



DPP STATUS, CONCERNS, NEEDS AND IDEAS – RESULTS FROM EWG5 ‘OTHER INDUSTRIES’ SURVEYS

30/10/2025



**Funded by
the European Union**

Funded by the European Union under the GA No 101158775. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Health and Digital Executive Agency (HADEA). Neither the European Union nor the granting authority can be held responsible for them.

Work package	WP 2
Task	T2.1
Version	1.0
Authors	Marc-Andree Wolf (maki Consulting GmbH)
Contributors	We gratefully acknowledge the valuable input from members of the CIRPASS-2 Expert Working Group 5 ("other industries")
Abstract	<p>This document provides the anonymised and summarised results of the survey that was held among the ca. 100 members of Cirpass-2 Expert Working Group 5 'Other industries' (EWG5), from 12 December 2024 until 31 January 2025 (with 52 contributions), and the results on the five open questions surveyed live during the EWG5 working meeting on 27 June 2025 (20 contributions).</p> <p>General summary of surveys outcomes:</p> <p>Supplier-data availability across tiers is reported to be the dominant bottleneck, but several other key or relevant pain points are named by more than half of the contributors. EU legislation is the primary driver to engage with DPP for producers' products; non-EU regimes matter but less. DPP tool and service market maturity remains limited to severely limited; organizational readiness mirrors this split. Main priorities to make DPPs successful and meaningful that were named are: harmonised open standards and technical/semantic interoperability; a clear split of mandatory vs. optional data; onboarding and funding for SMEs; proportionate, scalable verification; multilingual, human-centred UX with QR/NFC for access to DPPs (also) by consumers; alignment across ESPR/CPR/REACH/EPR/CSRD EU policies and sectoral regimes; an EU-federated registry with unique identifiers and privacy-preserving access; international cross-recognition; decentralised, future-proof architectures that avoid vendor lock-in; data-quality expression for DPPs was requested by some contributors, and confidentiality via one-up/one-down data exchange only in supply-networks proposed, and templates to standardise exchanges among actors.</p> <p>For the EU legislator:</p> <p>Move quickly on a horizontal technical/semantic backbone and lean, high-value mandatory DPP scopes and doable timelines, anchored in recognised standards. Mandate UID/data-carrier norms and legal equivalence to current declarations; provide SME-oriented tooling, pilots, and testbeds. Set machine-readable conformity/verification (CAB/AB-linked, proportionate), define EU-repository datasets, and ensure also authorities' digital readiness. Beyond the EU, promote decentralised, globally compatible architectures to safeguard data sovereignty and scale, and avoid overspecification or universal audits that would add cost without in proportion improving trust.</p>
Keywords	Digital Product Passport, Survey, Industry, EU policy, DPP Service providers
Citation	<p>Wolf, M.-A. (2025). DPP status, concerns, needs and ideas - Results from EWG5 'other industries' surveys. CIRPASS-2 consortium. https://doi.org/10.5281/zenodo.17476597</p>

DOCUMENT REVISION HISTORY

Version	Date	Description of change	List of contributor(s)
0.8	28/10/2025	Creation	Marc-Andree Wolf
0.9	29/10/2025	Editorial comments	Carolynn Bernier
1.0	30.10.2025	Prepare first version for publication	Marc-Andree Wolf

CIRPASS-2 CONSORTIUM

#	Participant Organisation Name	Short Name	Country
1	Commissariat A L'Energie Atomique Et Aux Energies Alternatives	CEA	France
2	Tallinna Tehnikaülikool	TALTECH	Estonia
3	Mindworks Industries Ou	MWX	Estonia
4	DIGITALEUROPE AISBL	DIGITALEUROPE	Belgium
5	E CIRCULAR APS	E CIRCULAR APS	Denmark
6	F6s Network Ireland Limited	F6S IE	Ireland
7	Global Textile Scheme GmbH	GTS	Germany
8	maki Consulting GmbH	MAKI	Germany
9	Ekodenge Muhendislik Mimarlik Danismanlik Ticaret Anonim Sirketi	EKODENGE	Sweden
10	Stiftelsen Chalmers Industriteknik	CIT	Sweden
11	Nederlandse Organisatie Voor Toegepast Natuurwetenschappelijk Onderzoek TNO	TNO	Netherlands
12	BIO Innovation Service SAS	BIOIS	France
13	Technische Universiteit DELFT	TU Delft	Netherlands
14	Asociacion De Empresas Tecnologicas INNOVALIA	INNOVALIA	Spain
15	CBT Comunicacion & Multimedia SL	CBT	Spain
16	Asociacion Para Desarrollo De La Economia Del Dato	BAIDATA	Spain
17	GS1 In Europe	GS1 IN EUROPE	Belgium
18	AOC Innovation	AOC INNOVATION	France
19	+IMPAKT Luxembourg SARL	+IMPAKT	Luxembourg
20	Industrie 4.0 Österreich - Die Plattform Für Intelligente Produktion	PIA	Austria
21	FUJITSU Technology Solutions	FJBE	Belgium
22	Fraunhofer Gesellschaft Zur Forderung Der Angewandten Forschung EV	Fraunhofer	Germany
23	Extra Red SRL	EXTRA RED SRL	Italy
24	European Apparel And Textile Confederation Aisbl	EURATEX	Belgium
25	IOXIO OY	IOXIO OY	Finland
26	Suomen Tekstiili Ja Muoti Ry	FINATEX	Finland
27	KEZZLER AS	Kezzler	Norway
28	EON Cloud Technology KFT	EON	Hungary

29	Avery Dennison Atma GmbH	atma.io	Austria
30	Circular.Fashion UG	circ.fashion	Germany
31	TRIPLER	TripleR	Belgium
32	SCANTRUST BV	SCANTRUST BV	Netherlands
33	ARCELIK A.S.	ARCELIK	Türkiye
34	WHATT.IO AB	whatt.io	Sweden
35	Gorenje Gospodinjski Aparati DOO	GORENJE	Slovenia
36	Manufacture Francaise Des Pneumatiques MICHELIN	MICHELIN	France
37	COBUILDER AS	COBUILDER	Norway
38	DIN Deutsches Institut Fuer Normung EV	DIN e.V.	Germany
39	VDE Verband Der Elektrotechnik Elektronik Informationstechnik EV	VDE	Germany
40	Energy Web AG	Energy Web AG	Switzerland
41	WORLDLINE France	WORLDLINE FR	France
42	Physikalisch-Technische Bundesanstalt	PTB	Germany
43	Digital Data Chain Consortium GbR	DDCC	Germany
44	ZVEI e. V.	ZVEI e.V.	Germany
45	Association of Service and Computer Dealers International	ASCDI	US
46	Open Blockchain for Asset Disposition Alliance (OBADA)	OBADA	US
47	Green Electronics Council	GEC	US
48	Textile Exchange	TextileExchange	US
49	iPoint-Systems GmbH	iPoint	Germany



Grant Agreement No.: 101158775
Call: DIGITAL-2023-CLOUD-DATA-04
Topic: DIGITAL-2023-CLOUD-DATA-04-DIGIPASS
Type of action: DIGITAL Simple Grants

DISCLAIMER

Funded by the European Union under the GA No 101158775. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Health and Digital Executive Agency (HADEA). Neither the European Union nor the granting authority can be held responsible for them.

COPYRIGHT NOTICE

© CIRPASS-2 Consortium, 2024-2027



Except otherwise noted, original content on this document is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) licence. This licence enables reusers to distribute, remix, adapt, and build upon the material in any medium or format, so long as attribution is given to the creator. The licence allows for commercial use.

TABLE OF CONTENTS

1	INTRODUCTION	8
2	PART 1: PRODUCING INDUSTRY PARTICIPANTS AND DEDICATED SURVEY VARIANT	9
2.1	Executive and legislator summary	9
2.2	Summary of replies, anonymised (numbers refer to the original question number)	9
2.2.1	Q6. Please first roughly read across the other questions here below and then write down for which specific product category you will fill in this survey ... So: I will answer this survey for the following product category:	10
2.2.2	Q7./8. Which pain points do you have for your products' in-house and supply-chain sustainability and compliance data (data in or related to DPP, PIM, PLM/PDM, ERP, EPDs and LCA/PEF, i.e. also beyond any specific DPP)?.....	10
2.2.3	Q9. Please give details/clarifications/highlights on any of the above replies	11
2.2.4	Q10. Relevance of drivers for DPP-type product information in your industry	12
2.2.5	Q11. Please name the specific legislation(s) and/or other business and policy driver(s)/scheme(s), if identified by you as relevant in the preceding question	12
2.2.6	Q12. Are you aware of any specific classifications, ontologies, vocabularies, or files/databases of relevant standards, test protocols, or policies for your product category or sector? Please provide name and ideally a weblink.	12
2.2.7	Q13. How mature do you consider DPP software/platform solutions as to any fully operational and offered for your products, if available?	13
2.2.8	Q14. How ready is your organisation with a DPP solution for your products?.....	14
2.2.9	Q15. What do you lack and would need for supporting your organisation's effort to build up a DPP system on your products? (Matching)	14
2.2.10	Q17. Please name the specific "Other" kind of support you lack, if any, as identified by you in the preceding questions 15/16.....	15
2.2.11	Q18. High-priority topics for EWG5 working meetings/surveys beyond those already derived above	16
2.2.12	Q19. Nice-to-have topics for EWG5 working meetings/surveys	16
2.2.13	Q20. Additional information	16
3	PART 2: NON-PRODUCING INDUSTRY PARTICIPANTS (CONSULTANTS, RESEARCHERS, GOVERNMENTAL AND OTHER ORGANISATIONS).....	17
3.1	Executive & Legislator Summary	17
3.2	Summary of replies, anonymised (numbers refer to the original question number)	17
3.2.1	Q7&8. Which pain points do you have for your products' in-house and supply-chain sustainability and compliance data (data in or related to DPP, PIM, PLM/PDM, ERP, EPDs and LCA/PEF, i.e. also beyond any specific DPP)?.....	18
3.2.2	Q9. Please give details/clarifications/highlights on any of the above replies under questions 7 and 8	18
3.2.3	Q10. Relevance of drivers for DPP-type product information in your industry	19
3.2.4	Q11. Please name the specific legislation(s) and/or other business and policy driver(s)/scheme(s) – free text	19

