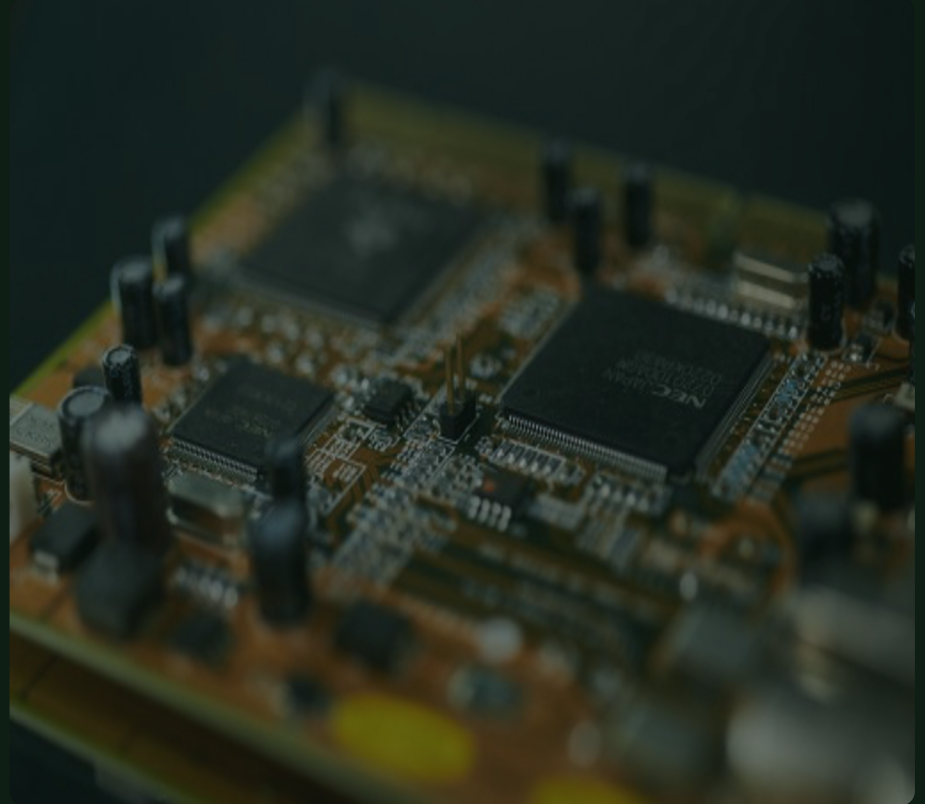


The New Ecodesign Regulation & Digital Product Passports – *What the electronics industry needs to know*

October 2024

Anthesis 



Webinar

Speaker



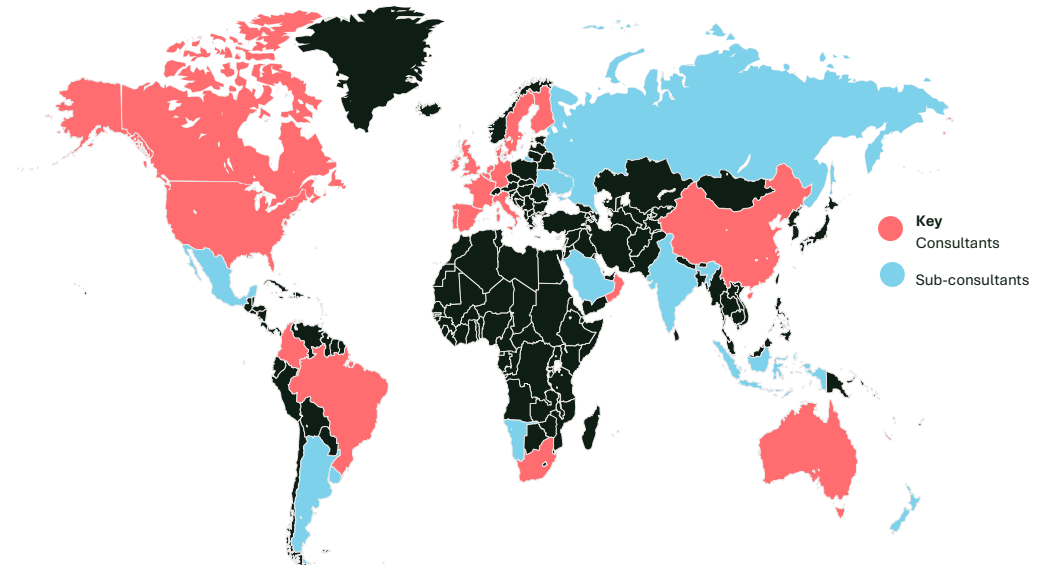
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➔ North America

Jessica is an experienced product strategy advisor with a demonstrated history of directing global organizations on a multitude of sustainability and organizational topics. Her considerable experience in Design for Sustainability program development has consistently delivered impactful results. Holding a MSc in Sustainable Engineering and having completed post-graduate work in Product Management, Agile product design, and Six Sigma, she brings a comprehensive skill set to drive strategic initiatives and sustainable growth.

