Industry Living Labs

A series of workshops to co-develop streamlined DPP processes that reduce complexity and increase accessibility

Workshop #3

13 April 2026 (Online)

01

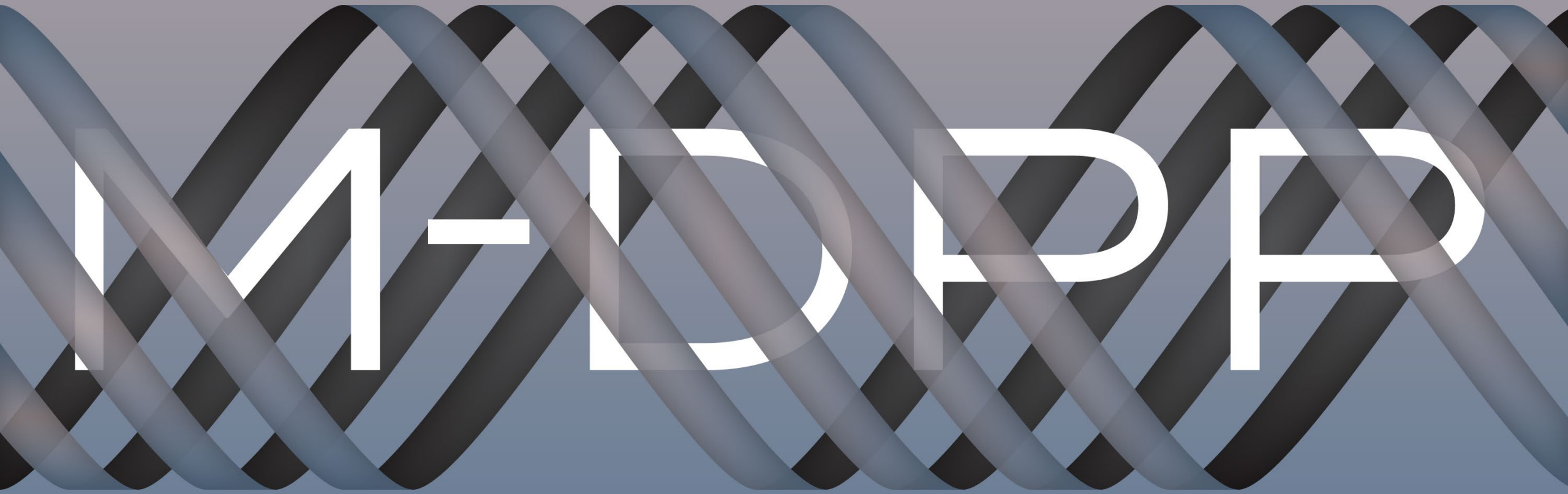
Welcome & Introduction

Agenda

01	5 min Lyske	Welcome & Introduction to Workshop
02	10 min Troy	Project recap & where we are
03	10 min	What the EU just told us: the new JRC Methodology
04	5 min Lyske	Transition to Miro
05	30 min [all]	DPP themes — review & input
06	15 min [all]	From themes to requirements — prioritisation
07	10 min Troy	Synthesis & what happens next
08	5 min Troy/Lyske	Close

02

Project recap & where we are


M-DRP

- **Dr. ir. Troy Nachtigall** – Lector Fashion Technology, Hogeschool van Amsterdam, Faculteit Digitale Media en Creatieve Industrie | CoE Creative Innovation
- **Dr. Christof Francke** – Lector Biobased Innovations, HAN University of Applied Sciences | CoE HAN BioCentre
- **Dr. Pascal Wiggers** – Lector Responsible IT, Hogeschool van Amsterdam
- **Douwe van der Leest** – Lector Bioinformatics | HAN
- **Tilman Todt** – Project Leader Applied Data Science | HAN
- **Dr. Marcio Fückner** – Senior Researcher Responsible IT, Hogeschool van Amsterdam, Faculteit Digitale Media en Creatieve Industrie | CoE Applied AI
- **Martijn de Bruin** – Researcher Responsible IT & AI | MSc Artificial Intelligence, Hogeschool van Amsterdam
- **Mijke van Ballegooijen & Robert Pans** – CEO, and Finance Controller, BYBORRE
- **Ellen Albers & Haiko Huvenaars** – Initiator and Chairwoman, and Director New Order of Fashion
- **Lex Raijmakers** – Co-Founder Candour.Digital
- **Thijs Verhaar & Tonka Oštrić** – CEO, and Microfactory Production Technician, KNITWEAR LAB
- **Claire Teurlings** – Ketenregisseur Circulair Textiel, Textielregie
- **Francesco Sollitto** – Research Analyst in Data and Sustainability, Hogeschool van Amsterdam
- **Marco Mossinkoff** –Senior Researcher in Textile Value Chain, Hogeschool van Amsterdam
- **Lyske Gais de Bildt** – Researcher, Hogeschool van Amsterdam