3.2.5	Q12. Are you aware of any specific classifications, ontologies, vocabularies, or files/databases of relevant standards, test protocols, or policies for your product category or sector that would help to increase the meaningfulness of the DPP scope?.....	20
3.2.6	Q13. How mature do you consider DPP software/platform solutions as to any fully operational and offered for your products, if available?	20
3.2.7	Q14. How ready is your organisation with a DPP solution for your products?.....	21
3.2.8	Q15. What do you lack and would need for supporting your organisation’s effort to build up a DPP system on your products?	21
3.2.9	Q17. Please name the specific “Other” kind of support you lack, if any, as identified in the preceding questions 15 and 16	22
3.2.10	Q18. Topics (high priority) for EWG5 working meetings or surveys beyond those already derived above	22
3.2.11	Q19. Additional topics for EWG5 working meetings or surveys	23
3.2.12	Q20. Insights into producing industry (worked-with sectors/products; be as narrow as possible)	23
3.2.13	Q21. Additional (general reflections)	23
4	PART 3 - LIVE SURVEY DURING EWG5 “OTHER INDUSTRIES” WORKING MEETING OF 27 JUNE 2025	24
4.1	Executive & Legislator Summary	24
5	ANONYMOUS SUMMARIES, PER TOPIC/QUESTION:.....	24
5.1	Q1. Compliance-related business drivers to adopt DPPs.....	24
5.2	Q2. Non-compliance drivers / incentives to adopt DPP-type solutions	25
5.3	Q3. Consumer communication and education on DPP	26
5.4	Q4. Testing & verification; authentication & data security; tracing/tracking for trust	27
5.5	Q5. Future-proofing/adaptability and international alignment	27

ABBREVIATIONS & ACRONYMS

AAS - Asset Administration Shell	EUDI - European Digital Identity
ATEX - ATmosphères EXplosibles	EU - European Union
AB - Accreditation bodies	EV - Electric vehicle
AI - Artificial Intelligence	EWG - Expert Working Group (under CIRPASS-2 project)
AIDC - Automatic Identification and Data Capture	FAIR (data principles) - Findable, Accessible, Interoperable, Reusable
ANSI - American National Standards Institute	G2C - Government-to-Citizen
API - Application Programming Interface	GEC - Green Electronics Council
B2B - Business-to-Business	GLEIF - Global Legal Entity Identifier Foundation
B2C - Business-to-Consumer	GRS/OCS - Global Recycled Standard, Organic Content Standard
BIFMA e3 - Business and Institutional Furniture Manufacturers Association e3 Standard	GSMA - Global System for Mobile communications (GSM) Association
CAB - Conformity Assessment Body	HADEA - European Health and Digital Executive Agency
CEFACT - (United Nations) Centre for Trade Facilitation and Electronic Business	HRI - Human Readable Interpretation
CENELEC - European Committee for Electrotechnical Standardization	IEC - International Electrotechnical Commission
CMMS - Computerized Maintenance Management Software	IETF - Internet Engineering Task Force
CPR - Construction Products Regulation	IAF - International Accreditation Forum
CPSIA - (U.S.) Consumer Product Safety Improvement Act	ILAC - International Laboratory Accreditation Cooperation
CSRD - Corporate Sustainability Reporting Directive	IMEI - International Mobile Equipment Identity
DID - Decentralized Identifier	IP - Internet Protocol
DPP - Digital Product Passport	IPC - Institute for Interconnecting and Packaging Electronic Circuits
ECLASS - (not an abbreviation/acronym - a data standard for the classification of products and services)	IoT - Internet of Things
EN - European Norm	IIoT - Industrial Internet of Things
EPCIS - Electronic Product Code Information Services	ISO - International Organization for Standardization
EPD - Environmental Product Declaration	JSON - JavaScript Object Notation
ERP - Enterprise Resource Planning	JSON-LD - JSON for Linked Data
EUBW - European Business Wallet	JTC - Joint Technical Committee (of CEN/CENELEC)

JWT - JSON Web Token

KERI - Key Event Receipt Infrastructure

KPIs - Key Performance Indicators

KYB - Know Your Business

KYC - Know Your Customer

KYS - Know Your Supplier; or: Know Your Source

LCA - Life Cycle Assessment

LPID - Linked Product Identifier

mDL - mobile Driving Licence

mdoc - mobile ID

ML - Machine Learning

NFC - Near Field Communication

OBADA - Open Blockchain for Asset Disposition Alliance

OEKO-TEX - International Association for Research and Testing in the Field of Textile and Leather Ecology

PEF - Product Environmental Footprint

PIM - Product Information Management

PLM - Product Lifecycle Management

PoA - Proof of Authority

QR - Quick Response (code)

RFID - Radio-Frequency Identification

ROI - Return on Investment

SCIP - Substances of Concern In articles as such or in complex objects (Products), a Database

SD-JWT - Selective Disclosure for JWTs

SME - Small and Medium-sized Enterprises

TCP - Transmission Control Protocol

ToIP - Trust over IP Foundation

VC - Verifiable Credential

VCDM - Verifiable Credentials Data Model

vLEI - verifiable Legal Entity Identifier

UN - United Nations

UNTP - United Nations Transparency Protocol

WBCSD-PACT - World Business Council for Sustainable Development - Partnership for Carbon Transparency

W3C - World Wide Web Consortium

1 INTRODUCTION

This document provides the **anonymised and summarised results** of a **survey** that was held among the ca. 100 members of **CIRPASS-2 Expert Working Group 5 ‘Other industries’ (EWG5)**, from **12 December 2024 until 31 January 2025**, (with 52 contributors) and the results on the **five open questions surveyed live during the EWG5 working meeting of 27 June 2025 (with 20 contributors)**.

Beyond this report, insights from the surveys will also feed into CIRPASS-2 deliverables. Both surveys have their own highly aggregated **executive/legislator summary**, always at the beginning of the respective chapter in this document; there is a certain overlap in scope of the questions, but participants in the two surveys agree to a relevant degree.

The results of the **first survey** are presented separately:

- responses from organisations representing producing industries are presented in **Part 1**.
- responses from other organisations (namely DPP service providers, civil society organisations, research bodies, etc.) are presented in **Part 2**. Representatives from these other organisations were asked to answer the questions from the perspective of their clients from producing industries. Naturally, this second part with its indirect perspective comes with some gaps as to insights and some misinterpretations.

Part 3 is the summary of the live survey of 27 June 2025.

2 PART 1: PRODUCING INDUSTRY PARTICIPANTS AND DEDICATED SURVEY VARIANT

2.1 EXECUTIVE AND LEGISLATOR SUMMARY

Executive summary: The top pain point on DPP-type instrument implementation selected across the contributing 22 participants was supplier data availability/gaps - rated relevant or key by ~95% of producing-industry respondents; several other pain points were reported as key or relevant by more than half of the respondents; consumer trust - at the other end - was markedly lower (~20% relevant, never “key”). EU legislation is the principal driver for DPP activities (>80% highly relevant), with non-EU laws seen as somewhat less relevant (~30% highly relevant and ~30% relevant). The market for DPP solutions was found immature (5% cite one “reasonably good” solution; 7 report only initial insufficient tools; most see none/unknown), and organisational readiness mirrors this (only 1 firm with first products live with DPP; 3 in preparation). Requested support from the legislator centres on legal clarity (mandatory fields, timelines), harmonised content/technology and cross-sector standards, SME-oriented funding, and test environments. Open-question priorities named most were: Interoperability, trust infrastructures (with KYS/LPID/PoA), onboarding of smaller suppliers, data-quality expression, confidentiality via one-up/one-down automation, and templates to standardise exchanges.

Policy takeaway: Moving timely on a horizontal technical/semantic backbone and product-group baselines; publish clear mandatory datasets/timelines; fund testbeds and SME support; and promote decentralised, globally compatible architectures to protect data sovereignty while enabling scale and cost-efficiency.

2.2 SUMMARY OF REPLIES, ANONYMISED (NUMBERS REFER TO THE ORIGINAL QUESTION NUMBER)

22 survey participants from producing industry

Company size:



■ a small or micro company, ■ a medium sized company, ■ a large or multinational company

2.2.1 Q6¹. PLEASE FIRST ROUGHLY READ ACROSS THE OTHER QUESTIONS HERE BELOW AND THEN WRITE DOWN FOR WHICH SPECIFIC PRODUCT CATEGORY YOU WILL FILL IN THIS SURVEY ... SO: I WILL ANSWER THIS SURVEY FOR THE FOLLOWING PRODUCT CATEGORY:

Nine categories are represented, spanning base materials and complex products: textiles (3), advanced ceramics & composites (2), ATEX lighting & IoT hardware/software (3), handling/intra-logistics equipment (2), steel/metal/manufacturing/mining (3), construction products (2), chemicals & synthetics (2), rail/track (2), and chemicals (1). This breadth indicates cross-sector transferability of the pain points and implementation needs encountered elsewhere in the survey. The mix of upstream (materials/chemicals), mid-stream (components/equipment) and downstream (systems) perspectives also explains why interoperability and supplier-data topics recur: multi-tier value chains create repeated requirements for identity, certification and machine-readable evidence across hand-offs.

2.2.2 Q7./8. WHICH PAIN POINTS DO YOU HAVE FOR YOUR PRODUCTS' IN-HOUSE AND SUPPLY-CHAIN SUSTAINABILITY AND COMPLIANCE DATA (DATA IN OR RELATED TO DPP, PIM, PLM/PDM, ERP, EPDS AND LCA/PEF, I.E. ALSO BEYOND ANY SPECIFIC DPP)?

