ECN

WHITEPAPER

EON COMPLIANCE SOLUTIONS: DIGITAL PRODUCT PASSPORTS



Contents

What you need to know	(4)
How EON can help	(7)
Step 1: Collect required data	(8)
Step 2: Validate data	(12)
Step 3: Share data with consumers	(13)

Global legislative requirements are mandating a new, deeper level of product data transparency across the retail industry. The EU's Digital Product Passport (DPP) legislation will change the way the industry collects and shares product data along the value chain, and is set to have a widesweeping impact on commerce as a whole. EON's technology is at the forefront of DPP legislative requirements, with robust tools designed to help brands prepare for DPP requirements and begin testing with confidence.

What you need to know

What are Digital Product Passports?

Digital Product Passports (DPPs) create a digital twin of a physical product to digitally record, store and share item-specific information along the product lifecycle. The goal of DPPs is to deliver increased transparency and traceability to all stakeholders in the value chain, while supporting aftersale services such as repair, resale and recycling.

What is the EU's Digital Product Passport Legislation?

The EU Strategy for Sustainable and Circular Textiles, released in March 2022, calls for DPPs to be mandatory on textiles sold in Europe by 2030. This strategy calls upon the Ecodesign for Sustainable Products Regulation (ESPR) to define general DPP requirements such as data requirements for all sectors. The ESPR is expected to be adopted in 2025, when sector-specific DPP requirements will start to be written as Delegated Acts.



Requirements:

~	A data carrier, connected to a unique product identifier, shall be physically present on or with a product
~	All information included in the DPP shall be based on open standards, developed with an interoperable format and shall be machine-readable, structured and searchable
~	The information included in the DPP shall refer to the product batch, model or item

Who is impacted and how?

The ESPR impacts all companies based in the EU or selling products in the EU. Penalties are yet to be defined.

Key dates for Textile and Footwear Products:

Effective Date	Event
March 2022	EU Strategy and ESPR draft released
End 2023	Draft data requirements expected
Early 2025	Delegated Act expected for Textiles and Footwear
Late 2026/Early 2027	DPP implementation requirements expected for Textiles and Footwear

Benefits of Digital Product Passports

DPPs are a key enabler for scaling the circular economy. By providing all value chain stakeholders with access to transparent, interoperable product data, DPPs:

- Empower businesses and consumers to make more sustainable choices
- Power new business models and services such as resale, repair and recycling
- Provide a new touchpoint for brands to re-engage customers and access post-sale relationships, revenue and insights

S	Product IDs / Women's Ow	arsized Crew-Neck Sweatshirt		Д илленисы
•	Women's	CloudRun Si	neakers	
© *	EON ID 4568			
¢ ₽	Overview			
	GTIN 8413351289543	EON ID 2398367163	SKU NMT54_S6H3F	
	BRAND / LABEL	RELEASE DATE 11.10.2022	COLOR NAME Space Grey	NEES 1
	SIZE SYSTEM	SEASON Spring 2022	sizes 34-44	a contraction of the second se
	ITEMS 10,245	MSRP \$125.00	CUSTOMER EXPERIENCE	
Ø			y Items	

EON Compliance Solutions

Create Digital Product Passports with a technology partner on the frontline

EON is a cloud-based software platform that provides a centralized, secure repository for all product and material data, enabling it to be efficiently shared with stakeholders across the value chain to support all product capabilities.