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NSF
Candour
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KNITWEAR LAB

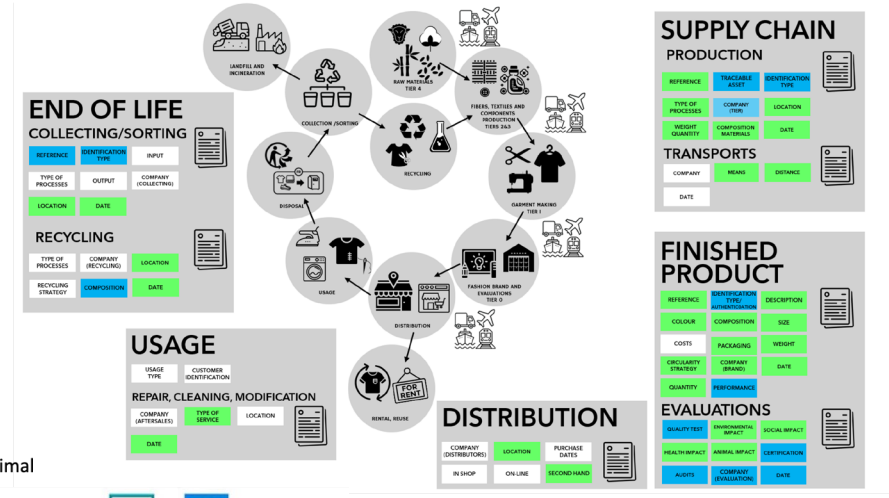
Molecular Digital Product Passports

The Molecular Digital Physical Product Passport (M-DPP) is a practice-based research project that develops a reliable and future-proof Digital Product Passport for textiles.

By linking laboratory-based molecular material analysis to a digital infrastructure, M-DPP creates a persistent verification layer that remains accessible throughout a textile's entire lifecycle — from production and use to reuse and recycling.

This approach supports trustworthy data exchange, regulatory compliance, and scalable circular textile systems.

Figure 14 – Advanced DPP Model for phase 2

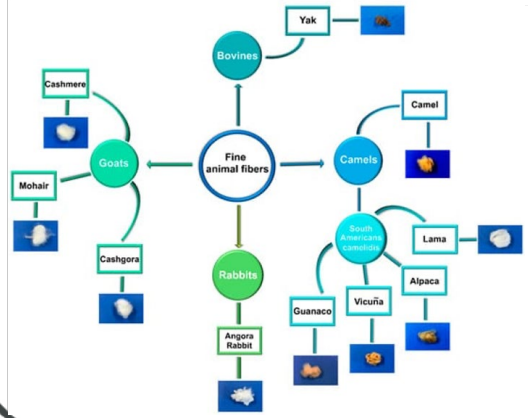


Genetic Traceability

- Reliably distinguish between different species
- Probable traceability down to the individual animal

Protein Identification


Journal of Proteomics
Unravelling the proteome of wool: Towards markers of wool quality traits



