

EU Digital Product Passport call for proposals: sustainable and circular systems ([DIGITAL-2021-TRUST-01](#))

CIRPASS: Collaborative Standardization of a European Digital Product Passport for Stakeholder-Specific Sharing of Product Data for a Circular Economy

The European Commission (EC) has recently shown a growing interest in emerging technologies to support the 'twin', green and digital, transitions and specifically in the development of a **Digital Product Passport (DPP)**. A DPP is a structured digital collection of product-related information including data on sustainability and circularity performance, whose objective is to facilitate circular value retention and extraction activities such as reuse, remanufacturing and recycling. Indeed the promotion of these activities is a primary focus of the Sustainable Products Initiative of the EC. CIRPASS is a proposal for a Coordination and Support Action (CSA) planned in the framework of the Digital Europe Programme¹, with a submission date of February 22, 2022 Its aim is to prepare the ground for a gradual deployment of DPPs from 2023 onwards, with an initial focus on the electronics, batteries and other sectors identified in Circular Economy Action Plan (CEAP).

Emerging initiatives related to the DPP

Spurred by the need to transition to a more circular and sustainable society, combined with new opportunities offered by a burgeoning European data market, a large number of initiatives have emerged recently, partly embodying the concepts targeted by the DPP. A few of these initiatives are listed below:

- Supply-chain traceability solutions: TradeLens, Circularise, TraceMet, CircularTree, ...
- GS1 Digital Link <https://www.youtube.com/watch?v=H2idDJeH3o4>
- The Product Circularity Data Sheet <https://pcds.lu/>
- CEN TC 350 – Construction Material Passport
- The digital nameplate: [scroll to 1:07:00 of the recording] <https://orgalim.eu/news/orgalim-policy-exchange-sustainable-products-initiative-and-eu-digital-product-passport>
- The Digiprime Platform for Circular Economy <https://www.digiprime.eu/>
- ...

What is CIRPASS?

CIRPASS's ambition is to lead a balanced, open and transparent community dedicated to the design and roll-out of the upcoming European Digital Product Passport (DPP). Our key values are as follows:

- **Neutrality** – Seven leading European Research and Technology Organisations (RTO) are leading the CIRPASS consortium, helping to ensure a neutral and technology agnostic stance. The RTO partners (CEA, Fraunhofer, Wuppertal Institute, Politecnico di Milano, Chalmers Industriteknik) are supported by three standardization organisations, an experienced pool of six circular economy and sustainability consultancies, several large European industrial associations, digital technologies and web experts and selected digital solution providers. The CIRPASS consortium is composed of 26 partners.
- **Inclusivity and consensus** - Our aim is to unite the most advanced European and international initiatives on data sharing for supporting and accelerating the transition to a circular economy. The project will build consensus and momentum around the current DPP concept and contribute to the development of

¹ <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/digital-2021-trust-01-digipass>

common standards and principles to secure the interoperability of DPPs across value chains, sectors and market participants.

The project has a timeframe of 18 months and a budget of €2million, so a combination of paid and “in kind” participation by partners is necessary.

Expected outcomes

- CIRPASS will deliver three DPP prototypes, for each key value chain (Batteries, Electronics, Textiles), to support improved product sustainability and better material and energy efficiency, and to enable new business models and circular value extraction based on data sharing.
- CIRPASS’s DPP blueprint will be transferrable to other value chains. Project partners will also bring strong expertise in the construction and plastics sectors.
- The project will contribute to enhanced stakeholders dialogue and engagement and will develop an actionable roadmap for open and standardised approaches for efficient use of DPPs based on digital innovations.

Reasons for working with CIRPASS

The wide-ranging and interdisciplinary expertise required to respond to the CSA, as well as meeting the EC’s (and other stakeholders’) expectations beyond the tender, suggests that we need a diverse, strong and experienced team. By joining CIRPASS, you will:

- Interact with leading interdisciplinary research teams and industrial actors actively involved in the design of the DPP and the wider value chains;
- Receive up-to-date feedback on early DPP pilots;
- Prepare your organization and networks for upcoming changes in technology and regulation;
- Contribute to the design of the DPP prototypes, as a basis for potential European standardization;
- Learn from others on the many-faceted issues and business and innovation opportunities related to data-sharing for the transition to a circular economy;
- Contribute and influence key market participants to make an impact.

Representatives from emerging DPP-related pilots are also warmly welcomed to join our dedicated advisory board. Our team also welcomes multi-disciplinary advisory expertise from all disciplines and key value chains (sectors) related to data sharing and traceability for the circular economy, and a more competitive EU.

Effort required from your organization

Experts and stakeholders joining one of our advisory groups should commit to the following **minimum** effort:

- Take part in three workshops or meetings (e.g. general assemblies, intermediate result presentations, product group stakeholder workshops addressing key information requirements, technical requirements, taxonomy, standardization, etc.)

Numerous other opportunities will be proposed to participate in the project’s activities (focus groups, expert interviews, online surveys, etc.)

Consortium leadership

CEA (French Alternative Energies and Atomic Energy Commission) is a public research organization whose mission is to develop know-how and assure the technological transfer in a large variety of civil and defence industrial applications (energy production, biotechnology, environmental protection, microelectronics,



nanotechnology, and others). It has 17000+ employees and a budget of 4.1 B€. With more than 6000 active patents, it was ranked respectively n°1/n°2 worldwide in 2015/2016 and n°1 in Europe according to Reuters top 25 global innovators - government. CEA has a long-standing expertise in leading coordination and support actions (CSA) in response to the needs of the European Commission.

SLR Consulting is a global environmental and advisory solutions consultancy. SLR is an ESG (Environment, Social and Governance) specialist with +25 years in the field, providing advice, research and services to clients in the renewable energy, mining and minerals, infrastructure and transport, built environment, industry, financial, power sectors, including their value chains. The company employs over 200 staff across 90 offices and has demonstrable experience of winning and coordinating EU research and innovation projects.