BUSINESS PLAN

CEN/CLC/JTC 24
Digital Product Passport - Framework and System

EXECUTIVE SUMMARY

CEN-CLC/JTC 24 develops deliverables for the Digital Product Passport (DPP) framework and system, based on but not limited to standards on:
- unique identifiers;
- data carriers and links between physical product and digital representation;
- access rights management, information, system security, and business confidentiality;
- interoperability (technical, semantic, organisation);
- data processing, data exchange protocols and data formats;
- data storage, archiving, and data persistence;
- data authentication, reliability, integrity;
- Application Programming Interfaces (APIs) for the product passport lifecycle management and searchability;

and the data delivering system, data specification method while ensuring cross-sectoral and cross-system interoperability.

Sector specific standards are excluded and will be done in the respective technical committees covering the sectors. Further exlusions include deliverables already covered by the scope of other CEN and CENELEC TCs and the definition of the content of data belonging to different product types or segments.

1 BUSINESS ENVIRONMENT OF THE CEN-CLC/JTC

1.1 Description of the Business Environment

The following political, economic, technical, regulatory, legal, societal and/or international dynamics describe the business environment of the industry sector, products, materials, disciplines or practices related to the scope of this CEN/CLC/JTC, and they may significantly influence how the relevant standards development processes are conducted and the content of the resulting standards:

The interoperable DPP system is pivotal for Europe's digital and green transformation. DPPs aim to group information on a product (e.g., about its manufacturing, features, specifications, usage guidelines) and its supply chain and make it available to entire value chains so all eligible actors, including consumers, are aware of the characteristics of what they use and the environmental impact of their consumption.

Stemming from political actions like the Ecodesign for Sustainable Products Regulation (ESPR) the Circular Economy action Plan (CEAP), and the Battery Regulation, the DPP initiative aims to enhance transparency, quality, and geostrategic resilience. The European Commission (EC) proposes the creation of a clear concept for DPPs by the definition of cross-sectoral product data models through a draft standardisation request to be delivered by December 2025 addressing: unique identifiers, data carriers, links between physical and digital representations, access rights, interoperability, data processing, storage, authentication, and security.

The political discourse extends to various transformation discussions, including at national, European, and international levels, focusing on the mandatory product information. The Joint Technical Committee (JTC) 24 aligns with discussions on sectoral and horizontal regulations, like the New Legislative Framework (NLF) and Cyber Resilience Act, emphasizing the digitization of the market surveillance process.

Within the NLF, the utilization of a DPP plays a pivotal role. The DPP serves as a digital tool to support standardized and transparent documentation and provision of product information throughout its entire lifecycle. The DPP supports the realization of NLF goals, particularly in the realm of product safety and compliance. By uniformly providing relevant product information, the DPP enhances efficiency in verifying and meeting regulatory requirements. Additionally, it aids in easing the harmonization of standards and promotes the digitization of processes within the context of European product regulation. Overall, within the NLF framework, the DPP enables more effective monitoring, documentation, and regulation of products, leading to enhanced product safety and compliance within the internal market.

The ESPR pursues various environmental objectives. It aims to reduce waste and enhance resource efficiency, utilizing the DPP to optimize product characteristics and minimize overall waste. Additionally, the ESPR intends to establish new ecodesign requirements to improve the environmental performance of products, with the DPP acting as a monitoring and documentation tool for compliance with these requirements. The regulation also includes provisions to limit hazardous chemicals in products, and the DPP can provide valuable information to monitor and minimize the presence of such substances. Furthermore, the ESPR targets increased energy and resource efficiency, and the DPP contributes by offering data to support the enhancement of these efficiency parameters. Lastly, the regulation promotes sustainable production and consumption practices, and the DPP serves as a tool to document and communicate the sustainability

performance of products. Together, these initiatives work towards fostering a more environmentally friendly and sustainable product landscape within the European Union (EU). The Standardisation Request prompts the development of specific technical standards that align with and support the objectives of the EU in promoting a more sustainable and efficient digital product ecosystem. Also, ensuring the harmonization of standards related to the DPP across the EU is required through the Standardization Request. This harmonization aids in creating a unified framework for digital product information, fostering interoperability, and facilitating cross-border trade. Supporting compliance with existing or forthcoming EU regulations, particularly those related to environmental sustainability, circular economy principles, and consumer protection is part of the objective. The Standardisation Request also encourages the development of technical standards that promote innovation and sustainability within the digital product sector. This may include standards that enhance the traceability, recyclability, and overall environmental performance of digital products. The Standardisation Request demands diverse perspectives and the interest to ensure a balanced approach, which can be realized by a JTC.

The overall concept is to provide one uniform DPP system, consisting of interconnected components to be operated by European Commission, Economic Operators and DPP System Service Providers. This one DPP System has to be applied for all relevant product groups as defined in the ESPR.

2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC

The deployment of the digital product passport (DPP) and its ecosystem necessitates the development and coordination of standards. Existing standards, as outlined in the StandICT.eu Landscape Analysis Report, highlight the need for adoption of ISO, IEC, or ISO/IEC standards, along with the creation of new ones. Therefore CEN/CENELEC established a new Join Technical Committee - CEN/CLC/JTC 24 on Digital Product Passport, responsible for the standardization of a horizontal approach, and answering the upcoming standardization request from the European Commission. Collaboration with existing European and international Technical Committees (TCs) is a key focus.

3 PARTICIPATION IN THE CEN-CLC/JTC

All the CEN and CENELEC national members are entitled to nominate delegates to CEN-CENELEC Joint Technical Committees and experts to Working Groups, ensuring a balance of all interested parties. Participation as observers of recognized European or international organizations is also possible under certain conditions. To participate in the activities of this CEN-CLC/JTC, please contact the national standards organization in your country.

4 OBJECTIVES OF THE CEN/TC AND STRATEGIES FOR THEIR ACHIEVEMENT

4.1 Defined objectives of the CEN-CLC/JTC

The CEN-CLC JTC aims to fulfil the anticipated European Standardisation Request on DPP, ensuring alignment with European regulation and supporting the transition to a circular economy. The scope covers unique identifiers, data carriers, links between physical and digital representations, access rights management, and interoperability in technical, semantic, and

organizational aspects. Additionally, it addresses data exchange protocols, formats, processing, storage, persistence, authentication, reliability, integrity, security, and privacy. The work program emphasizes collaboration with European and international TCs for a comprehensive and interoperable DPP system.

4.2 Identified strategies to achieve the CEN-CLC/JTCs defined objectives.

4.3 Environmental aspects

This will include:
1. A review of the key environmental issues associated with the scope of the work covered by the CEN/TC
2. How these will be reflected in all New Work Item Proposals (NWIPs) and formatted resolutions when new work items are adopted by the CEN/TC
3. Objectives regarding addressing environmental issues and consideration of how to assess progress in achieving those objectives

For further assistance, CEN/EHD should be contacted.