CEN

WORKSHOP

AGREEMENT

CWA 18291

October 2025

English version

TRICK - Guidelines on data collection from Textile supply chains for the Digital Product Passport

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties, the constitution of which is indicated in the foreword of this Workshop Agreement.

The formal process followed by the Workshop in the development of this Workshop Agreement has been endorsed by the National Members of CEN but neither the National Members of CEN nor the CEN-CENELEC Management Centre can be held accountable for the technical content of this CEN Workshop Agreement or possible conflicts with standards or legislation.

This CEN Workshop Agreement can in no way be held as being an official standard developed by CEN and its Members.

This CEN Workshop Agreement is publicly available as a reference document from the CEN Members National Standard Bodies.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents

Page

Foreword

This CEN Workshop Agreement (CWA 18291:2025) has been developed in accordance with the CEN-CENELEC Guide 29 "CEN/CENELEC Workshop Agreements – A rapid way to standardization" and with the relevant provisions of CEN/CENELEC Internal Regulations - Part 2. It was approved by the CEN Workshop "TRICK - Product data traceability from cradle to cradle by blockchains interoperability and sustainability service marketplace", the secretariat of which is held by UNI Ente Italiano di Normazione consisting of representatives of interested parties on 2025-09-26, the constitution of which was supported by CEN following the public call for participation made on 2024-10-30. However, this CEN Workshop Agreement does not necessarily include all relevant stakeholders.

The final text of this CEN Workshop Agreement was provided to CEN for publication on 2025-10-01.

The following organizations and individuals developed and approved this CEN Workshop Agreement:

— Gessica Ciaccio – ENEA, Chairperson

— Carla Fité Galan – Reverse Resources, Vice-Chairperson

— Piero De Sabbata – C Solutions – Main Contributor

— Fabio Rossi – UNI Ente Italiano di Normazione, Secretary

— Arianna Brutti – ENEA – Main Contributor

— Emma Enebog – RISE – CISUTAC – Main Contributor

— Catrine Marchall – RISE – CISUTAC – Main Contributor

— Traci Kinden – Stichting TEXroad – PESCO UP – Main Contributor

— Lor Albrighi – Smart Products Infrastructure Network

— Andrea Ausili – GS1 Italy

— Alessia Azzini – Temera

— Bridget Baker – NEN

— Raffaele Bini – 1Trueid

— Alessandro Canepa – Fratelli Piacenza

— Claudio Capuzzimati – SUPSI

— Emanuela Casalini – GS1 Italy

— Sara Casini – Manifattura Maiano

— Ana Carolina Chaves – INESC TEC

— Helen Colebourn – Bureau Veritas CPS

— Joao Correia – INESC TEC

— Thiago Costa – CITEVE

— Elizabeth Dakin – UK Fashion and Textile Association

— Quan Deng – BIBA - Bremer Institut für Produktion und Logistik

— Robby Dubus – Textil'IA

— Karin Eufinger – CENTEXBEL

— Thomas Fischer – DITF - Deutsche Institute für Textil- und Faserforschung Denkendorf

— Sabrina Frontini – ICEC Quality Certification Institute for the Leather Sector

— Gabriella Alberti Fusi – Centro Tessile Cotoniero

— Miriam Geelhoed – Modint

— Alessio Gnaccarini – COSMOB

— Miguel Gonçalves – Macwin.Tek

— Marius Jurt – Toshiba Europe Limited, Bristol Research & Innovation Laboratory

— Ava Kenny-Colwell - UK Fashion and Textile Association

— Rembrandt Koppelaar – EcoWise Ekodenge

— Eliana Kuo – Smart Products Infrastructure Network

— Lorenzo Landi – Dataset

— Anaïs Le Bas – Textil'IA

— Edwin Maes – CENTEXBEL – Convenor of CEN/TC 248/WG 39

— Jan Merckx – CIRPASS

— Francesco Merlino – Univerlab

— Francesca Michelini – SAIT

— Nunzio Modesto – Dataset

— Maria Flavia Mogos – SINTEF Manufacturing

— Marta Montanari – UNIC – Concerie Italiane

— Bruno Gabriel Mota – Inforcávado – Informática

— Davide Oliveira – Macwin.Tek

— Joao Oliveira – CITEVE

— Elisabetta Scaglia – UNIC – Concerie Italiane

— Andreas Schneider – Global Textile Scheme

— Ana Semedo – IL Expansions

— Lorenzo Sforzini – ONIT Smart

— Viktoriia Shiraeva – Deda Stealth

— Marta Sobocinska – Marina Textil

— Olaf Stecken – VDMA Textile Machinery

— Dieter Stellmach – Deutsche Institute für Textil- und Faserforschung Denkendorf

