainable manufacturing industry, providing consumers with products that have a lower environmental impact and are designed for longevity and recyclability.

5. **Advancing Sustainability through DPPs and Data Spaces (SENECA Project).** SENECA focuses on critical material recovery, product manufacturing with Secondary Raw Materials (SRW), and traceability through a DPP deployed on a Data Space.

Contribution to Consumer Agenda: Supports the creation of products with higher recycled content and better traceability, enabling consumers to make more environmentally responsible choices.

6. **Product Access and Secure Sharing by Automated Trust (PASSAT Project):** PASSAT explores usage control for DPP information, aiming to address concerns about data abuse beyond what is legally mandated, ensuring that data is used for intended purposes like recycling.

Contribution to Consumer Agenda: Builds trust in the DPP system by ensuring secure and controlled access to product information, encouraging more comprehensive data sharing that benefits circular economy initiatives.

These use cases collectively illustrate the multifaceted ways in which Digital Product Passports are being developed and deployed to support the core objectives of the EU Consumer Agenda 2025-2030, fostering a more transparent, sustainable, and digitally empowered Single Market for all.

7. Conclusion and Next Steps

The European Commission's "Consumer Agenda 2025-2030" presents a critical opportunity to forge a truly digital-first, fair, and sustainable Single Market. As DigitalTrade4.EU, we firmly believe that the transformative power of digitalization is not merely an enabler but the very foundation upon which a more resilient, competitive, and consumer-centric European economy can be built. Our comprehensive feedback, particularly the "Digital Trade & Capital Markets Integration Roadmap," offers concrete, actionable strategies that directly align with and operationalize the Commission's ambitious objectives.

We have demonstrated how initiatives such as the **EU Trade Document Registry (ETDR)**, the widespread adoption of **MLETR and eIDAS 2.0**, the development of **RegTech supervision tools**, and the implementation of **Digital Product Passports (DPPs)** are not isolated technical advancements. Instead, they are interconnected pillars designed to:

- **Enhance Transparency and Security:** By establishing legal certainty for digital transactions and empowering real-time oversight of market practices.
- **Reduce Administrative Burdens for SMEs:** Fostering a more inclusive market that expands consumer choice and competition.
- **Empower Sustainable Consumer Choices:** Providing verifiable data and financial incentives for environmentally responsible consumption.
- **Harmonize Legal Frameworks:** Building cross-border trust and simplifying digital commerce across the Union.
- **Ensure Inclusion and Accessibility:** Guaranteeing that all citizens, including vulnerable groups, can equally benefit from the digital Single Market.

The synergy between the Consumer Agenda and our roadmap is clear: a digital-first approach is essential for robust consumer protection, market efficiency, and global competitiveness. The challenges identified by the Commission—from cross-border obstacles and e-commerce risks to the impact of new technologies and administrative complexities—find their most effective solutions in a coordinated digital transformation.

Next Steps:

To translate this shared vision into tangible results, DigitalTrade4.EU urges the European Commission to consider the following next steps:

1. **Mainstream Digital Trade Infrastructure:** Explicitly integrate instruments like the ETDR, MLETR, and eIDAS 2.0 into the Consumer Agenda's action plan, recognizing them as fundamental for consumer trust and legal clarity.
2. **Prioritize SME Digitalization Support:** Embed tiered compliance thresholds, standardized ESG templates, and access to digital upskilling (e.g., through a Green-Digital Trade Academy) to ensure SMEs can thrive in the digital Single Market.
3. **Accelerate RegTech Deployment:** Establish pilot programs for AI-powered RegTech tools under the Consumer Protection Cooperation (CPC) framework to strengthen enforcement and proactively address digital unfair practices.
4. **Integrate DPPs with Green Incentives:** Fully leverage Digital Product Passports as a tool for product transparency, coordinating with relevant DGs to link their use to green incentives for consumers and businesses.
5. **Drive Legal Harmonization:** Continue efforts to update EU transport, customs, and consumer law to ensure mutual recognition of digital documents and identities across all member states.
6. **Champion Inclusive Digital Design:** Incorporate inclusive design standards into all digital consumer services and fund capacity-building programs for vulnerable groups.
7. **Export EU Digital Standards Globally:** Leverage the Consumer Agenda to promote European consumer data standards, sustainability rules, and legal norms in international forums and bilateral agreements.

These steps could be initiated as part of the Consumer Agenda's first implementation phase (2025–2027), with measurable outputs reported annually under the Single Market Scoreboard and CPC network evaluations.

By embracing these **recommendations**, the **European Commission** can solidify the **EU's position** as a **global leader** in **digital trade**, ensuring a **Single Market** that is not only **fair** and **green** but also **dynamically responsive** to the evolving needs of its **consumers** and **businesses** in the **digital age**. DigitalTrade4.EU stands ready to **collaborate further** in the implementation of these **crucial initiatives**.