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Agenda

Today we are going to address the following questions:

1. What is the Ecodesign for Sustainable Products Regulation (ESPR)?
2. How is the ESPR different from the previous eco-design directive?
3. What are the priority products under ESPR?
4. What are the product performance requirements under ESPR?
5. What are the product information requirements under ESPR?
6. How will the legislative process work under ESPR?
7. Who oversees the ESPR?
8. What are the Digital Product Passports (DPP) & how do they work?
9. What are the value chain impacts from ESPR?
10. How can companies prepare?



Poll 1: Where are you in your ESPR journey?

Level 1	Learning	Just learning what the ESPR is
Level 2	Awareness building	Building internal awareness of the ESPR
Level 3	Assessing	In the process of assessing organisational readiness
Level 4	Strategizing	Developing a strategy and action plan
Level 5	Integrating	Integrating the strategy and action plan into business processes, roles, & responsibilities (i.e., product development, sourcing, R&D, labelling, etc.)
Level 6	Embedding	Assessing the sustainability performance of key products and rolling out digital product passports
Level 7	Optimization	Have established future-proof ecodesign programs and implemented digital product passports

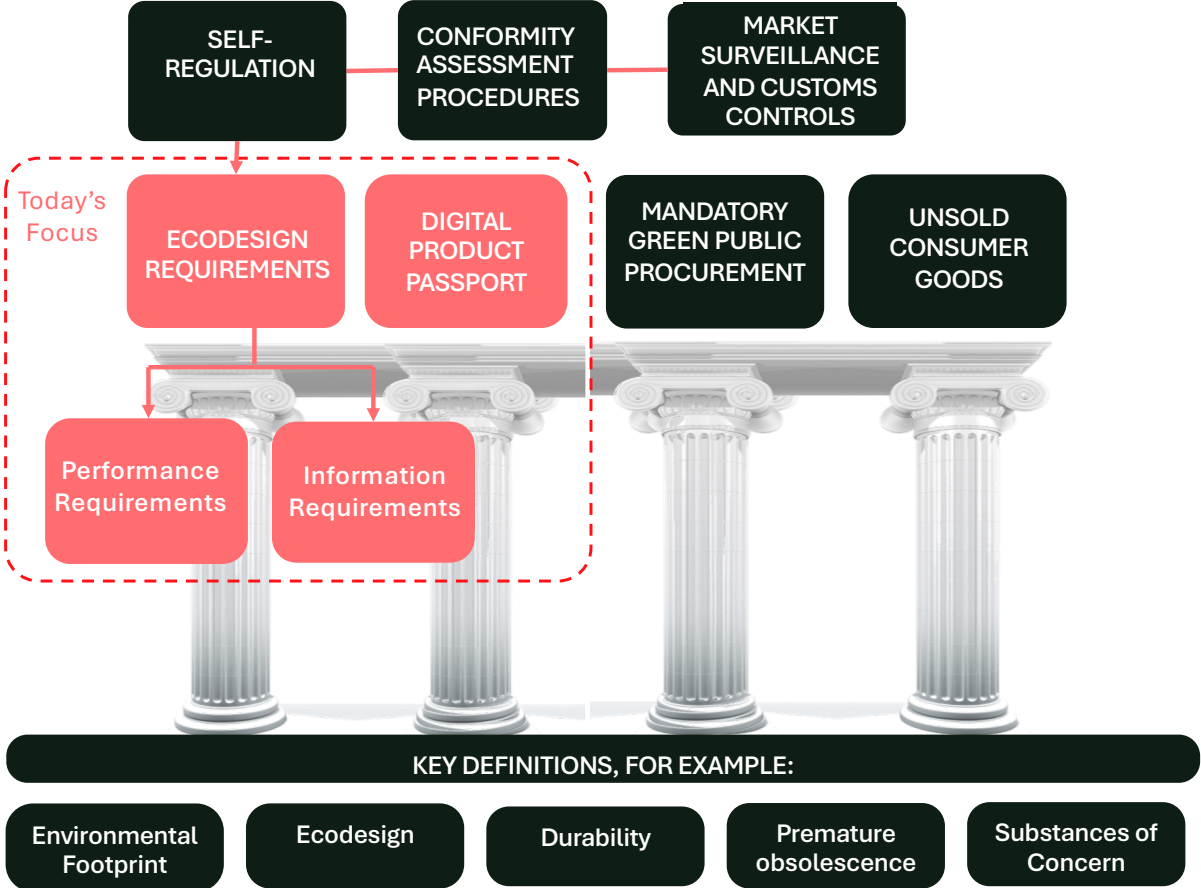


What is the ESPR?