— Riccardo Stronati – Temera

— Cesar Toscano – INESC TEC

— Davide Uberti – Fedabo

— Marco Valtolina – Univerlab

— Linda Vezzani – GS1 Italy

— Aletta Westra – Ministry of Defence (NL)

— Ariane Yonta – Domina

Attention is drawn to the possibility that some elements of this document may be subject to patent rights. CEN-CENELEC policy on patent rights is described in CEN-CENELEC Guide 8 "Guidelines for Implementation of the Common IPR Policy on Patent". CEN shall not be held responsible for identifying any or all such patent rights.

Although the Workshop parties have made every effort to ensure the reliability and accuracy of technical and non-technical descriptions, the Workshop is not able to guarantee, explicitly or implicitly, the correctness of this document. Anyone who applies this CEN Workshop Agreement shall be aware that neither the Workshop, nor CEN, can be held liable for damages or losses of any kind whatsoever. The use of this CEN Workshop Agreement does not relieve users of their responsibility for their own actions, and they apply this document at their own risk. The CEN Workshop Agreement should not be construed as legal advice authoritatively endorsed by CEN/CENELEC.

Introduction

This CEN Workshop Agreement (CWA) addresses the issues of data collection along textile supply chains in order to facilitate the whole industrial ecosystem (manufacturers, brands, it and service providers, etc.) to meet the increasing needs for faithful information collected along the whole supply chains originated by the evolution of the normative and of the consumers sensibility.

This CWA has an important starting point in the results and the activities of some European projects dedicated to circularity, in the textile sector but not only. It is therefore useful to briefly report their characteristics. Furthermore, Annex E reports the standardization baseline of the European projects that contributes to this CWA: TRICK, PESCO-UP and CISUTAC.

Presentation of the TRICK project and of the other contributing projects

TRICK project

This CWA was initiated within the framework of the TRICK project, a 3,5-year project funded under the Horizon 2020 program (Grant Agreement No. 958352), ended in 2024.

The project consisted of providing a complete, reliable, SME affordable and standard-aware platform to support the adoption, tracing, and demonstration of sustainable and circular approaches, secured by blockchain enabling the enterprises to collect product-secured data. The concept arose from the objective of fighting false green claims of productions within the supply chain: that made necessary and mandatory, looking for a solution that could give traceability validations taking advantage of the benefits of blockchain to promote traceability on textiles.

Its uniqueness lies in the innovative solutions developed and validated through real-world industrial use cases, addressing critical sectoral needs. The project's main achievements include:

- An event-based open data model presented in this CEN CWA process,

- A Blockchain-enabled platform developed for supply chain data collection, ensuring data immutability and trustworthiness,

- A Portfolio of Business Services comprising six key services to address diverse industry requirements, including:

  - The Preferential Certificate of Origin (PCO), co-developed with the Italian Customs Agency (ADM);

  - The Product Environmental Footprint (PEF) service;

  - The Circular Assessment service;

  - The Health Protection service;

  - The Social Lifecycle Assessment (SLCA) service;

  - An Anti-Counterfeiting service.

In the TRICK project, not all actors within the value chain were directly represented, particularly those in the downstream segment, such as collectors and sorters. To address this gap, ECOSYSTEX[1] projects played a pivotal role in supporting the CWA initiative. Notably, direct collaborations were established

---

[1] The European Community of Practice for a Sustainable Textile Ecosystem, coordinated by the Textile ETP, https://www.ecosystex.eu/

with CISUTAC, PESCO-UP, and CIRPASS 1 and 2, facilitating the integration of insights and expertise from these projects. The collaborations carried out with these projects is further described in [1].

PESCO-UP project

PESCO-UP[2] is an ongoing Horizon Europe initiative (Grant Agreement No. 101138367) dedicated to developing sustainable and economically viable processes for upcycling mixed polyester/cotton (PES/CO) textile waste into high-quality cotton and polyester products. With the European Union mandating textile waste collection by 2025, PESCO-UP transforms this challenge into an opportunity by enhancing textile recycling capabilities across the value chain.

The project focuses on overcoming key barriers in textile recycling by:

• **Creating a digital Marketplace powered by the Digital product Passport** to facilitate seamless information exchange among stakeholders, improving supply-demand alignment for recycled materials.