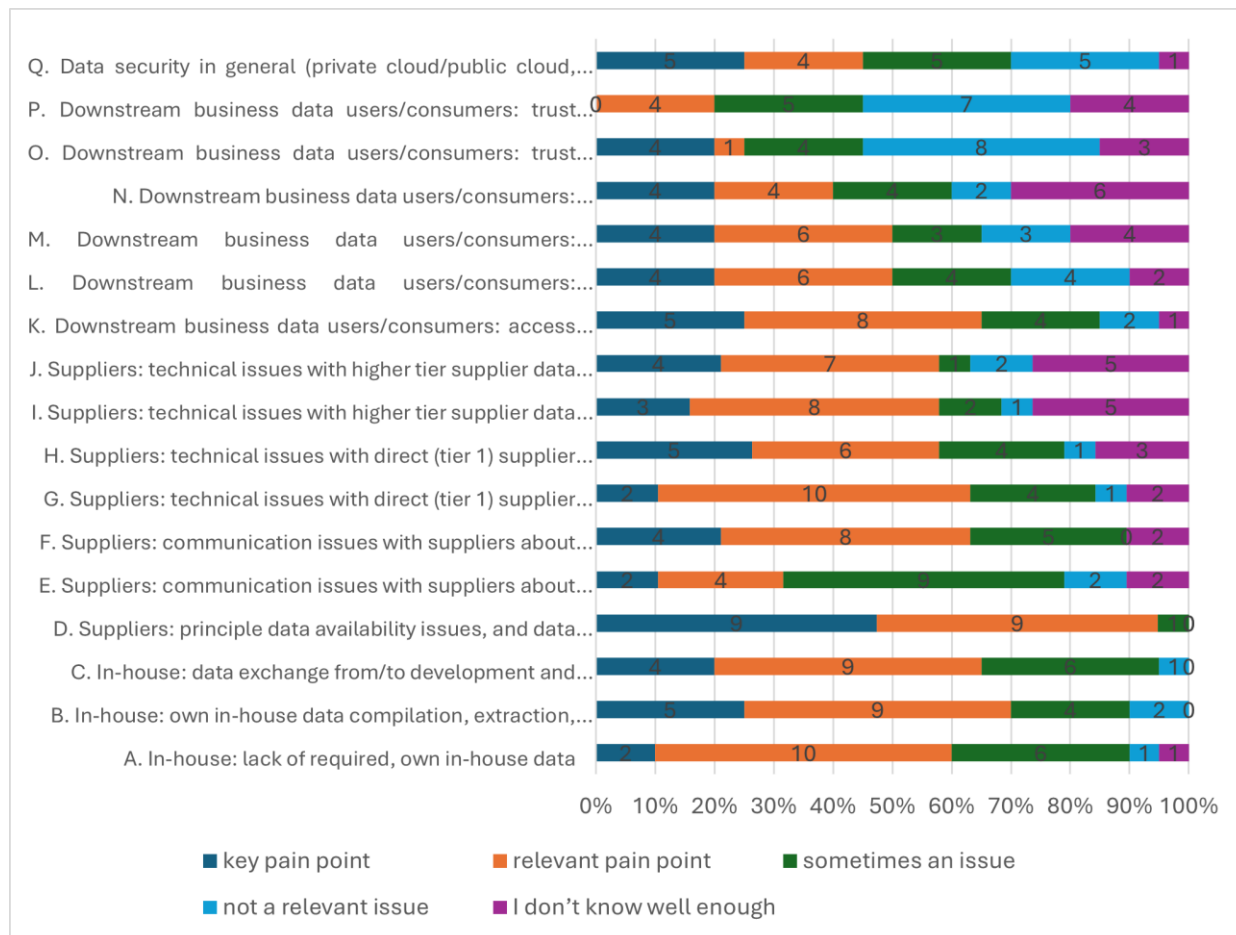
We identified 17 potential “pain points” (spelled out, as not fully readable in the results graphic):

1. In-house: lack of required own in-house data
2. In-house: own in-house data compilation, extraction, preparation, and/or exchange across the above data platforms and applications
3. In-house: data exchange from/to development and ecodesign tools to the above platforms and applications
4. Suppliers: principle data availability issues, and data gaps at suppliers
5. Suppliers: communication issues with suppliers about data access (language)
6. Suppliers: communication issues with suppliers about data access (lack of leverage, incentives, confidentiality issues)
7. Suppliers: technical issues with direct (tier 1) supplier data access
8. Suppliers: technical issues with direct (tier 1) supplier data compilation, extraction, interoperability, preparation/conversion or mapping into our tools, platforms or applications
9. Suppliers: technical issues with higher tier supplier data access
10. Suppliers: technical issues with higher tier supplier data compilation, extraction, interoperability, preparation/conversion or mapping into our tools, platforms or applications
11. Downstream business data users/consumers: access rights and its management related to our products' data (e.g. access to business sensitive information only in-house for specific users, specific data for customers)
12. Downstream business data users/consumers: technical access to our products' information by business customers (interfaces, formats&mappings, interoperability, other technical issues)
13. Downstream business data users/consumers: technical access to our products' information by consumers (e.g. in online market places, at Point-of-sale, issues with interfaces to consumer apps)
14. Downstream business data users/consumers: suitability issues with our data by consumer or business customers (e.g. too much/too little information, (perceived) unsuitable information)
15. Downstream business data users/consumers: trust issues on our products' information by business or governmental users

¹ These are the original numbers of the survey; missing numbers were questions mainly about the participant identity, which are left out in this anonymised report.

16. Downstream business data users/consumers: trust issues on our products' information by consumers
17. Data security in general (private cloud/public cloud, espionage...)

Results:



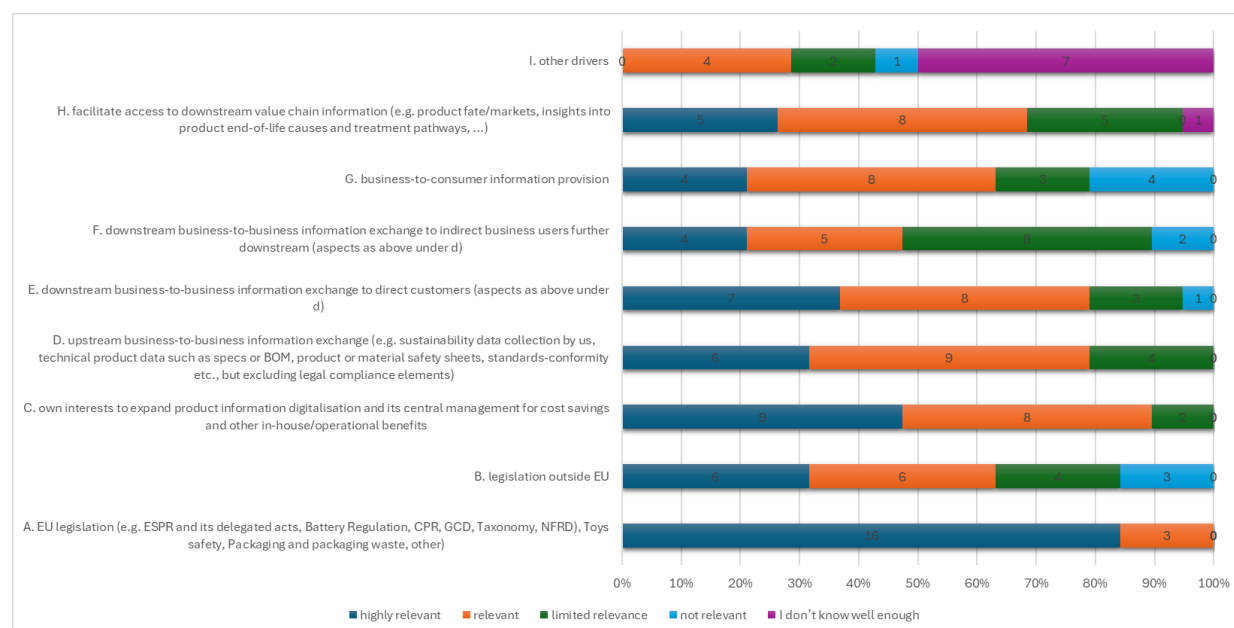
A differentiated picture of issues is the outcome on this question: some issues are more seldomly a pain point (e.g. “only” 20% of participants named “Downstream business data users/consumers: trust issues on our products' information by consumers” as a relevant pain point (and never a key pain point), but “Suppliers: principle data availability issues, and data gaps at suppliers” were a key or relevant pain point for 95% of the respondents, what is however not unexpected and confirms the key issues. Overall, most potential issues are a relevant or key pain point for the majority of respondents what signals a wide range of challenges. This is an important input for the further work of the group and also for the general work in Cirpass-2 and on the DPP in other workstreams including by Commission.

2.2.3 Q9. PLEASE GIVE DETAILS/CLARIFICATIONS/HIGHLIGHTS ON ANY OF THE ABOVE REPLIES

- Interoperability is a prerequisite for scale and for end-to-end exchange: respondents describe a target “database → ERP → organisational wallet → B2B exchange → wallet → ERP → database → reporting / DPP creation” chain. Scale is said to depend on interoperability and on the number of issuers/legal entities in the ecosystem.
- Supplier and customer onboarding: smaller expert suppliers can be hard to integrate due to limited data management capacity. Customers (often large companies) may send unclear, outdated or unrealistic information requests, increasing friction.

- Trust and architecture: authenticate partners (KYS/LPID/PoA) and establish a robust B2B trust infrastructure. For strategically relevant sectors (e.g., rail), an automated DPP should mimic the one-up/one-down confidentiality model; centralised storage of business-critical data is rejected.
- Additional pain points (individual to several): define time/site references; represent data quality (percentiles, deviations); protect actor identity; clarify the role of raw data points vs. aggregated PDFs.

2.2.4 Q10. RELEVANCE OF DRIVERS FOR DPP-TYPE PRODUCT INFORMATION IN YOUR INDUSTRY



The survey results from 20 producing industry participants revealed that EU legislation (such as ESPR, Battery Regulation, and others) is viewed as highly relevant by over 80% of participants, while legislation outside the EU is considered highly relevant by still about 30% and relevant by another 30%. The respondents emphasized the importance of expanding product information digitalisation for cost savings and operational benefits, rating it mainly as relevant or highly relevant. Business-to-consumer information provision was also found to be relevant. In contrast, upstream and downstream business-to-business information exchanges were considered in comparison of less relevance, while still almost 50% consider it as relevant or even highly relevant (as of now and highlighting that EWG5 is composed of members of which many are not in the ESPR priority list). Additionally, facilitating access to downstream value chain information was rated as of similarly less but still overall noteworthy relevance, and there are little other drivers.