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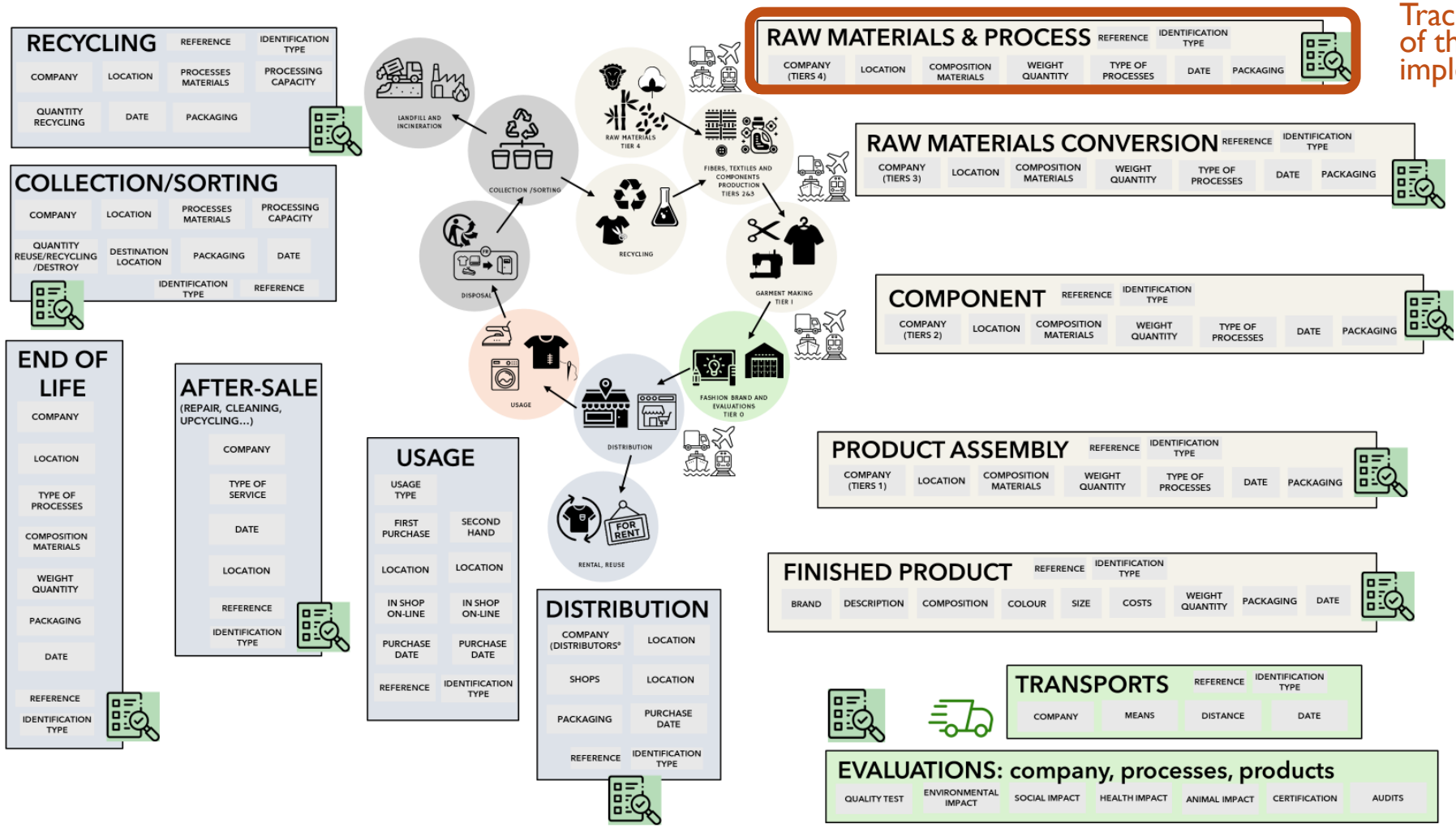
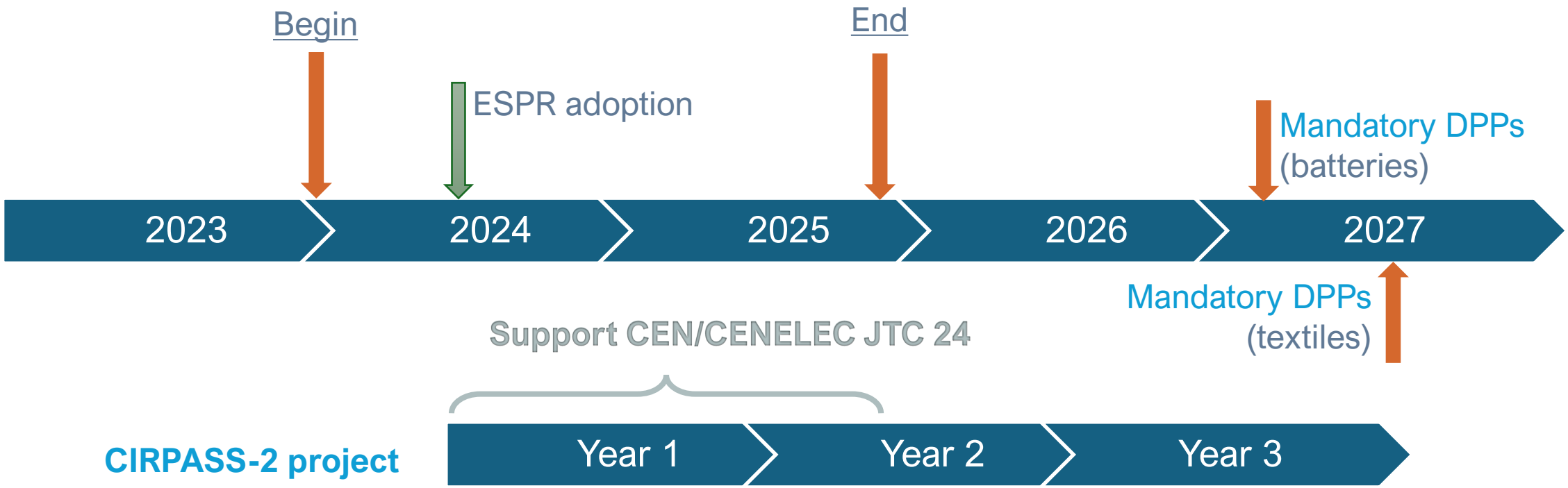
COMMON EU framework