- The **Ecodesign for Sustainable Products Regulation (ESPR)** is a *framework legislation* intended to **ensure sustainable products are the 'norm'** in the European Union (EU).
- The ESPR entered into force **July 18th, 2024**.
- The ESPR will be further implemented through **delegated acts**, which will specify detailed requirements for different product groups over time.



Key Pillars



Overview

The ESPR replaces the Ecodesign Directive 2009/123/EC and introduces more extensive requirements across more product groups.

Ecodesign Directive 2009/123			Ecodesign for Sustainable Products Regulation (ESPR)			
01	Scope	Energy related products.	→	01	Scope	Covers wider range of products, including textiles, furniture, paints, ICT & electronics, etc.
02	Performance Requirements	Performance requirements focus on energy efficiency.	→	02	Performance Requirements	Broader set of performance requirements including energy efficiency, durability, recyclability, end of life - among others.
03	Information Requirements	Regulation (EU) 2017/1369 set the framework for energy labelling.	→	03	Information Requirements	Economic operators will provide a broader set of information on the environmental performance of products beyond energy efficiency – e.g., durability, recyclability, recycled content, etc.
04	Digital Product Passport (DPP)	No existing requirements.	→	04	Digital Product Passport (DPP)	The information requirements will be made available to consumers through DPPs, as well as product labels, and other means.
05	Destruction of Unsold Goods Requirements	No existing requirements.	→	05	Destruction of Unsold Goods Requirements	Gives authority to the EC to require information on destruction of unsold goods as well as prohibit the destruction of unsold goods.
06	Substances of Concern	No existing requirements.	→	06	Substances of Concern	Both performance and information requirements can be set related to SoC. The aim of the regulation is to enable tracking of SoC throughout the life-cycle of products.

Oversight

European Commission (EC)

The European Commission is responsible for developing and coordinating the ESPR's policies and legislative framework, as well as conducting impact assessments and preparatory studies.

Joint Research Centre (JRC)

The JRC provides scientific and technical support, conducting many of the preparatory studies and assessments that inform ecodesign requirements for various product groups.

Ecodesign Forum

Established by the Commission, this forum allows industry representatives, environmental groups, consumer organizations, and other stakeholders to provide input on ESPR requirements. The Ecodesign Forum plays a consultative role, helping shape the regulatory measures to ensure practical and effective outcomes.

Member States & National Market Surveillance Authorities

EU Member States are responsible for enforcing ESPR requirements within their jurisdictions. National authorities monitor compliance, conduct inspections, and take enforcement actions if necessary.



Scope



PRODUCTS IN SCOPE OF ESPR

Includes nearly all physical goods placed on the EU market

PRIORITY PRODUCTS IN 1ST WORKING PLAN



Furniture
(incl. mattresses)



Textiles
(Garments, Footwear)



Tyres



Detergents



Paints



Lubricants



Chemicals



Aluminium



Iron & Steel



Energy related products



ICT & other electronics

Products NOT under the scope of ESPR

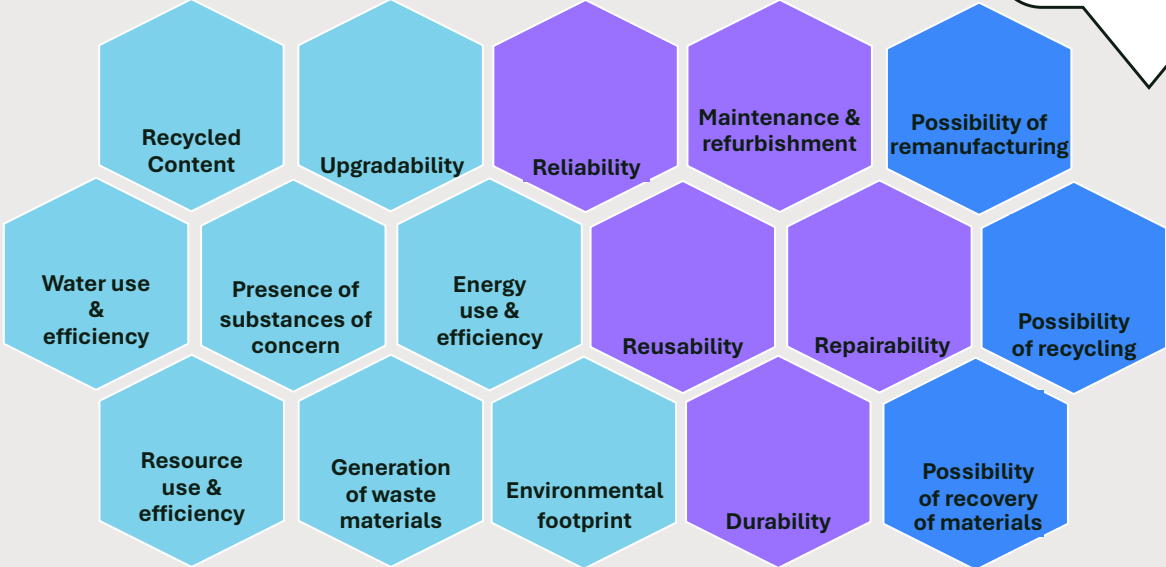
- Food & feed
- Medicinal & vet products
- Living plants, animals, micro-organisms and their products
- Vehicles