- As a leader in Digital ID technology, EON has almost a decade of experience in real-world DPP implementation of global retail brands
- Expert stakeholder to CIRPASS (<u>cirpassproject.eu</u>), the EU consortium laying the groundwork for DPP requirements
- Granular and flexible product data management infrastructure, designed to meet all DPP requirements

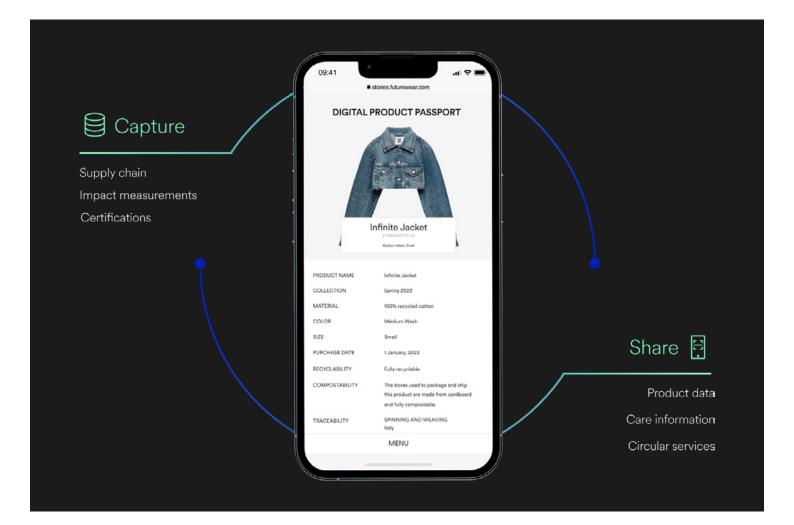
EON Compliance Solutions offers brands robust tools to solve the sustainable product data gap and create traceable, transparent and compliant products.

CAPTURE	VALIDATE	SHARE
Collect and unify product data from your supply chains and sustainability partners with pre- built partner connections and API integrations.	Validate product data against existing and expected DPP data requirements and receive real- time alerts for data gaps.	Create engaging, dynamic digital experiences that provide customers and other stakeholders with access to transparent product data.

STEP 1: CAPTURE REQUIRED DATA

While the exact data fields for DPP have not been defined and will require additional studies and impact assessments, below you can find potential information requirements for Textiles and Footwear that have been prioritized for ESPR from the fo-llowing sources:

- ESPR Proposal and Annexes
- ESPR Preliminary Study on New Product Priorities
- Expert input, such as interviews with policy experts and <u>CIRPASS</u>, for which EON is an expert stakeholder

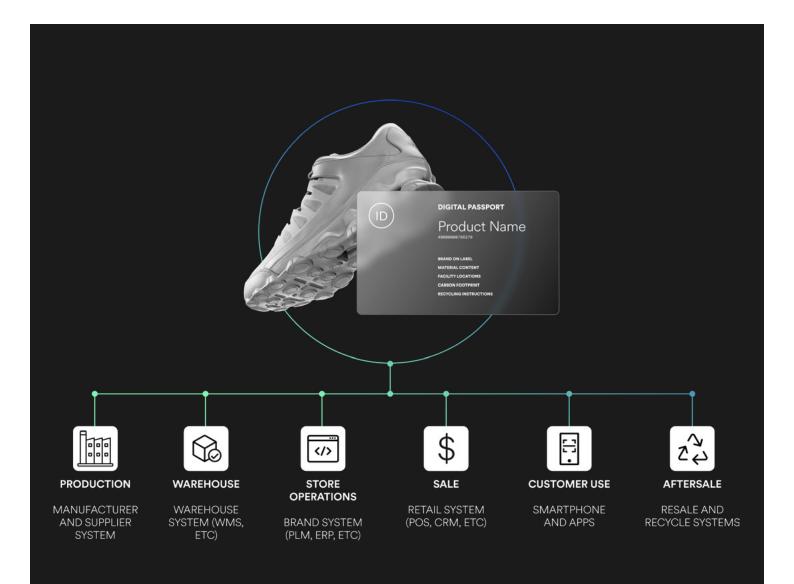


A draft of ESPR data requirements is expected to be published at the end of 2023.