2.2.5 Q11. PLEASE NAME THE SPECIFIC LEGISLATION(S) AND/OR OTHER BUSINESS AND POLICY DRIVER(S)/SCHEME(S), IF IDENTIFIED BY YOU AS RELEVANT IN THE PRECEDING QUESTION

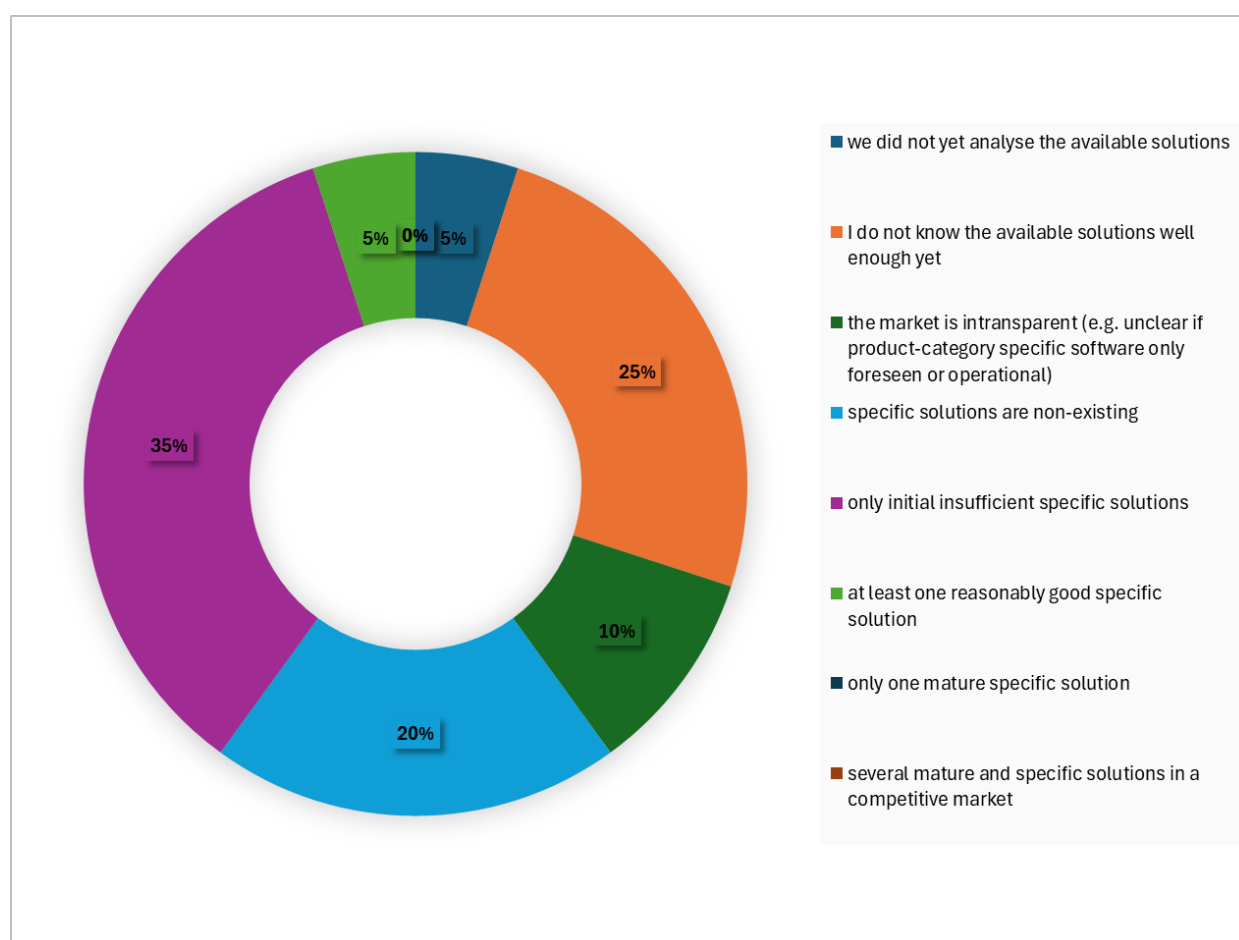
A broad legal landscape is cited - ESPR / Regulation (EU) 2024/1781, Battery Regulation, CSRD, Extended Producer Responsibility, Waste/Circular Economy Acts, CPR (construction), REACH and chemicals-related regimes (including SCIP), packaging rules, EU Taxonomy, classification & labelling, supply-chain acts, textile strategy. Mentions also include national product registers (Sweden, Denmark, Norway) and private/sector schemes (e.g., FABRIC). The pattern shows EU acts dominate strategic planning, with sectoral instruments providing product-group specificity. No single non-EU driver dominates.

2.2.6 Q12. ARE YOU AWARE OF ANY SPECIFIC CLASSIFICATIONS, ONTOLOGIES, VOCABULARIES, OR FILES/DATABASES OF RELEVANT STANDARDS, TEST PROTOCOLS,

OR POLICIES FOR YOUR PRODUCT CATEGORY OR SECTOR? PLEASE PROVIDE NAME AND IDEALLY A WEBLINK.

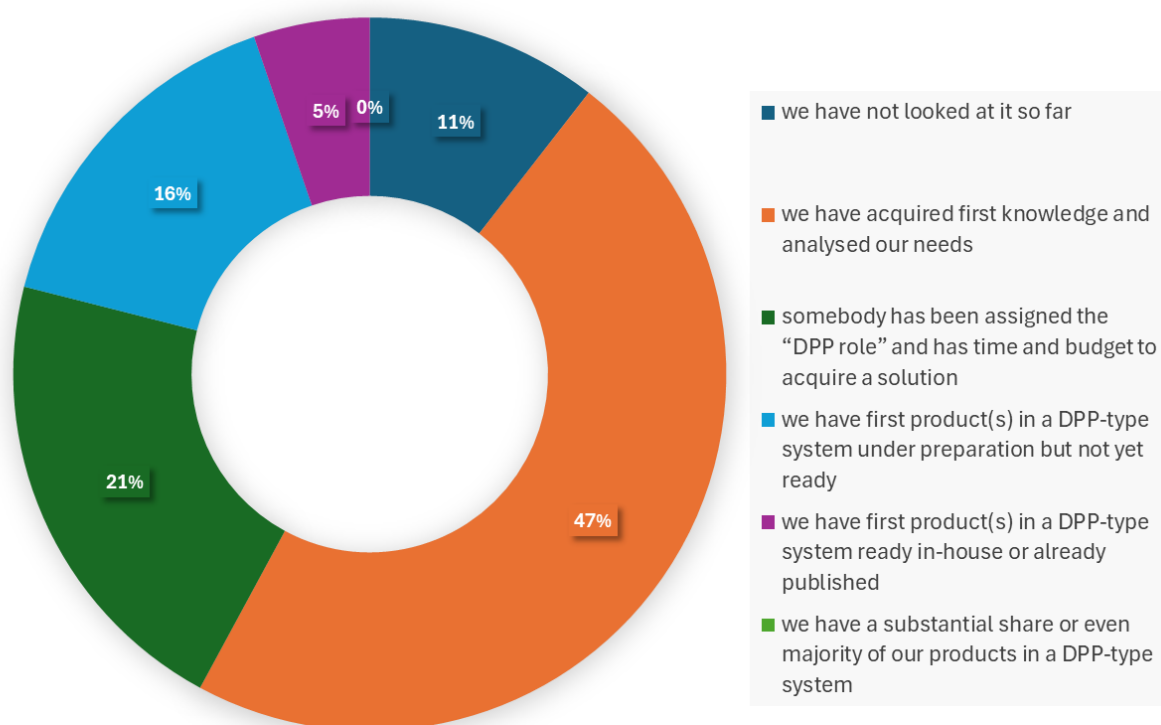
Core references include ISO 14025 and EN 15804 (EPDs/construction), rail & BIM standards (e.g., EN 13674-1), IPC standards and BOMcheck (chemical compliance), GS1 GPC and tariff/HS codes for identity/traceability, Catena-X and WBCSD-PACT for carbon-footprint exchange, Gaia-X and Asset Administration Shell (AAS) for data spaces/industry 4.0, and device identifiers in electronics (GSMA/IMEI). ChemX is flagged as an in-progress consortium; smartphone-related standards and Prolog are mentioned. Overall, respondents converge on using existing open/international frameworks as anchors for DPP scope semantics and machine-readable event data.

2.2.7 Q13. HOW MATURE DO YOU CONSIDER DPP SOFTWARE/PLATFORM SOLUTIONS AS TO ANY FULLY OPERATIONAL AND OFFERED FOR YOUR PRODUCTS, IF AVAILABLE?



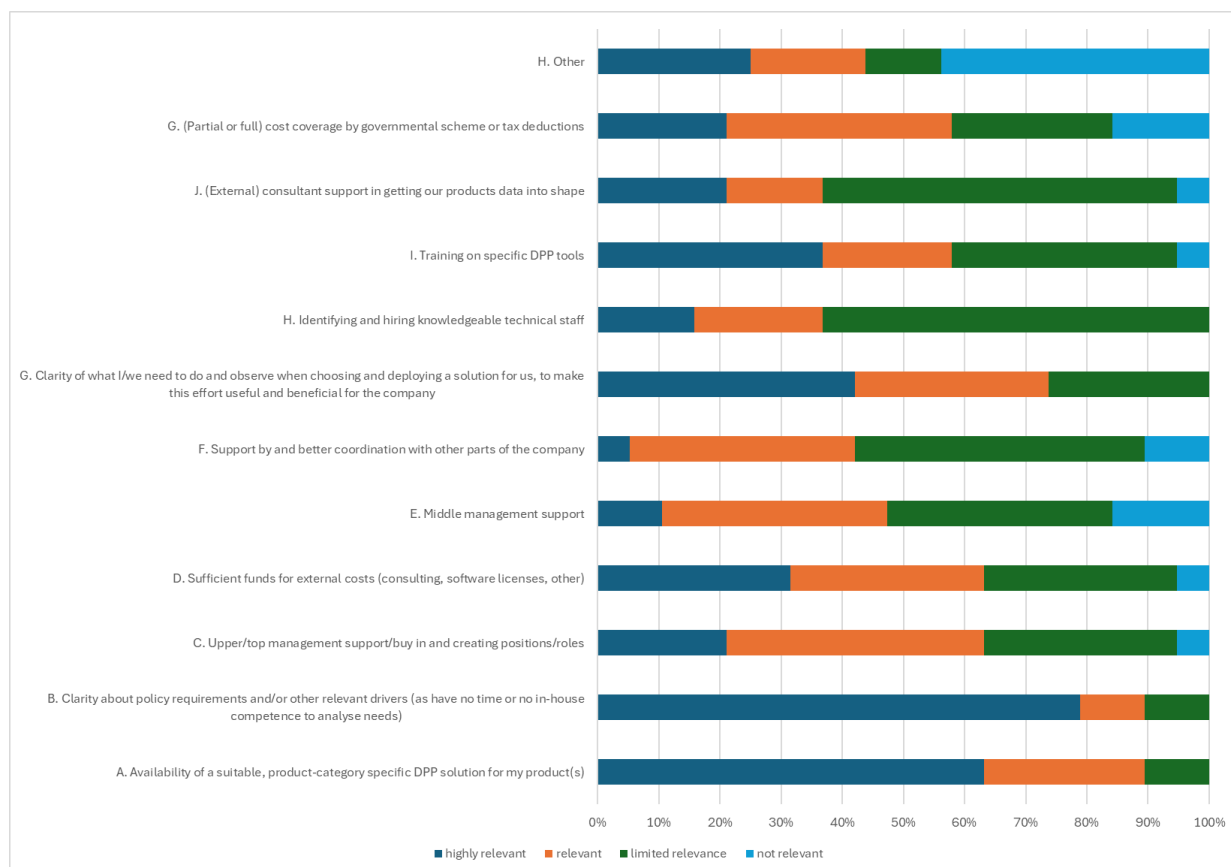
A very heterogeneous situation is visible, predominantly showing an emerging market situation: For only one respondent (5%) “at least one reasonably good specific solution” is available, for 7 others “Only initial insufficient specific solutions” were reported, and for the other 12 respondents no solution is existing or the situation is unknown.