Performance Requirements

Article 5 – Ecodesign requirements

Key product aspects under ESPR



Important Note Regarding Environmental Footprint:

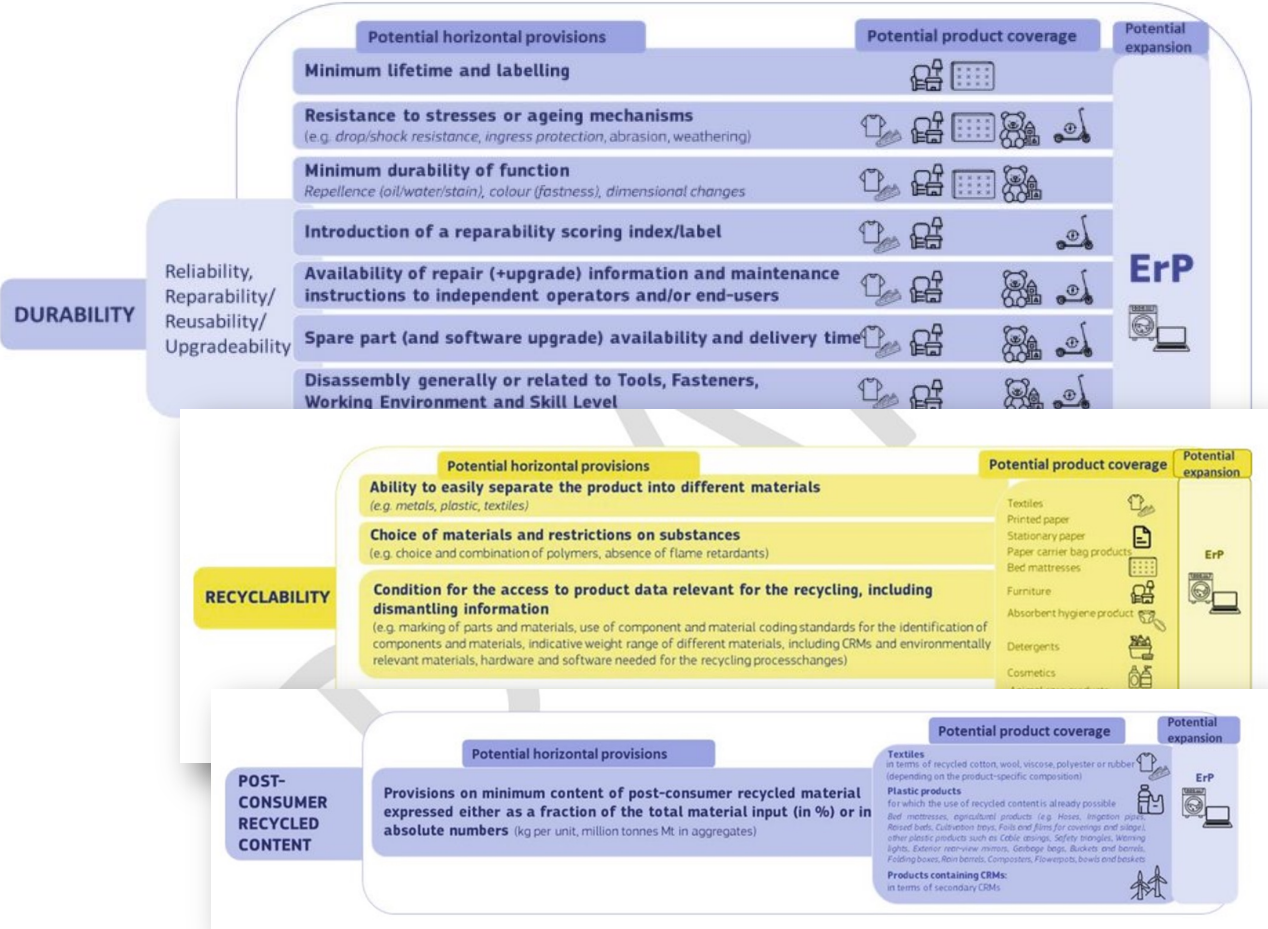
LCAs may be required to assess and report on a product's environmental impact as either **performance thresholds** or **information disclosures**. These calculations will be guided by standardized methodologies (e.g., PEF, PEFCRs, or compatible methods) to ensure consistency and reliability across product assessments.