• **Establishing industry-wide standards for recycling technologies**, considering the chemical structures, physical properties, and textile finishing attributes to ensure efficiency and scalability.

• **Developing systematic sorting, purification, and separation processes** that enhance the recovery of high-quality fibres from mixed textile waste, maximizing resource efficiency.

• **Ensuring social and technological alignment** by fostering a skilled workforce and supporting sustainable employment opportunities in textile recycling.

By integrating these strategies, PESCO-UP aims to advance circularity in the textile sector, reduce reliance on virgin materials, and contribute to greener, more resilient European textile industry.

CISUTAC project

CISUTAC[3] is an ongoing Horizon Europe project, under the grant agreement No. 101060375, aimed at enhancing circularity and sustainability in the European textile and clothing sectors, focusing on fashion garments, workwear, personal protective equipment (PPE), and active goods such as outdoor gear.

The project seeks to improve sorting processes for reuse and repair, promote efficient management and recycling of textile waste, and establish fully circular value chains, particularly for complex products like protective workwear.

By addressing key challenges such as dismantling, repairability, and sustainable design, CISUTAC aims to remove bottlenecks and develop inclusive, large-scale European value chains to minimize the environmental impact of the textile industry.

An open-source solution for post-consumer textile waste management developed by the project is available online[4]. The tool empowers the textile ecosystem to make informed decisions, driving a digital change in line with the upcoming digital product passport legislation, and enable a more accurate feedstock for the recycling industry and unlock potential for the reuse market. With the tool, CISUTAC explored the current and future potential to channel waste, to reuse and recycling supported by Digital Product Passport (DPP) and complementing technology. The most prioritised datapoints to channel post-consumer waste are identified to be condition (one of the key datapoints that channel waste from either reuse or recycling), product construction, multilayer, chemical content, fibre composition, recycled content, textile finishing, fabric colour and disruptors.

By helping stakeholders understand the main datapoints and principles for channelling routes and the potential of the Digital Product Passport in the sorting process, the tool empowers them to take next steps

---

[2] https://www.pesco-up.eu/

[3] https://www.cisutac.eu/

[4] https://www.cisutac.eu/solution-post-consumer-textile-waste

with testing how technology can improve channelling of waste to reuse and recycling. It also underscores the imperative of granular information on item-level to drive fibre-to-fibre recycling initiatives forward, and to harmonise datapoints definition on a European (or global) level, considering some could be difficultly handled with the DPP (i.e. condition).

CIRPASS project

The CIRPASS project[5] is a collaborative initiative funded by European Union aimed at laying the groundwork for the gradual piloting and deployment of a standards-based DPP in alignment with 1 - the requirements outlined in the Proposal for Ecodesign for Sustainable Product Regulations (ESPR), 2 – with the needs of industry and 3 – with international DPP initiatives. The project focuses on the electronics, batteries, and textile sectors. The primary objective is to build a common understanding of a cross-sectoral DPP and to build stakeholders consensus on the DPP adoption scenarios and descriptions including agreements and recommendations across various domains, including data, technical specifications, semantics, organizational structures, and legal frameworks. Cirpass-1 (2022-2024) focused on the DPP roadmap within electronics, batteries, and textile sectors. The sequential Cirpass-2 (2024-2027) brings together different pilot projects from within textiles, electronics, construction and tyres, while supporting DPP deployment in many other sectors thanks to its extensive expert network.

CIRPASS assumes a pivotal role in implementing the DPP for the ESPR implementation. It is responsible for deploying the necessary technical infrastructure in parallel with the definition of standards for the DPP system carried out by JTC 24 CEN/CENELEC. Together with determination of the requisite data to be collected done by the Joint Research Centre (JRC) of the European Commission, these three pillars are expected to offer input to the delegated acts concerning textiles, which are expected to be released between 2026 and later.

State of the art of the traceability approaches in Textile

The current situation of the traceability approaches for the textile value chain is described in the following SWOT analysis [2]. This analysis reflects the value chain internal motivation and challenges and the external enablers and barriers coming from the current framework, shown in Table 1 and Table 2.