2.2.8 Q14. HOW READY IS YOUR ORGANISATION WITH A DPP SOLUTION FOR YOUR PRODUCTS?



Consistently with the preceding question, the situation "on the ground" shows only 1 respondent who has "first product(s) in a DPP-type system, all others have nothing, or (3 respondents) have something under preparation. However, it is to be highlighted that the majority of members are not in the priority list of the ESPR. Moreover, it can be assumed that companies that have a perfectly working solution in place would rather not have joined this group (while this last-named situation is known to be rather the exception).

2.2.9 Q15. WHAT DO YOU LACK AND WOULD NEED FOR SUPPORTING YOUR ORGANISATION'S EFFORT TO BUILD UP A DPP SYSTEM ON YOUR PRODUCTS? (MATCHING)



Aside answers that echo the outcome of the preceding answers, particularly about lack of product-category specific DPP solutions on the market, which are named 90% of the participants as highly relevant or relevant, here in addition a lack of clarity about policy requirements and other relevant drivers is highlighted. This last-named issue is also linked to lack of time or competence in-house to analyse details. Then, interestingly in view of the high policy relevance and anticipated business benefits of sound DPP solutions, more than half of the respondents name also lack of upper and top management support and sufficient funds as relevant or highly relevant. Then, also more than 70% name as irrelevant or relevant a lack of clarity of what exactly will be needed. Several other issues, however, also still listed as highly relevant or relevant by a substantial number of participants, again pointing at an overall challenging situation.

2.2.10 Q17. PLEASE NAME THE SPECIFIC “OTHER” KIND OF SUPPORT YOU LACK, IF ANY, AS IDENTIFIED BY YOU IN THE PRECEDING QUESTIONS 15/16

- Timeliness and clarity: ATEX standards lag (4–5 years after tech shifts such as LEDs); need up-to-date, clear system requirements, tutorials, Q&A tools, and association focal points.
- Harmonisation and funding: Effective DPPs require cross-sector content/technology harmonisation; public funding should back consortia and test environments to automate exchange and validate life-cycle data flows.
- Single semantic framework: A horizontal technical/semantic backbone to meet all EU DPP-related legal requirements is requested; indicators must be consistent to avoid parallel tracks.
- Data sovereignty and templates: Preserve industrial data ownership/control; provide standardised templates (akin to IPC) and clarify mandatory fields/timelines so businesses can prepare.
- Overall: A call for harmonised rules, practical tooling and SME-oriented support, with legal clarity on scope and timing.

2.2.11 Q18. HIGH-PRIORITY TOPICS FOR EWG5 WORKING MEETINGS/SURVEYS BEYOND THOSE ALREADY DERIVED ABOVE

Themes (several times): Document and analyse pilot results (successes and failures); prioritise cross-sector harmonisation and clear processes; leverage test environments/prototypes to validate hypotheses and expose gaps (anticipating JTC24 DPP Systems by end-2025). Ensure interoperability of ESPR-driven DPPs with other EU frameworks; adapt to the regulatory context shifting a voluntary market to harmonised practice; draw lessons from SCIP to avoid repeating pitfalls; set clear product-group timelines; define robust data models; review present frameworks and recommend future-proof standards.

2.2.12 Q19. NICE-TO-HAVE TOPICS FOR EWG5 WORKING MEETINGS/SURVEYS

The following are suggestions that have been taken into account when planning and scoping the subsequent working meeting of 27 June 2025:

Only two responses: (i) map/profile all DPP initiatives, connect stakeholders and foster mutual awareness; (ii) guidance for business on operator obligations, early high-level architecture and product-group/classification decisions to clarify what economic operators must implement.

2.2.13 Q20. ADDITIONAL INFORMATION

Summary (several times): DPP standards should be future-proof and innovation-friendly, based on open, international and interoperable frameworks, and affordable - particularly for SMEs. Architecturally, decentralised systems are preferred to preserve data accuracy, security and confidentiality, while remaining globally adoptable to avoid trade friction and to align with other EU reporting obligations. Across product categories, respondents stress the balance between data quantity and quality as essential for credible life-cycle management at product level.

3 PART 2: NON-PRODUCING INDUSTRY PARTICIPANTS (CONSULTANTS, RESEARCHERS, GOVERNMENTAL AND OTHER ORGANISATIONS)

3.1 EXECUTIVE & LEGISLATOR SUMMARY

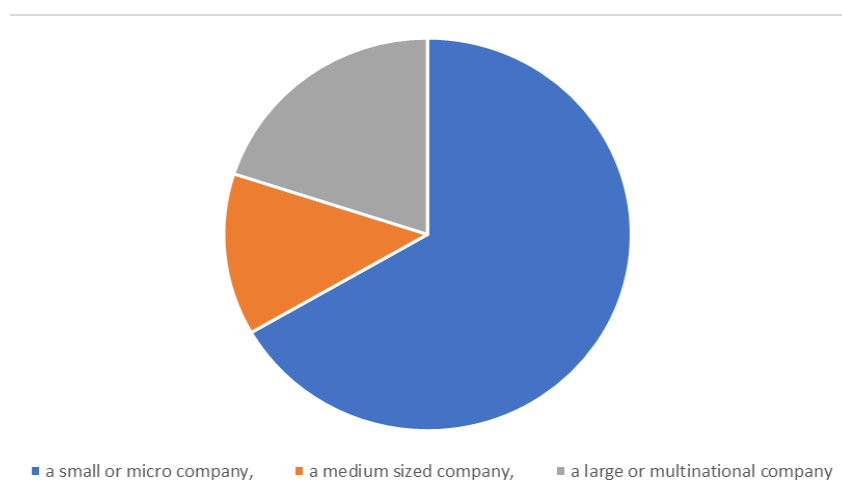
Executive summary: Supplier-data gaps are the dominant pain point also reported by this subgroup of EWG5 members (~80% key/relevant). EU legislation (ESPR, Battery Regulation, etc.) is highly relevant (>80%); non-EU laws are less so (~25% highly relevant; ~15% relevant), again. Solution maturity remains uneven (only a minority cite mature/specific solutions; >50% report no specific solution/intransparent market/“don’t know”), albeit more positive than directly reported by producing industry. Organisational readiness across the respondents clients is mixed but – naturally – much better than reported by producing industry in Part A of this survey/report: the high share of DPP Service providers in this present group explains this difference (~25% already have first products in DPP-type systems; ~33% preparing; ~40% not yet or unknown). Priorities/challenges named, partly directed at industry, partly legislator or standardisation: Tackle supplier data availability (including higher-tier), interoperability across ERP/PIM/PLM/LCA, trust/verification, and consumer-facing comparability baselines. Anchor DPP content in recognised standards and vocabularies (ISO/IEC 17000 family; ISO 14021; ISO 14040/44; PEF; GS1/EPCIS; UN/CEFACT UNTP; sector catalogues/schemes such as ECLASS, BIFMA, OEKO-TEX, GRS/OCS, EU Ecolabel; data-space protocols). Provide SME-oriented funding and capacity-building; clarify legal obligations, storage and pricing; resource dedicated teams; foster a culture that sees sustainability as value creation. Set harmonised, machine-readable conformity-assessment data; baseline product-group standards and third-party verification; define EU-repository datasets; address scalability/security and operator obligations; fund pilots, measure ROI, and deliver education. Breadth across the very diverse sectors represented suggests transferability of these insights, while the sample size is small; success of DPP was moreover argued to depend on a lean mandatory scope and proportionate/limited SME burdens.

Policy takeaway: Pair narrow, high-value mandatory data with robust interoperability/verification and SME support to accelerate credible, cross-sector DPP adoption.

3.2 SUMMARY OF REPLIES, ANONYMISED (NUMBERS REFER TO THE ORIGINAL QUESTION NUMBER)

30 survey participants listed as Consultants, non-producing industry, governmental bodies, research bodies and some others.

Organisation size:



Note: for information about the kind of the industries for which the survey part 2 has been answered, please see question 20 here more below.

3.2.1 Q7&8. WHICH PAIN POINTS DO YOU HAVE FOR YOUR PRODUCTS' IN-HOUSE AND SUPPLY-CHAIN SUSTAINABILITY AND COMPLIANCE DATA (DATA IN OR RELATED TO DPP, PIM, PLM/PDM, ERP, EPDS AND LCA/PEF, I.E. ALSO BEYOND ANY SPECIFIC DPP)?