* Recreated based on the European Commission ESPR Webinar 22nd June 2024

Preliminary Preparatory Studies

- ErPs, ICTs, & electronics were out of scope of the preliminary studies as these priority products were identified later in the public consultation.
- It was recognized, however, that the horizontal measures identified could apply to ErP.
- The preliminary studies are expected to be finalized Q3 2024 and will help inform the Working Plans.

Preliminary preparatory studies can be found [here](#).



Information Requirements

Article 7 – Information requirements

General Requirements

DPP & Implementation

Information must be accessible through the DPP and may also be provided on the product, packaging, label, user manual, or a public website.

Language Accessibility

Information must be provided in a language easily understood by customers in each Member State where the product is sold.

Core Information Requirements

Environmental Performance Data

Environmental performance data on product aspects (e.g., reparability, durability, carbon footprint).

General Instructions

Instructions on safe installation, usage, maintenance, repair, and end-of-life handling.

EoL & Treatment Facility Data

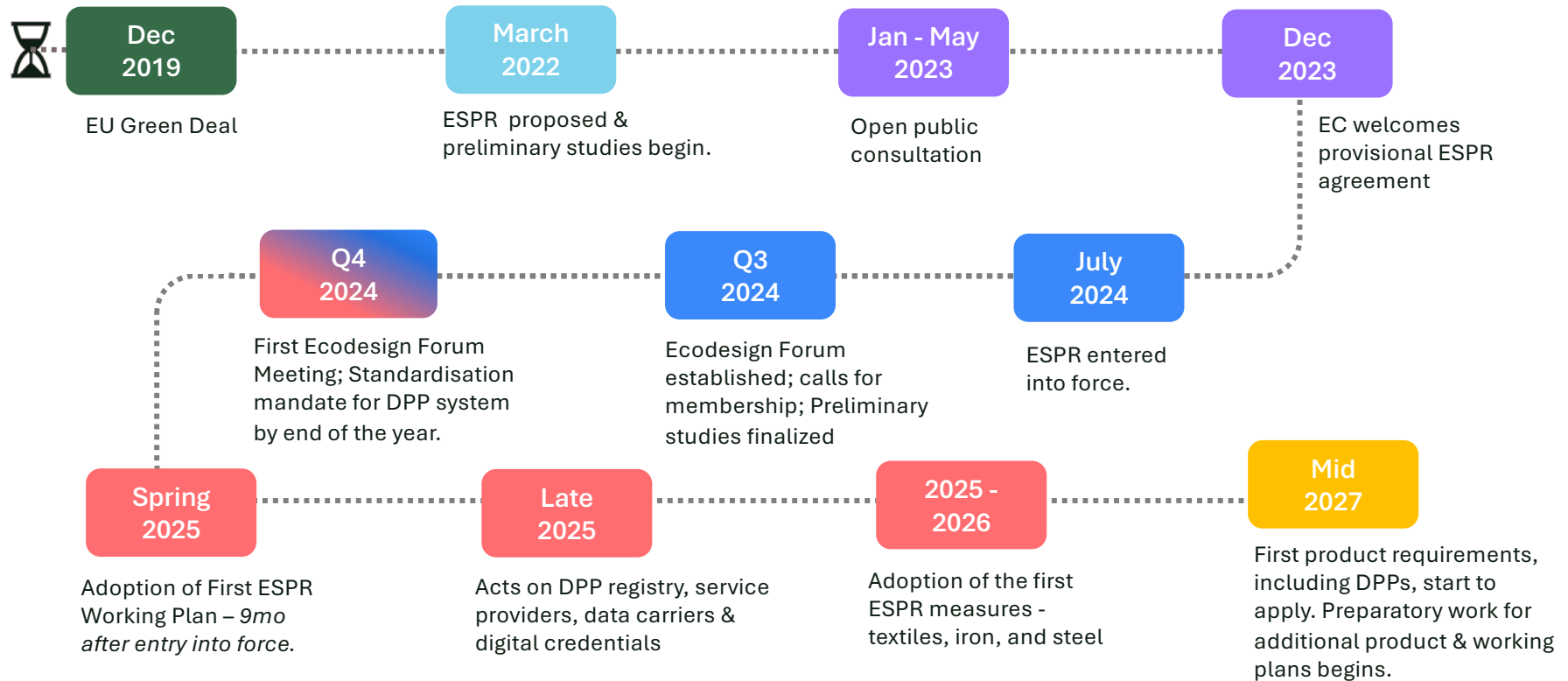
Other data to support sustainable use and end-of-life processing; Information for treatment facilities on disassembly, reuse, and recycling.

Substances of Concern (SoC)

Information must track these substances through the product lifecycle, detailing chemical name and identifiers, location & concentration within product, safe use instructions, & EoL management, etc.



Legislative Process & Timeline



Adapted from the EC website

Joining the Ecodesign Forum



The Commission is currently preparing the call for applications for membership of the Ecodesign Forum.