---

[5] https://cirpassproject.eu/

Table 1 — SWOT analysis – Strengths and Weaknesses

STRENGTHS	WEAKNESSES
Motivations	Challenges
• The Sustainable Development Goals (SDGs) launched by the Agenda for Sustainable Development • Traceability as key enabler for sustainability, assuring verifiability and accessibility to accurate and reliable information for the reliability of sustainability claims • Green claims validation and anti-counterfeiting efforts	• Sector fragmentation, opacity, and complexity of the textile supply chain • High environmental and social impacts • Limited transparency and data sharing due to the fear among stakeholders about sharing sensitive or confidential information • Increasing effort for adapting to certification schemes and addressing harmonization in data metrics and procedures • Need for enhancing intrinsic sustainability, including the control of all the external stakeholders • Reduce reluctance to technological and organizational changes

Table 2 — SWOT analysis – Opportunities and Threats

OPPORTUNITIES	THREATS
Enablers	Barriers
• Upcoming EU legislation should drive innovation in supply chain mapping, traceability, and verification • Emerging technologies such as Blockchain, IoT, RFID, NIR, XRF, and AI • Increasing consumer awareness of the environmental impact of the post-consumer phases and demand towards environmentally and socially responsible products • Addressing environmental and social challenges	• Lack of Harmonization and Standardization in data collection and sharing • Consumer mistrust • Limited availability of trustworthy and reliable data sources • Lack of traceability tools that cover the entire product lifecycle from a sustainability and circularity perspective • Greenwashing accusations • Regulatory Pressure

The regulatory context and the role of this CWA

The latest update on the Digital Product Passport indicates that it will become mandatory for the clothing industry by, probably, 2027. Market, business operators, consumers, and evolving regulations are all pushing the fashion sector toward increased transparency and sustainability, calling for a transition to a more circular, ethical and sustainable model. The European Green Deal and the European Strategy for

circular textiles[6] have marked a turning point towards this transformation. According to EURATEX, more than 16 regulations will directly or indirectly impact the sector in Europe in the coming years. To cope with these regulatory changes, the industry should implement a range of adaptations to ensure preparedness.

As a result, companies throughout the supply chain will be required to provide accurate and faithful data to brands. This will require significant effort to ensure that textile and clothing companies, particularly SMEs, are equipped to meet the upcoming customer requirements.

One of the key challenges to address is the lack of standardization across various areas, including data semantics, product identification, and data collection protocols. Some of the main outcomes of the TRICK project could play a crucial role in aligning with upcoming EU regulations. Table 3 below is a summary of the regulations that could benefit from the open data model presented in this CWA.

Table 3 — Potential impact on the upcoming regulations and directives

Regulation	CWA potential impact
Ecodesign for Sustainable Products Regulation (ESPR)[7]	Supporting the collection of trustful, reliable and well-organized data from the value chain, offering proof of its truthfulness to enable the companies to fill the Digital Product Passport (DPP) with the required data.
Extended Producer Responsibility (EPR)[8]	The information flows modelled in the data model could support the EPR schemes for eco modulation, in line with the framework directive on waste needs of traceability and transparency. One of the benefits could be enabling a more informed and efficient sorting process that will impact on the quality of the recycled feedstock.
Corporate Sustainability Due Diligence Directive (CSDDD)[9][10]	The data model and architecture for traceability support the collection of supply chain data which could support due diligence throughout the supply chain, including primary data and environmental and social impacts within a company and its value chain.
REACH Regulation Review[11]	This CWA proposes an expert-based pattern of collaboration processes between companies and experts and data flows and an open data model that supports the collection of data related to chemical composition or substances of concern in textiles, with a dialogue that preserves confidentiality of the information but also efficacy in the assessment activities.
Directive on Green Claims[12]	The data model supports the provision of verifiable and trustworthy sustainability data for brands. As well as helping in the declaration of data ownership.

---

[6] EU strategy for sustainable and circular textiles (COM(2022) 141 final), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022DC0141
[7] https://www.europarl.europa.eu/doceo/document/TA-9-2024-0303_EN.html
[8] https://www.oecd.org/en/topics/extended-producer-responsibility-and-economic-instruments.html#:~:text=Extended%20producer%20responsibility%20is%20a,goals%20such%20as%20recycling%20targets.
[9] https://commission.europa.eu/business-economy-euro/doing-business-eu/sustainability-due-diligence-responsible-business/corporate-sustainability-due-diligence_en
[10] Taking into account the Omnibus simplification package
[11] https://environment.ec.europa.eu/topics/chemicals/reach-regulation_en
[12] https://environment.ec.europa.eu/topics/circular-economy/green-claims_en

Regulation	CWA potential impact
The Corporate Sustainability Reporting Directive (CSRD)[13]	The data model for transparency and traceability enables the collection of trustful and verified environmental, social, and governance data in a structured way to support audits preparation.