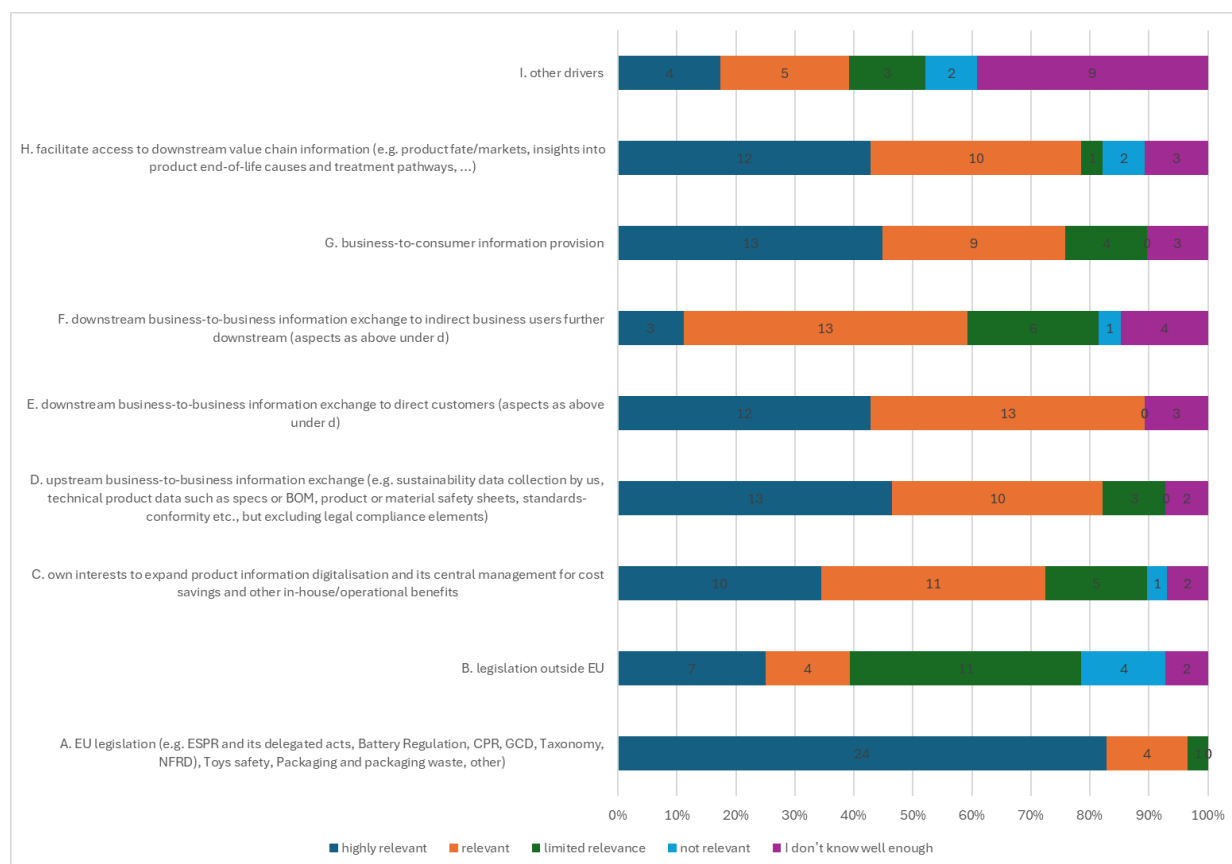


A differentiated picture of issues is the outcome on this question (similar as for producing industry, interestingly, while overall rather more often naming issues to be key or relevant pain points): also here, the most challenging issue was “Suppliers: principle data availability issues, and data gaps at suppliers” that was named a key or relevant pain point for however “only” 80% of the respondents. Overall, most potential issues are a relevant or key pain point for the majority of respondents (only four were between 40 and 50%) what signals a wide range of challenges. It has to be kept in mind that the participants of this survey variant were asked to report on issues occurring at their customers from producing industries. So, on the one hand side this is an indirect, filtered view, on the other hand expected to be similar in outcome to the survey directly filled in by producing industry, what it indeed is.

3.2.2 Q9. PLEASE GIVE DETAILS/CLARIFICATIONS/HIGHLIGHTS ON ANY OF THE ABOVE REPLIES UNDER QUESTIONS 7 AND 8

- Supplier data availability and completeness - several times: Difficulty obtaining accurate and complete data from suppliers, including material origins, chemicals, and energy use; higher-tier transparency is limited. Reluctance to share due to competitiveness/security concerns and reciprocity expectations.
- Interoperability and data exchange - several times: Inefficient integration across ERP, PIM, PLM and LCA tools; duplication and inconsistency; heavy spreadsheet use; desire for implementable interoperability standards.
- Trust, verification and security - several times: Risk of greenwashing and counterfeits; calls for verifiable credentials and validation for business/government users; strong data security.
- Consumer access and information adequacy - several times (with some opposing views): Expectation of seamless access (QR/app) and minimum comparable baselines; also “no issues” reported by some; concerns about both overload and insufficiency.

3.2.3 Q10. RELEVANCE OF DRIVERS FOR DPP-TYPE PRODUCT INFORMATION IN YOUR INDUSTRY



The survey results from 30 other (non-producing industry) participants revealed that EU legislation (such as ESPR, Battery Regulation, and others) is viewed as highly relevant by over 80% of participants, almost identical to the producing industry results. Legislation outside the EU is considered highly relevant by a bit less (25%, compared to 30% for producing industry) and relevant by “only” another 15% (vs. 30%). Business-to-consumer information provision and - in contrast to producing industry speaking from themselves - upstream and downstream business-to-business information exchanges were considered also to be highly relevant or relevant by jointly between 60 to 90%, depending on the specific aspect. Additionally, facilitating access to downstream value chain information was rated as of overall noteworthy relevance, and there are little other drivers, even less than what producing industry had reported.

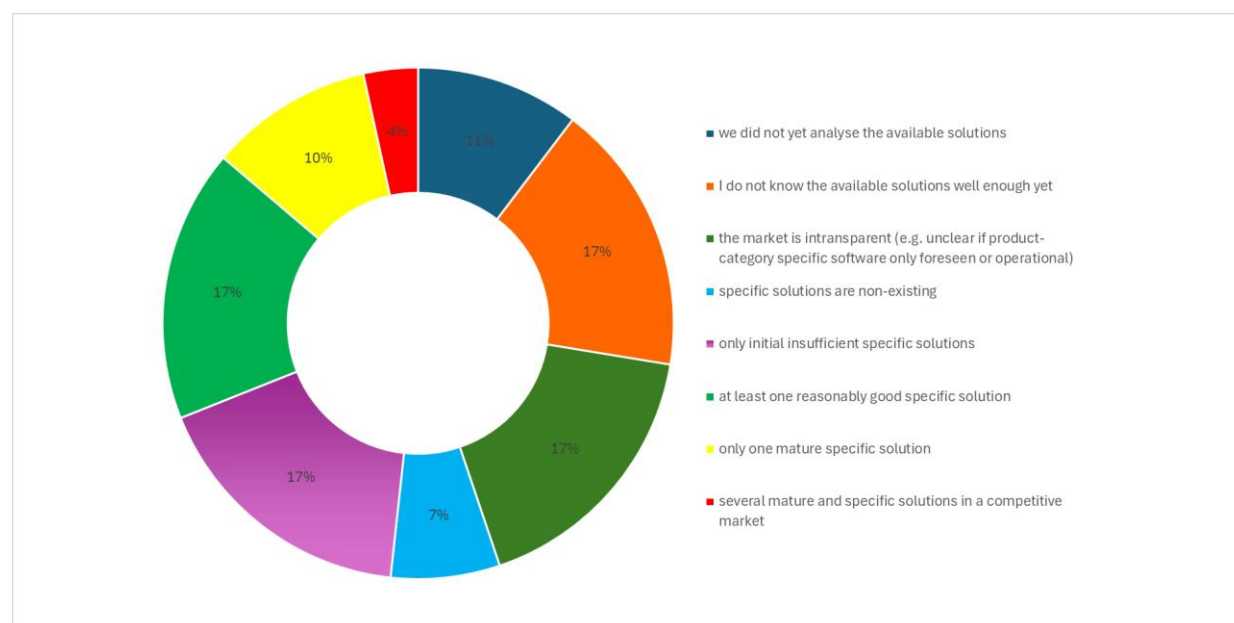
3.2.4 Q11. PLEASE NAME THE SPECIFIC LEGISLATION(S) AND/OR OTHER BUSINESS AND POLICY DRIVER(S)/SCHEME(S) – FREE TEXT

Various mentions of specific legislation and business policy drivers. The overall legislation and business policies named are: Ecodesign for Sustainable Products Regulation (ESPR), Corporate Sustainability Reporting Directive (CSRD), EU Battery Regulation and associated secondary legislation, EU Taxonomy Regulation, Circular economy, Product Environmental Footprint (PEF) methodology, Textile Labelling Regulation. From other countries such as U.S. Consumer Product Safety Improvement Act (CPSIA), APAC Chemical Compliance Regulations (e.g., China REACH), State-specific EPR schemes globally (e.g., US, AU, JP), U.S. Clean Vehicle Tax Credit, ISO 590040.

3.2.5 Q12. ARE YOU AWARE OF ANY SPECIFIC CLASSIFICATIONS, ONTOLOGIES, VOCABULARIES, OR FILES/DATABASES OF RELEVANT STANDARDS, TEST PROTOCOLS, OR POLICIES FOR YOUR PRODUCT CATEGORY OR SECTOR THAT WOULD HELP TO INCREASE THE MEANINGFULNESS OF THE DPP SCOPE?