Tracing data back to Tier 0 is one of the biggest challenges in DPP implementation

DPP System Standardisation - Timeline

Standardisation Request – DPP System standards CEN/CENELEC JTC-24

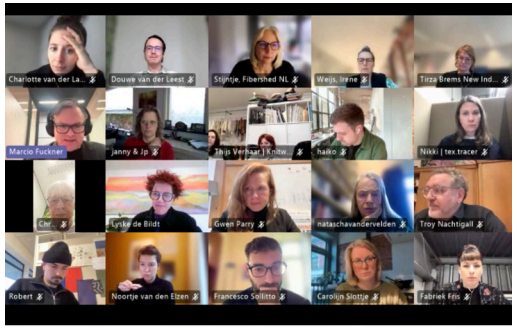


Funded by the European Union

The Living Lab Journey

Workshop #1
Online
Dec 2025

Understanding the landscape

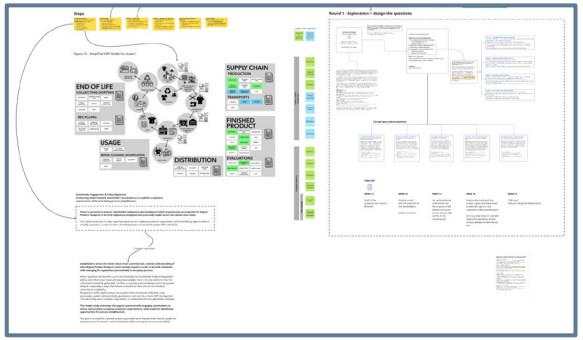


Workshop #2
New Order of Fashion
March 2026

Exploring ownership & data

Workshop #3
Online
Today

From conditions .... to solutions



Workshop #1 Learnings

Understanding the landscape

Awareness without operational clarity

Participants know DPPs are coming, but cannot yet connect regulation to their own data, roles, or daily workflows.