The driver of this document is the adaptation of standardized models to the requirements that arise from a fragmented and volatile supply chain, providing general guidelines validated on real industrial pilots, that provide the way to keep the costs to comply with the upcoming regulations low and affordable, particularly for SMEs. The solution could be the creation of a standardized and open language to collect data across the layers of the supply chain.

The risk of false claims and the lack of transparency (and control) throughout the entire supply chain should be minimized, and traceability can play a crucial role in enabling this. However, gathering data from the entire supply chain and ensuring its faithfulness is not a simple task for the industry. To address this, standardized event-based models for tracking and representing the history of traced items jointly with product sustainability data reporting can provide a potential solution.

The terminology used in this document is aligned with the ones of the following official documents:

- Commission Implementing Decision on a standardisation request to the European Committee for Standardisation, the European Committee for Electrotechnical Standardisation, and the European Telecommunications Standards Institute as regards Digital Product Passports in support of Union policy on Ecodesign requirements for sustainable products and on batteries and waste batteries, ANNEXES 1to 2 [D096100/01].

- ISO 59004:2024 Circular Economy – Vocabulary, Principles and Guidance for Implementation

- CEN CWA 16667:2013 (withdrawn), referred to as "eBIZ specification".

---

[13] https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en

1 Scope

This CEN Workshop Agreement (CWA) establishes a set of guidelines for data collection along textile and textile products supply chains to support the collection of validated information both for the purpose of traceability of goods as well as of transparency and sustainability claims.

The CWA is based on the TRICK project outcomes and includes contributions from other European projects, to provide a comprehensive view of the circular approach required by the implementation of the textile strategy of the European Commission[14]. It addresses processes related to traceability and transparency but also, transversally, addresses the need to collect blockchain references and footprints of the information to guarantee their source and integrity. The primary purpose of this CWA is to assist companies in gathering information across the supply chain, on which the statements to be published on the Digital Product Passport (DPP) should be based. It is not designed for data upload towards the DPP services or for representing information within the DPP as outlined by the ESPR regulations (which will be regulated by the outcomes of the CEN JTC24).

The overall goals of the developed CEN Workshop CWA are:

* Supporting companies in the approach to the traceability and sustainability data collection necessary to fill the Digital Product Passport, providing guidelines and open resources;

* Proposing a common semantics and a common language to enhance the interoperability of the solutions along the supply chain, reducing the costs of setting up new collaborations within fragmented and interweaved supply chains;

* Providing stakeholders and policy makers with a view of the results coming from experimentations carried out on industry pilots, focusing on the approaches adopted to overcome barriers and criticalities related to the compliance to the upcoming European regulations.

Furthermore, the CWA is intended to be used by any industry in textile and textile products sector, along the whole supply chain, with 'ready to use' specifications and references to related documentation and resources that can be freely adopted either by internal IT offices of the industry or by IT providers involved in the textile and textile products data ecosystem. That includes developers of:

* ERPs,

* PLMs,

* Traceability Systems,

* Customs Operation software,

* Sustainability and Impact evaluation tools,

* providers of services for traceability and sustainability impact evaluation (both for software on premises as well as third party platforms).

The final outcome attended is to offer public, common, sectorial reference guidelines for the textile and textile products industry based on existing sectorial specifications but built upon a cross-sectorial paradigm.

---

[14] EU strategy for sustainable and circular textiles (COM(2022) 141 final), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022DC0141

2   Normative references

There are no normative references in this document.

3   Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at http://www.iso.org/obp/

— IEC Electropedia: available at http://www.electropedia.org/

3.1
claim
high-level statement about a characteristic of a product, or about a process or an organization associated with that product (traceable asset). A sustainability claim is a claim that covers one or multiple sustainability dimensions (economic, environmental, social)

[SOURCE: UNECE Recommendation N.46][3].

Note 1 to entry: In this document "sustainability claims" are referred to as just "claims"

3.2
traceable asset
traceable asset is any product or material (individually, in batches, or in trade units) that needs to be tracked along a value chain

[SOURCE: UNECE Recommendation N.46] [3]

3.3
Unique Identifier
identifier which is guaranteed to be unique among all identifiers used for those objects and for a specific purpose

Note 1 to entry: For more information, see ISO/IEC 15459-1.

[SOURCE: ISO 29404:2015, 3.26]

3.4
textile product – product
product made mainly of textile fibres, yarns and/or fabrics and intended to be used, as such or in conjunction with other textile or non-textile elements

Note 1 to entry: These articles can contain non-textile parts, such as plastics (e.g. buttons and membrane or coatings) or metals.

[SOURCE: ISO 5157:2023]

3.5
eService platform
platform for eBusiness centralized services