Danish technical paper on an interoperable ESG data infrastructure contributing to realising the European Data Union and reducing administrative burdens for companies.

The EU Green Deal has set world-leading standards and regulations in place for increasing the sustainability of companies and products. Major recurring elements are new documentation and reporting requirements increasing the sharing of information across companies' value chains pushing for more collaboration and transparency on sustainability among companies, authorities, and consumers. The purpose is to develop a well-functioning single market for sustainable products and finance.

A prerequisite for businesses to comply with the reporting requirements in regulations such as the Corporate Sustainability Reporting Directive (CSRD) and the Ecodesign for Sustainable Products Regulation (ESPR), is an interoperable ESG data exchange infrastructure where companies and digital system providers can connect their systems and facilitate effective data sharing in standardized and structured data formats with business partners, investors, public authorities, and customers, thereby contributing to realizing the European Data Union.

Today, companies face several challenges when exchanging ESG data such as high costs, inefficient data management, and limited access to necessary ESG data in fragmented restricted networks and platforms, resulting in unnecessary administrative costs and barriers for companies. These same challenges also constitute significant entry barriers for new private market actors developing digital solutions such as ESG data management and calculation tools.

With regulative initiatives such as the Data Act, the Eco-design regulation and the Interoperability Act as well as the establishment of European data spaces the EU has chosen a decentralized approach to data and disclosure of information requirements, making it possible for companies to report on multiple reporting obligations through their own systems without duplicative manual reporting to authorities, while allowing for companies to maintain ownership and control of their data.

This require that European companies engage in the digital transition themselves such as acquiring digital systems and get new skills to deliver and handle data. However, the EU has a responsibility in developing and expanding the decentralized approach to data into a coherent European Data Union by establishing the necessary digital infrastructure for seamless sustainability-related data exchange between companies, and with public authorities and consumers. Utilizing a 'connect once, connect all' principle will further open up a well-functioning Single Market for ESG system providers.

Considering the need for a substantial reduction in administrative burdens, we need to work towards more automated sustainability reporting by developing a European effective, interoperable data exchange infrastructure, including:
1) facilitating cross border system-to-system data exchange between companies and authorities;
2) being interoperable with companies' IT systems;
3) utilizing existing European building blocks, standards, principles and protocols to ensure "connect once, connect all";
4) guaranteeing safe data exchange protecting business sensitive information and intellectual property;
5) being vendor and platform agnostic, to avoid lock-in effects and monopolies.

To achieve such an infrastructure, **the EU should take the following steps:**

- Launch a **flagship initiative on a public-private partnership with relevant DGs, Member States and private actors** where the development of a European interoperable data infrastructure being a key component and with the potential to achieve automated sustainability reporting for companies. This should include a common effort by Member States and the Commission to ensure cross border and 'cross regulation' applicability, meaning that various registers, IT system, and data management systems used in areas such as company reporting, market surveillance or customs control, are compatible, integrable and interoperable with the European interoperable ESG data infrastructure.

- This could for instance take shape through the establishment of **a new European Digital Infrastructure Consortium (EDIC)** to implement the flagship initiative to ensure commitment, resources and robust governance including relevant other stakeholders[1]. This EDIC could be part of pilot projects to draft solution architecture and demonstrate necessary capabilities and functionalities for the ESG data infrastructure and be co- funded by programs such as the Digital Europe Programme or other suitable funding mechanism.

- **Analyze the functional capabilities of existing EU building blocks** such as the Connecting Europe Facility (CEF) eDelivery, eID, eInvoicing, to evaluate their effectiveness in supporting data exchange and identify areas where further developments and improvements are needed to fully serve the purpose of European companies' sustainability data exchange and reporting requirements.

- Following the analysis, the EU should **define a 'target state/solution architecture' for data distribution**, minimizing the number of solutions and transactions points that European companies need to comply with. When defining the architecture, it is important to ensure that the infrastructure allows for system-integration through a network of access points, typically established by IT service providers through common standards. This will enable that all systems can connect once-only, without having to set up multiple API's. This work should build on the preliminary architecture presented in a recent TSI-project on "*Green and circular transition through standardization of product data in digital and automated processes*" carried out for DG Reform.[2] The Commission is already required to consider the CEF building blocks for the Battery Passport[3] and the Digital Product Passport[4], where all information shall be 'transferable through an open interoperable data exchange network without vendor lock-in'.

The Danish Business Authority is available to further discuss the elements proposed.

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[1] Inspiration could be drawn from the governance model adopted with OpenPeppol in the area of eInvoicing and other business documents – OpenPeppol and Peppol - https://peppol.org/about/
[2] Please see: DG Reform – Technical Support Instrument – Circular economy transition in Denmark p. 9. for input to a target state architecture.
[3] (2020/0353(COD)) – Regulation concerning batteries and waste batteries – recital 94a
[4] (2022/0095(COD)) – Ecodesign for Sustainable Products Regulation – article 9 paragraph 1 litra (d).