DPP readiness is a chain problem

Individual organisations cannot implement DPPs alone; readiness depends on what suppliers, customers, and partners are also able to provide.

Transformative expectations — with real anxiety

The sector sees DPPs as structurally significant, but that same significance generates legitimate concerns around cost, burden, and competitive exposure.

Trust is the central currency

Across every discussion, trust in data, in partners, and in the system itself emerged as the condition that everything else depends on.

Workshop #2 Learnings

Exploring ownership & data

Data questions remain unresolved
It is still unclear where product information originates, how systems connect to each other, and who carries responsibility for accuracy.

Confidentiality vs. transparency
Companies need clarity on which data stays internal and which becomes accessible — and at what level of detail that distinction should be made.

SME accessibility is non-negotiable
Any system that is too complex, too costly, or too time-consuming to maintain will simply not be adopted by the companies that form the backbone of this sector.

CHALLENGES

Greater trust in the product information companies act on every day — both upstream and downstream

More **certainty** about what is actually being purchased, reducing reliance on supplier declarations alone

DPPs as an enabler of better procurement decisions and **more circular** design choices from the start

A basis for future policy incentives that reward producers who invest in **responsible practices**

Molecular verification as a credible, label-independent **trust layer** that persists throughout the product's lifecycle

OPPORTUNITIES

Cross-Cutting Themes

- **Translation, not awareness**
  The gap is not knowledge about DPPs in general, but the absence of practical, role-specific guidance on what implementation actually requires.

- **Trust as infrastructure**
  Trust is not a soft condition; it is a design requirement that must be built into governance, verification, and data access from the start.

- **Collective readiness**
  DPP implementation is a coordination challenge as much as a technical one — and solutions that only work for individual actors will not work for the ecosystem.

03

What the EU just told us: the new JRC Methodology

The Standard is out

Joint Research Centre

Methodology for defining data requirements for the Digital Product Passport under the ESPR framework

Chawla, K., Chirvasuta, T., Wolf, M.-A., Wolf, K., Rongen, S., Rurup, R., Gonzalez Torres, M., Naumann, G., Arcipowska, A.