- The call for applications will apply to B & C members. This call will set out detailed membership criteria.
- Note: For B & C members, **registration in the Transparency Register is a pre-requisite** for appointment as members.
- Applicants which do not meet the selection criteria in full **may be granted observer status** in certain cases.
- Members of type **D & E will be appointed directly by the commission.**
- **Non-EU based members** may be granted membership or observer status.

Members can be of the following types:

- **Type A - individuals appointed in a personal capacity** , acting independently and expressing their own personal views.
- **Type B - individuals appointed to represent a common interest** shared by stakeholder organisations in a particular policy area. They do not represent individual stakeholders, but a particular policy orientation common to different stakeholder organisations. They may be proposed by stakeholder organisations.
- **Type C - organisations** in the broad sense of the word including companies, associations, NGOs, trade unions, universities, research institutes, law firms and consultancies.
- **Type D - Member States' authorities** - national, regional or local.
- **Type E - other public entities** , such as authorities from non-EU countries (including candidate countries), EU bodies, offices or agencies, and international organisations.

Type B and C members may be appointed only if they are registered in the Transparency Register.

Type C, D and E members nominate their permanent representatives or appoint representatives on an ad hoc basis, depending on the meeting agenda of the group.



Information Requirements & the Digital Product Passport (DPP)

WHAT

The DPP is a digital tool that will be used to collect and share information about a product and its supply chain. It is a **structured collection of product related data** with a pre-defined scope and agreed **data ownership and access rights** conveyed through a **unique identifier**.



Unique ID

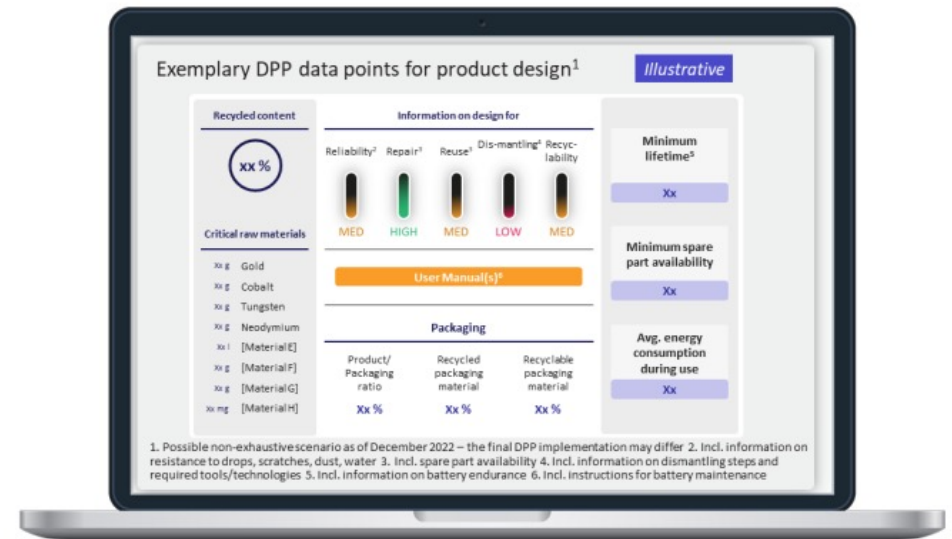


HOW

The DPP will use a **decentralized system** with a **central registry** and **searchable web portal**.