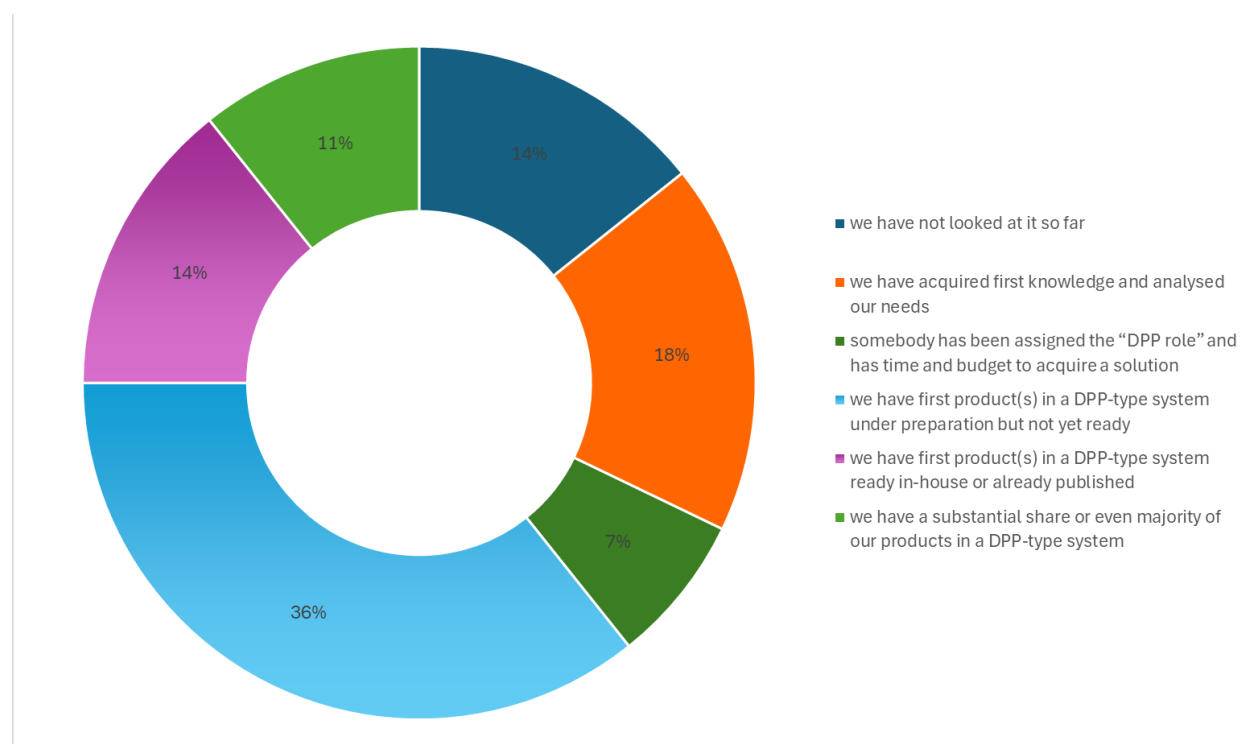
- Conformity assessment scaffolding - several times: ISO/IEC 17000 family for procedures, vocabulary and minimum content of certificates, inspection and test reports; proposed as baseline for machine-readable conformity data in DPPs.
- Product sustainability methods - several times: ISO 14021 (environmental claims), ISO 14040/44 (LCA) and PEF method for comparability and to avoid duplicate methods.
- Identification and traceability - several times: GS1 identifiers and EPCIS for product identity/event data; Open Apparel Registry for supplier facility identity (apparel); UN/CEFACT UNTP Core and DPP vocabularies.
- Domain/sector catalogues - individual to several: ECLASS-14; EN ISO 23387/23386, ISO 22057 (construction); furniture standards (CEN/TC 207, EU Ecolabel furniture, ANSI/BIFMA e3); apparel: Textile Exchange GRS/OCS, OEKO-TEX®, Higg Index; automotive aftermarket associations; International Data Spaces (dataspace protocol); Open3P; GS1 EPCIS.
- Governance and security - individual to several: ISO/IEC 27001 (Information Security Management), ISO/IEC 38500 (IT governance).

3.2.6 Q13. HOW MATURE DO YOU CONSIDER DPP SOFTWARE/PLATFORM SOLUTIONS AS TO ANY FULLY OPERATIONAL AND OFFERED FOR YOUR PRODUCTS, IF AVAILABLE?



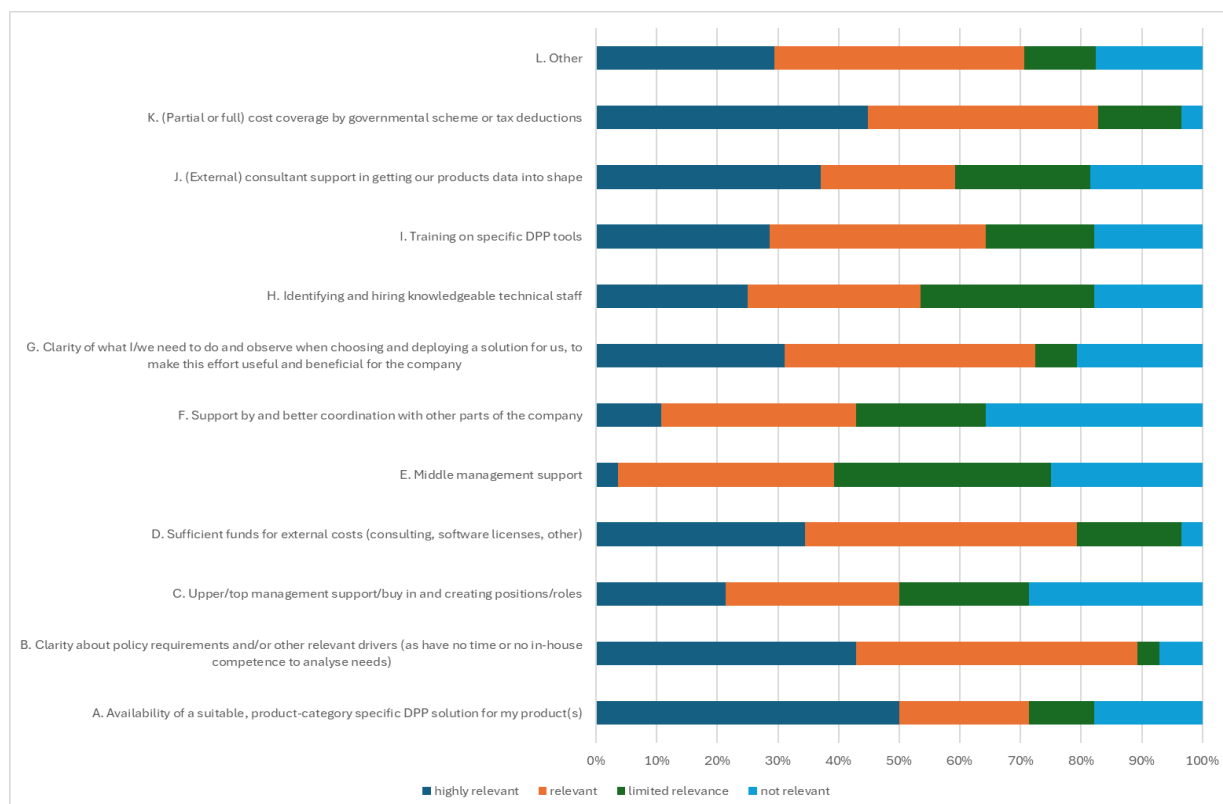
A very heterogeneous situation is visible, predominantly showing – while it is to be noted that many experts are from DPP service providers – a more advanced market situation than what producing industry had reported themselves: For one respondent (4%) “several mature and specific solutions” were selected, 3 others (10%) said there would be one mature specific solution, and 6 (17%) stated that “at least one reasonably good specific solutions” would be there. Still, a bit more than half said that there was no specific solution or the market would be intransparent or that did not know.

3.2.7 Q14. HOW READY IS YOUR ORGANISATION WITH A DPP SOLUTION FOR YOUR PRODUCTS?



Almost a quarter of participants stated that their customers would have first products or even a substantial share/majority of products in a DPP-type system available. About a third report that first products are under preparation for their customers (but not yet online), and almost 40% have not (yet) anything in place or under preparation or don't know (this is mainly from specific providers or components only, and governmental bodies that are grouped into this second subgroup of respondents).

3.2.8 Q15. WHAT DO YOU LACK AND WOULD NEED FOR SUPPORTING YOUR ORGANISATION'S EFFORT TO BUILD UP A DPP SYSTEM ON YOUR PRODUCTS?



Overall, a similar pattern of requested support emerges as from the sub-survey directly in producing industry, albeit clarity about political requirements – while still overall the most critical aspect – is seen somewhat less severe. The other aspects are seen similar or even stronger overall to requiring support.

3.2.9 Q17. PLEASE NAME THE SPECIFIC “OTHER” KIND OF SUPPORT YOU LACK, IF ANY, AS IDENTIFIED IN THE PRECEDING QUESTIONS 15 AND 16

- Resource allocation - several times: Lack of dedicated teams slows DPP work relative to need
- SME (Small and Medium-Sized Enterprises) support - several times: Funding and capability-building (notably for CO₂/product data) are needed; maturity varies widely.
- Legal clarity and costs - several times: Clarify obligations, scope, long-term data storage, and service-provider pricing.
- Mindset/culture - individual: Shift needed to view sustainability as value creation rather than only regulatory burden; aligned with EU net-zero 2050 context.

3.2.10 Q18. TOPICS (HIGH PRIORITY) FOR EWG5 WORKING MEETINGS OR SURVEYS BEYOND THOSE ALREADY DERIVED ABOVE

- Machine-readable conformity assessment - several times: Harmonised data/formatting so results are unambiguously interpretable.
- Baseline standards and trust - several times: Consistent, product-group baselines; third-party verification protocols.
- EU data governance - several times: Define the EU repository’s required datasets (“digital twin”) to enable cross-industry flow.

- Implementation feasibility - several times: Address scalability, security, and clear obligations for economic operators.

3.2.11 Q19. ADDITIONAL TOPICS FOR EWG5 WORKING MEETINGS OR SURVEYS

The following are suggestions that have been taken into account when planning and scoping the subsequent working meeting of 27 June 2025:

- Funding and incentives for SMEs; regional regulatory variances and market expectations; cost–benefit and ROI evidence.
- Ease of implementation for non-EU manufacturers; data-exchange formats across industries; adaptability to upcoming technical standards; avoid vendor lock-in.
- Recyclability criteria (preference for clear binary classification); readiness for environmental/CO₂ footprints; emerging technologies for material circularity tracking.
- Stakeholder roles and responsibilities; structured dialogue across value cycles; pilot “lighthouse” feedback; educational resources (videos, DPP framework/info/data models).