2026

- https://publications.jrc.ec.europa.eu/repository/handle/JRC145830

Reading Guide:
Digital Product Passport (DPP) Data Specification Methodology

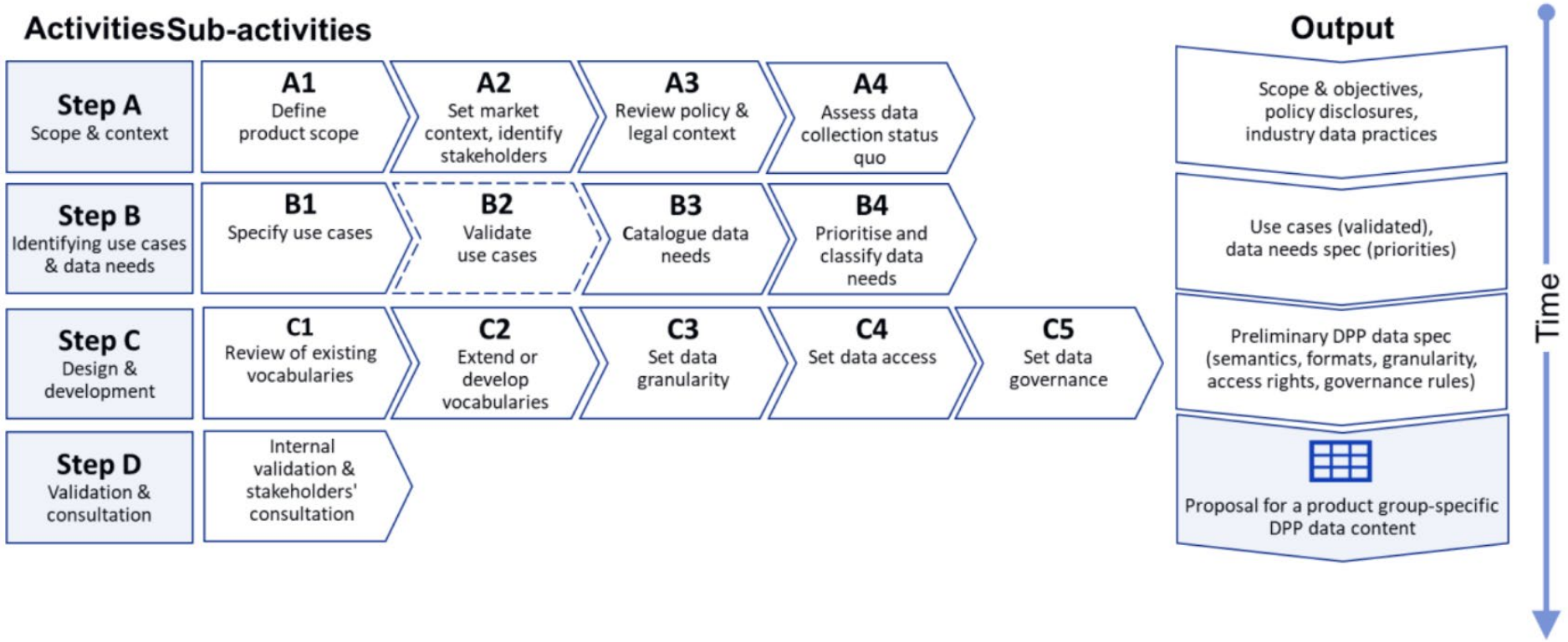
- **Chapters Overview: The "What" and the "How"**
  - **Chapter 1 & 2:** The Context. Explains the ESPR legal basis, roles of economic operators, standardisation efforts, and defines what a DPP is.
  - **Chapter 3:** The Core Methodology. Outlines the 4-step workflow to specify DPP data (A: Scope, B: Use cases, C: Design, D: Validation).
  - **Chapter 4:** Summary, limitations, and the role of the preparatory study.

- **Annexes Overview: The Toolkit**
  - **Annex 1 & 2:** Foundational background on the MEErP process and ESPR legal requirements.
  - **Annex 3 to 9:** The practical guidance and frameworks for determining use cases, data needs, vocabularies, granularity, access rights, and data governance.

→**Tip**

- **Read First: Chapter 3**, as it details the exact step-by-step actions required to formulate the DPP specification.
- **Keep on Hand: Annexes 3 through 9**, which provide the direct instructional criteria, templates, and decision matrices needed to execute the steps in Chapter 3.

Figure 4. DPP data specification methodology workflow



Source: own elaboration

04

Transition to Miro

The question for today:

What must be true — in the data, in the roles, and in the system — for a DPP to become a working tool for this ecosystem?

What data is genuinely needed — and who in the chain is responsible for providing it?

How can verification add credibility to product claims without adding administrative weight?

What would a minimum viable DPP look like for a small producer with limited IT capacity?

From mapping conditions to co-designing solutions

Today we work through five concrete compliance areas where the industry needs to reach shared ground.

Q1 — Composition & safety

Can we get reliable data on what a product is made of, all the way back to the raw material? This is where molecular verification is most directly relevant — and where the gap between supplier declarations and verifiable fact is largest.

Q2 — Supply chain traceability

How ready is the industry to say where each production step happened? The 2027 requirement to document key processing locations exposes one of the most persistent structural weaknesses in global textile supply chains.

Q3 — Recyclability

Is 'recyclable' a binary label or a detailed breakdown — and which is actually useful? The answer depends on who is reading the passport and what they need to do with the information.

Q4 — Packaging

How do you attach packaging data to a product passport without conflating two different stories? Packaging is often managed separately and disappears long before the product does.

Q5 — Environmental footprint

Is collecting transport distance data across a multi-tier supply chain realistic by 2027? And if exact data is not available, what approximations or defaults could still be meaningful?

Practical

- If you have already a Miro account, you can use this to enter and request access to the board.

- You can enter anonymously by using the link and then the password:

  Molecular

  https://miro.com/app/board/uXjVGolBzdc=/?share_link_id=611936863966