SCOPE

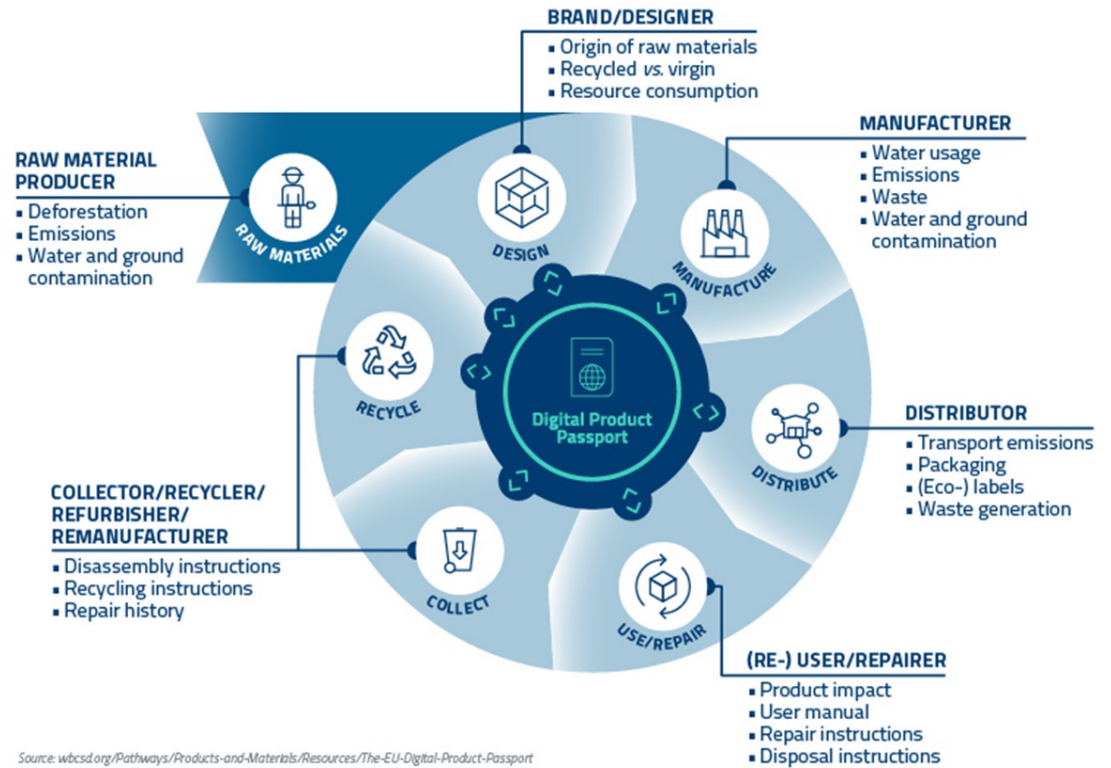
The DPP will include **information related to sustainability**, environmental impact, circularity, **Substances of Concern**, value retention for reuse/ remanufacturing/ recycling



Source: WBCSD The EU Digital Passports shapes the future of value chains report

The ESPR is not the only regulation implementing DPPs: Battery Regulation, Toy Regulation, Detergent Regulation, Construction Products Regulation, Critical Raw Material Act

Information Requirements & the Digital Product Passport (DPP)

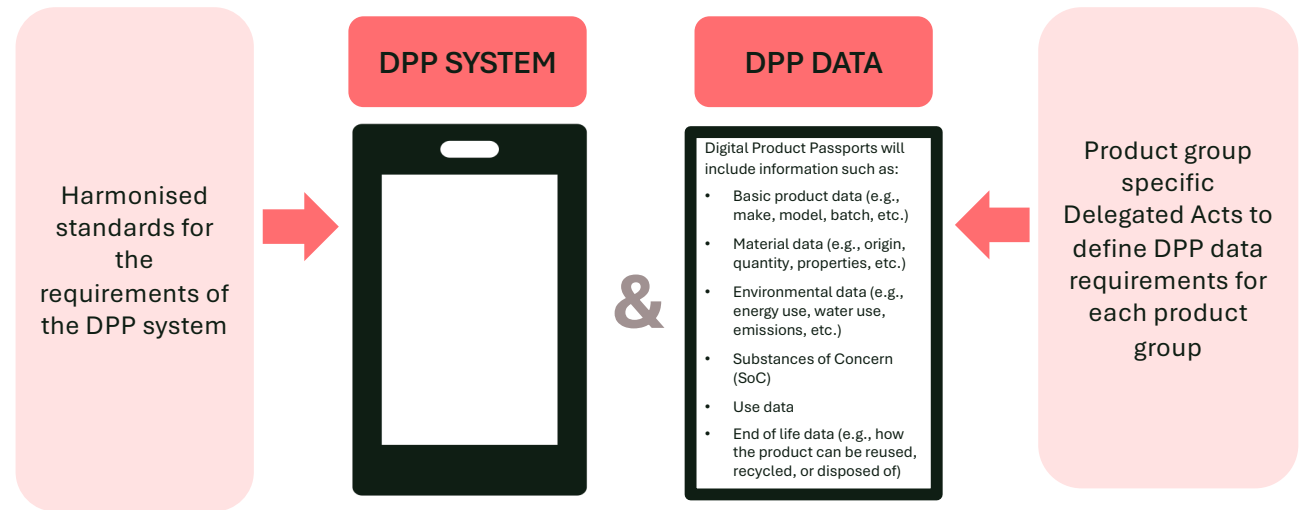


Source: wbcsd.org/Pathways/Products-and-Materials/Resources/The-EU-Digital-Product-Passport

DPP Requirements

Areas for standardisation:

- Unique id
- Data carriers
- Links between physical product and digital representation, incl. look-up mechanism
- Access rights management
- Interoperability e.g. data exchange protocol
- Data authentication, reliability, integrity
- Data security and privacy



Companies need to make sure:

- ✓ Product passport exist, meets both technical and data requirements, available to all stakeholders (with appropriate access rights)
- ✓ The information included is authentic, reliable and verified
- ✓ A copy of the data carrier or unique product id is made available to the dealers and online marketplaces selling the product
- ✓ Back-up copy stored by a (certified) third-party DPP service provider



DPP Stakeholder Cooperation



Funded by the EC under Digital Europe Programme, CIRPASS is a collaborative initiative to prepare the piloting and deployment of a standards-based DPP aligned with ESPR requirements; Cirpass will provide feedback to the EC on DPP implementation.