3.2.12 Q20. INSIGHTS INTO PRODUCING INDUSTRY (WORKED-WITH SECTORS/PRODUCTS; BE AS NARROW AS POSSIBLE)

- Breadth of sectors - several times (breadth rather than dominance): textiles/apparel (incl. licensed products), furniture (indoor/outdoor), electronics/white goods, pharmaceuticals (traceability), construction products/materials, batteries incl. EV, automotive aftermarket and garage equipment, packaging, food & beverage (malting, aquaculture, dairy, distilleries), leather/aeronautics, steel/hydrogen projects, sports/e-bikes, ceramics, detergents/personal care/home care, power tools, adhesives, infrastructure, digital/tourism/health industries.
- Implication - individual: Pain points and solution patterns appear cross-sectoral; prioritised actions from Q18–19 likely generalise.

3.2.13 Q21. ADDITIONAL (GENERAL REFLECTIONS)

- Several independent responses converge on the balance of mandatory/optional fields and SME burden.
- Governance focus - individual: Success depends on careful delegated acts under the Ecodesign for Sustainable Products Regulation (ESPR); balance transparency with feasibility for SMEs.
- Mandatory vs optional - several times: Small, well-defined mandatory key performance indicators (KPIs) outperform large, lower-value reporting sets.
- Role statements - individual: Public environmental organisation stresses neutrality (not a producer or DPP provider) and cross-industry engagement.

4 PART 3 - LIVE SURVEY DURING EWG5 “OTHER INDUSTRIES” WORKING MEETING OF 27 JUNE 2025

Participants were asked within 15 minutes per question to please state needs, observations/concerns and/or solutions/ideas.

From the 52 EWG5 meeting participants, 11 to 20 answered to the individual five questions, mostly the same participants across the questions. They range from business associations, to individual producing companies, research bodies, other types, and consultants.

4.1 EXECUTIVE & LEGISLATOR SUMMARY

Executive summary: Stakeholder input across the five topics converges on expressing the need for (and/or express related concerns and/or provide related ideas and suggested solutions):

- harmonised open standards and technical interoperability;
- clear separation of mandatory vs. optional data;
- SME support;
- an authoritative EU-federated registry with unique identifiers;
- a proportionate verification framework;
- human-centred user interface/experience (icon, QR code/NFC);
- multilingual accessibility;
- alignment across ESPR, CPR, REACH, EPR, CSRD and sectoral regimes (e.g. ATEX/IECEx);
- international cross-recognition;
- and: a future-proof architecture avoiding vendor lock-in.

Policy takeaway: Legislators should embed legal equivalence of DPP to current declarations, fund SME tooling and pilots, mandate UID/data-carrier standards, enable CAB/AB-linked attestations and ensure authorities’ digital readiness with privacy-preserving access. The EU should avoid overspecification and universal audits that add cost without improving safety or trust.

5 ANONYMOUS SUMMARIES, PER TOPIC/QUESTION:

5.1 Q1. COMPLIANCE-RELATED BUSINESS DRIVERS TO ADOPT DPPS

Concerns / Observations²

[Several times = more than one reply] SME readiness and supplier reluctance to share data amid high data-granularity and complex, multi-tier supply chains (e.g. textiles).

[Several times] Fragmentation across ESPR/CPR/REACH/EPR and misaligned timelines, national-level inconsistencies; also, authorities still are allowed to request paper formats, even if DPP implemented.

² Replies are grouped along the three originally asked for themes Concerns & Observations, Needs and Solutions/Ideas, also where they were not explicitly labelled as such.

[Several times] Need to clearly separate legally mandatory vs. voluntary data in the DPP to ensure transparency and comprehensibility.

[Several times] Burden on importers, and challenges harvesting data from extra-EU suppliers; questions around whether DPP alone will suffice as vehicle for demonstrating compliance.

[Individual = one reply³] Unclear referencing/hosting of certificates, test reports and accreditation status (Conformity Assessment Bodies (CAB) and Accreditation Bodies (AB) vs. ABs alone vs. economic operators), including “flexible accreditations”.

[Individual] Sector-specific integration questions (e.g. ATEX/IECEx) and whether all products fall into scope by 2030; UK activities aligning with EU work.

Needs

[Several times] Regulatory alignment of data points and implementation timelines across EU acts and with any registry.

[Several times] Simple DPP software and training, plus sectoral guidelines for long-life industrial products and sensitive domains (e.g. ATEX/IECEx).

[Several times] Interoperability with ERP/CMMS/IIoT and other platforms; data must be immutable yet updatable to reflect real-world changes.

[Individual] Reduce double-work by reusing DPP data for CSRD and related reporting.

Solutions / Ideas

[Several times] Common DPP templates and open APIs plus legal logic; start with key products; joint pilots and sandboxes with authorities.

[Several times] Publish sectoral guidance; map mandatory vs. optional fields; adopt open standards to avoid provider lock-in.

[Individual] Embed REACH/RoHS declarations and safe-use information; establish an EU-sponsored federated DPP registry that is recognised as authoritative.

[Individual] Treat DPP as legal equivalent to declarations of conformity; fund open-source tools for SMEs; standardise data carriers (Automatic Identification and Data Capture (AIDC) part and a Human Readable Interpretation (HRI)).

5.2 Q2. NON-COMPLIANCE DRIVERS / INCENTIVES TO ADOPT DPP-TYPE SOLUTIONS

Concerns / Observations

[Several times] Need for clear ROI beyond compliance; fragmentation across pilots/ sectors/ platforms; significant effort to determine and input required data, often pushed onto suppliers.

[Individual] Voluntary adoption without regulation likely limited; verification quality is a concern.

[Individual] Uncertainty over scope and phasing (all products vs. initial pilots).

³ The individual replies are (also) reworded, as the input often needed formulation as complete sentence or at least clarification, and to correct grammar and spelling, as to be expected from a live survey.

Needs

[Several times] Digitalisation of certification/technical documents and usage tracking; level playing field via verified data; proactive promotion of DPP benefits.

[Several times] Customer and investor demand for verified claims, operational efficiency and risk mitigation, and credible brand positioning.

[Individual] Rules for additional (beyond mandatory) data and visibility rights; domain-specific ontologies and standardised forms, ideally via a central EU portal.

Solutions / Ideas

[Several times] Recognise DPPs in green finance criteria and public procurement; develop marketplaces/registries on open standards; token- or fiscal-based rewards for high-quality open DPPs.

[Individual] FAIR data principles met to enable meta-data services and new businesses; include EPD-type information in a voluntary track; add technical data sheets, where useful.

[Several times] Develop domain/market-specific ontologies with standardised forms and a central EU web portal for partner input (see also “Needs” above).

5.3 Q3. CONSUMER COMMUNICATION AND EDUCATION ON DPP

Concerns / Observations

[Predominantly = more than half of the respondents] Risk of information overload and low engagement; data must be comprehensible, transparent and clearly marked as self-declared vs. verified; need for a unified communication approach.

[Several times] Accessibility and inclusivity concerns (language, disabilities, digital divide); proposal to always include English alongside local languages.

[Several times] Consumers often ignore lengthy instructions; standard icons and consistent formats are needed to meet expectations.

[Individual] Complex access-rights when final consumers are not direct customers; how to manage UID and trace-back consistently?

Needs

[Several times] A standard DPP icon alongside QR/NFC, so users recognise and access DPPs quickly across channels (POS, repair, disposal).

[Several times] Human-centered language, UX/UI patterns and tiered views (quick summary to full details); feedback loops to improve usefulness.

[Individual] EU-level support, projects and funding for education and public-interest communication, not only company-led outreach.

Solutions / Ideas

[Several times] Pan-EU DPP label and iconography; simple infographics, short videos and in-store prompts; retailer/brand engagement for education.

[Several times] Co-design with repair/maker communities; standardise QR/NFC interactions and summary dashboards to avoid overload.

[Individual] Tokenised incentives for scanning/engagement; privacy-preserving design using UID providers and B2B RFID vs. B2C QR/NFC patterns.

5.4 Q4. TESTING & VERIFICATION; AUTHENTICATION & DATA SECURITY; TRACING/TRACKING FOR TRUST

Concerns / Observations

[Predominantly] Without reliable verification layers, DPPs risk greenwashing; comparability must be ensured (e.g. Environmental Footprint (EF) vs. Environmental Product Declaration (EPD) rules such as mass balancing).

[Several times] Accreditation recognition outside the EU (e.g. International Laboratory Accreditation Cooperation (ILAC) / International Accreditation Forum (IAF)) and clear acceptance criteria; balancing privacy with traceability and contactability.

[Several times] Governance of edit/update rights and stewardship; authorities' access and long-term availability obligations.

[Individual] Universal third-party checks for all data points are disproportionate and add cost without improving product safety; caution on recalls/retroactive updates undermining trust.

Needs

[Several times] EU-level third-party verification frameworks; digital signatures; secure product identification binding physical to digital; interoperable traceability protocols.

[Individual] Guidance for self-assessments and lists of verification bodies; enable competent users to contribute data; consider satellite data for validation.

Solutions / Ideas

[Several times] Cryptographically link attestations (e.g. via an EU Business Wallet); designate bodies for high-impact claims; use secure QR/NFC/RFID with cryptographic keys.

[Several times] Tamper-proof audit trails and privacy-preserving identifiers (e.g. DIDs); proxy contact services to protect addresses while preserving traceability.

[Several times] APIs to ERP/PLM with zero-knowledge where needed; publish product recall information within DPPs.

5.5 Q5. FUTURE-PROOFING/ADAPTABILITY AND INTERNATIONAL ALIGNMENT

Concerns / Observations

[Predominantly] Avoid vendor lock-in; base DPPs on open standards (e.g. GS1, ISO/IEC, W3C, DIDs) and ensure data can flow between systems; prefer distributed architectures.

[Several times] Pursue international alignment and cross-recognition; avoid multiple registries per jurisdiction; manage mass-download risks and protect data sovereignty/IP.

[Individual] Integrate sector-specific regimes (e.g. ATEX/IECEx) and align with Building Information Modelling (BIM) for construction-related products; ensure long-lifecycle traceability.

Needs

[Several times] Guidelines and quality criteria for DPP software; roles for national compliance authorities and accreditation bodies in validation/approval.

Solutions / Ideas

[Several times] Standardisation via CENELEC → ISO pathway; regional data nodes/clearinghouses to translate/protect data, while enabling exchange.

[Several times] Cross-recognition agreements among regulatory regimes (e.g. EU - non-EU); provider criteria covering backward compatibility, AI/ML integration and decentralised storage.

[Individual] One global registry vision with rate-limiting and privacy-preserving access; central UID provider for consistent trace-back.