Information Category	Expected Data Request	Source
Product Identification	Unique product identifier at the level indicated in the applicable delegated act	ESPR, Annex III (b)
	Global Trade Identification Number as provided for in standard ISO/IEC 15459-6 or equivalent of products or their parts	ESPR, Annex III (c)
	Relevant commodity codes, such as a TARIC code as defined in Council Regulation (EEC) No 2658/871	ESPR, Annex III (d)
	Compliance documentation and information required under this Regulation or other Union law applicable to the product, such as the declaration of conformity, technical documentation or conformity certificates	ESPR, Annex III (e)
Company Information	Information related to the manufacturer, such as its unique operator identifier and the information referred to in Article 21(7) of the proposed ESPR	ESPR, Annex III (g)
	Unique operator identifiers other than that of the manufacturer	ESPR, Annex III (h)
	Unique facility identifiers; with standardized and > 1 location identifier aside outside of ISO/IEC 15459- 6, e.g. Open supply Hub ID, GTS ID, etc. (provided by facilities)	ESPR, Annex III (i)
	Importers shall indicate on the product their name, registered trade name or registered trade mark and the postal address	ESPR, art. 23 (3), Annex III (j)
	Information related to the importer, name, registered trade name or registered trade mark and the postal address, EORI number	ESPR, Annex III (j)
	Name, contact details of the economic operator	ESPR, Annex III (k)
	Unique operator identifier code of the economic operator established in the Union	ESPR, Annex III (k)
Material and	Fiber Composition	EU No 1007/2011
Composition nformation	Color brightness, group, description	Expert input
	Fabric construction type (woven, knit, etc.)	Expert input
	Individual material declarations	Expert input
	User manuals (to safely assemble, install, operate, store, maintain, repair and dispose)	ESPR, Art. 7, 21, 30, annex III (f)
	Waste type	Expert Input

	Substance of concern name, location within the product, concentration at the level of the product, main components or spare parts	ESPR Art.7, 2 (a)
	Compliance documentation (decl. of conf., technical doc. Individual material declaration, etc.)	ESPR, annex III, (e)
	Percentage of recycled material content in product and packaging	ESPR, Art 7.2 (b)(i) JRC report on ESPR Product Priorities
Product Service	User manuals (to safely care for, disassembly, recycle, take-back, dispose of, etc.)	ESPR, Art. 7, 21, 30, annex III (f) JRC report on ESPR Product Priorities Expert Input
	Number of materials and components used	JRC report on ESPR Product Priorities, Textiles and Footwear
	Modularity, transformability, detachable/adjustable elements	JRC report on ESPR Product Priorities, Textiles and Footwear
	Possible lifetime of the textile or footwear	JRC report on ESPR Product Priorities, Textiles and Footwear
	How to manage the textile or footwear at the end of its lifetime	JRC report on ESPR Product Priorities, Textiles and Footwear
Design and Performance Requirements	Water consumption for the production of cotton in the product	ESPR, Art 7.2 (b)(i) JRC report on ESPR Product Priorities
	Water consumption for the production of 1 kg of product or item	ESPR, Art 7.2 (b)(i) JRC report on ESPR Product Priorities
	Chemical consumption for the production of 1 kg or item	ESPR, Art 7.2 (b)(i) JRC report on ESPR Product Priorities
	Fertilizers, pesticides and insecticides used for the production of cotton in the product	ESPR, Art 7.2 (b)(i) JRC report on ESPR Product Priorities
	GHG emissions emitted for the production of 1 kg or item	ESPR, Art 7.2 (b)(i) JRC report on ESPR Product Priorities
	Guarantees to remanufactured clothing items	ESPR, Art 7.2 (b)(i) JRC report on ESPR Product Priorities
	Energy consumed for the production of 1 kg or item	ESPR, Art 7.2 (b)(i) JRC report on ESPR Product Priorities