CEN/CENELEC are responsible for creating European standards that support EU regulations like the ESPR. For DPPs, they focus on developing technical standards that define data formats, interoperability requirements, and data security protocols to ensure that DPPs can be adopted widely across sectors.



CEN/CENELEC & CIRPASS Collaborate...

1

Standardization Framework

2

Guidance & Pilot Programs

3

Harmonization with EU Policy

ESPR & DPP FAQ



Recently published
ESPR FAQ can be found [here](#).

How will upstream operators provide DPP data for downstream products?

When upstream information is needed for a Digital Product Passport (DPP), the **economic operator placing the product on the market must ensure suppliers provide accurate, complete data, including suppliers from third countries.**

Will products outside the EU need a product passport? What about the online marketplace?

Products imported into the EU must have a Digital Product Passport (DPP), with importers ensuring its presence. *Online marketplaces must make DPPs accessible to EU customers and provide interface access for market surveillance.*

Should complex products have a single DPP or will separate ones be needed for components?

Components covered by separate delegated acts may require individual DPPs, which would then link to the product's main DPP. For example, a battery passport may be separate from the whole product.

What can industry do to prepare when there are still so many open questions until the delegated acts are come out?

The **ESPR working plans** outline priority products for regulation, *allowing industry to anticipate regulatory focus and consider technological advancements.* Once preparatory work begins, stakeholders are invited to participate in meetings, providing comments, data, and insights throughout the process.



How to prepare



DPP Value Chain Impacts

Component suppliers and final product manufacturers play distinct roles in ESPR compliance: suppliers provide more sustainable, traceable components - while manufacturers ensure these parts integrate into more sustainable designs, driving full product lifecycle sustainability.

Responsibility	Component Suppliers	ICT and Electronic Manufacturers
Compliance with Digital Product Passport (DPP) requirements	May need to provide DPP data for each component used in downstream products	Ensure a complete DPP for the final product, integrating all component data
Provide data on materials, sustainability, and substances of concern	Responsible for detailed data on materials and any substances of concern in components	Compile and verify data from component suppliers to meet DPP and ESPR standards
Support recyclability, repairability, and circularity efforts	Focus on providing components that are easy to disassemble or recycle	Ensure that the product as a whole meets repairability and recyclability requirements
Meet ecodesign requirements for durability and performance	Not required to meet final product performance but must meet component-specific standards	Must comply with full ESPR performance requirements on durability, efficiency, etc.
Provide product lifecycle information for supply chain actors	Provide data to downstream manufacturers for integration into the final product DPP	Integrate and ensure lifecycle information from all suppliers for product-level compliance
Implement tracking systems for component traceability	Track and provide detailed data for components as required under the ESPR	Manage a full DPP that links to individual DPPs for components where applicable



Indirect obligations under ESPR

Direct obligations under ESPR

ESPR Preparation

1

Enable your organization

- **Assess impact & readiness:** Identify how ESPR and DPP will impact the business (e.g., IT, product design & development, quality, compliance, sourcing, marketing, etc.).
- **Prepare product design & development teams:** Create Design for Sustainability program to ensure alignment with regulatory objectives.

2

Assess data needs & fill gaps

- **Conduct data inventory & gap analysis:** Identify data needs and map data requirements to relevant systems and owners. Identify where data is insufficient and close data gaps.
- **Collaborate across the value chain:** Supplier vetting, and collaboration will take on new meaning in working closely together to collect accurate data for ESPR needs.
- **Collect, manage, & report data:** Develop standardized data collection and reporting processes across the organization.

3

Plan for technology needs

- **Plan digital infrastructure needs for data collection & management:** Implement robust systems for collecting and managing product data.
- **Enable interoperability and integration capabilities for tracking data:** Ensure new and existing data systems integrate seamlessly with DPP.

4

Shape the regulation & DPP process

- **Get involved in the Ecodesign Forum:** Find ways to get involved or support industry associations in the Ecodesign Forum.
- **Get involved in DPP standards and frameworks:** Find ways to get involved and support the DPP process, such as CIRPASS-2; Work on setting standards relevant to your business (e.g., CEN/CENEL standards development, Circular Electronics Initiative, etc.)



Poll 2: What would you like to see next?

1	How to set up an ecodesign program	Steps to integrate sustainability principles into product design and development for electronics.
2	How to manage DPP data needs	Dive deeper into DPP data needs, tracking methods, and how to manage the complexities of supply chain data.
3	How to engage suppliers to gather accurate data	Strategies for working with suppliers to gather accurate product data and ensure compliance throughout the supply chain.



Anthesis 

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