	Durability of the product (during under normal conditions of use)	ESPR, Art 7.2 (b)(i) JRC report on ESPR Product Priorities
	Reliability (eg. Resistance to shrinkage/weathering)	ESPR, Art 7.2 (b)(i) JRC report on ESPR Product Priorities
	Components and materials coding standards for the identification of components and materials for reuse or recycling	ESPR, Art 7.2 (b)(i) JRC report on ESPR Product Priorities
	Possible release of non-biodegradeable microplastics	JRC report on ESPR Product Priorities, Textiles and Footwear
Label	Certified labels (EU Ecolabel)	ESPR, Art. 21, Annex III



STEP 2: VALIDATE THE COMPLIANCE STATE OF YOUR DATA

Once in the platform, data can be formatted, structured, validated and aligned to industry standards to enable interoperability across the value chain. EON Compliance Solutions gives you an accurate picture of your compliance state with actionable, real-time reporting.



CHANGE NOTIFICATIONS:

Get notified if DPP data requirements change, and what data must be updated in response.



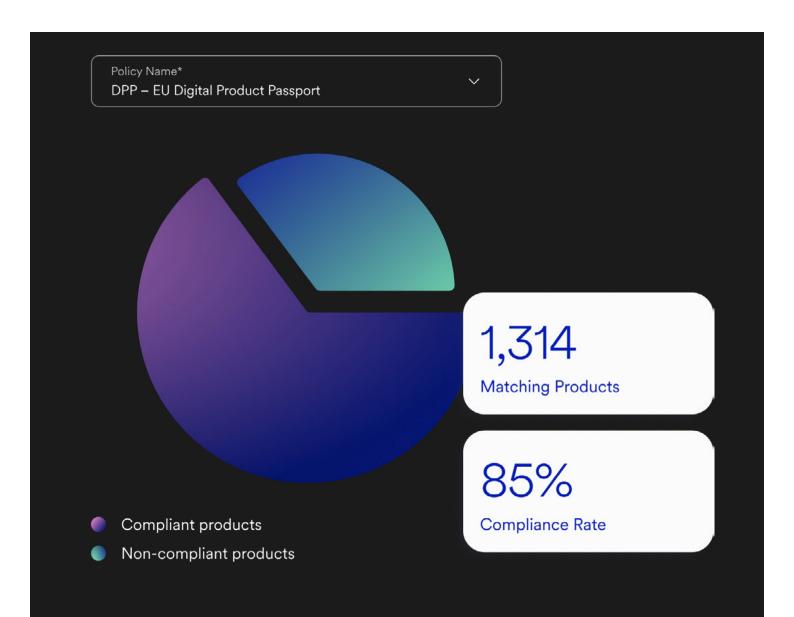
REAL-TIME REPORTING:

Real-time reporting means you can identify and resolve issues quickly and efficiently.



ALERTS:

Receive alerts when your data has issues and understand the steps needed to resolve.



STEP 3: BROADCAST REQUIRED DATA TO CUSTOMERS AND CIRCULAR PARTNERS

Through the DPP, brands are able to provide all value chain stakeholders with access to transparent and interoperable product data, empowering business and consumers to make more sustainable choices. DPPs also enable brands to scale new business models and record post-sale events, such as repair, resale or recycling, to understand the ultimate fate of your products and effectiveness of your programs.

With the ability to instantly identify products and materials and share granular batch-, model- or item-level data across the value chain, EON DPPs bring operational efficiency to the circular value chain along with intelligence and accountability.

In addition to the information that will be included in the DPP, the forthcoming Delegated Acts described in Article 8 and Annex VI of the proposed ESPR will specify the following:

- The layout in which the data carrier shall be presented and its positioning
- Whether the product passport is to correspond to the batch, model or item level
- The manner in which the product passport shall be made accessible to customers before they are bound by a sales contract, including in case of distance selling
- The actors that shall have access to information in the product passport and to what information they shall have access, including customers, end-users, manufacturers, importers and distributors, dealers, repairers, remanufacturers, recyclers, competent national authorities, public interest organizations and the Commission, or any organization acting on their behalf



Learn more about EON Compliance Solutions

Book a demo with our team

www.eon.xyz