

standICT.eu 2026

ICT Standardisation Observatory and Support Facility in Europe

Digital Product Passport "tie up the loose ends"

challenges and next steps for standardisation community

28.04.2023 Benjamin Helfritz / Dr. Jens Gayko







### **DPP - Origins/Motivation** stakeholders, interests, requirements





**Digitization efforts** of the economy plus new business models

potentiell alle Produkte

**Battery** regulation

Batterien Besonderheit:

Traktionsbatterien

#### **ESPR**

**Ecodesign for Sustainable Products Regulation** 

washing machines, refrigerators, TV sets, lighting and motors. In the future, textiles, furniture, steel, cement and chemicals will also be

CE-markung / approval regulations

broad product categories

LkSG

#### Origins/Motivation of the DPP idea

- **Circular Economy**
- R-strategies (re-use, re-cycling, re-manufacturing, re-pair)
- social aspects (forced labor, child labor, etc.)
- ecological aspects (PCF)
- animal welfare
- traceability
- Access to mandatory product information
- **Proof of conformity**
- **Consumer information**
- **Operating instructions**
- **Usability / Maintenance**
- Quality assurance (QI)
- New business models
- **Identification / nameplate**
- etc.

#### **Various Stakeholders**

- **Product manufacturers**
- **Integrators**
- **Users / Consumers**
- Recyclers
- Market surveillance
- Third parties
- etc.

Central building block of the Digital and Green Transformation



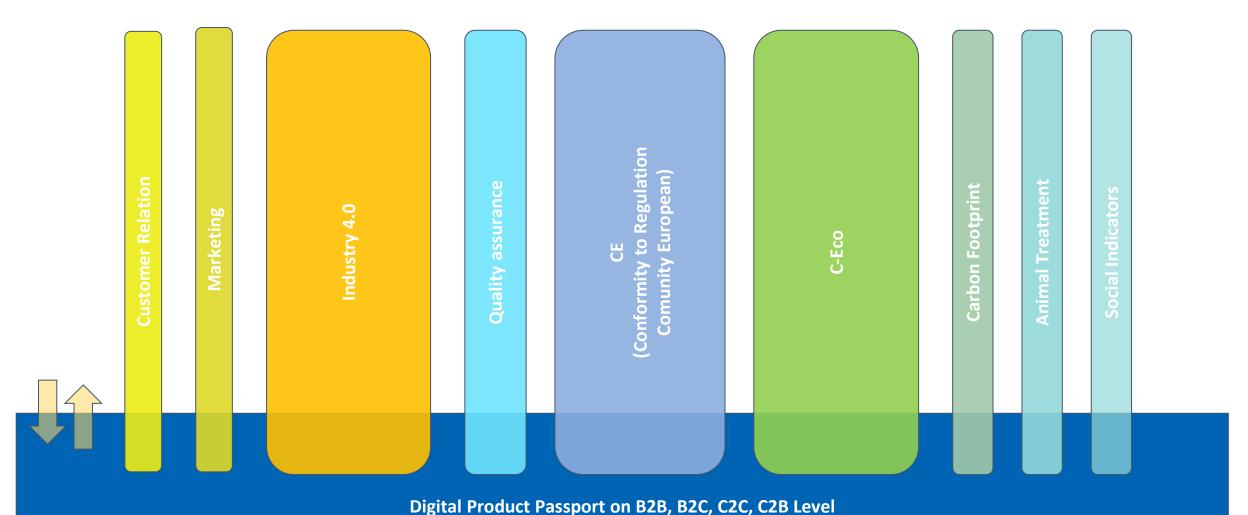
It makes sense not to think about the design of the DPP from one origin - it should be approached as universally as possible.



The interests of the stakeholders and the requirements derived from the various ideas for a digital product passport may not be compatible.



### DPP - System, Data-Structure & Governance Le horizontal Infrastructure for several issues



(Horizontal Infrastructure)



### DPP – existing building blocks and solutions



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#### **Existing building blocks and solutions**

A standardization search through Stand.ICT already addresses more than 170 standards (ISO, IEC, ISO/IEC). In particular, also on the areas mentioned by the EU so far:

- (1) Data carriers and unique identifiers
- (2) Access rights management
- (3) Interoperability (technical, semantic, organisation)
- (4) Data storage
- (5) Data processing (introduction, modification, update)
- (6) Data authentication, reliability, and integrity
- (7) Data security and privacy
- (8) Data structure

In addition, there are various activities that are directly related to the DPP: Digital Twin, Digital Nameplate/AAS, Product Circularity Data Sheet, Building Resource Passport, Digital Resume File, Digital Representation of Product Information, Plant Passport and many more.



Build on existing, prevent double standardization and create interoperability.





## DPP – standardisational view and challenge



#### There is a need for

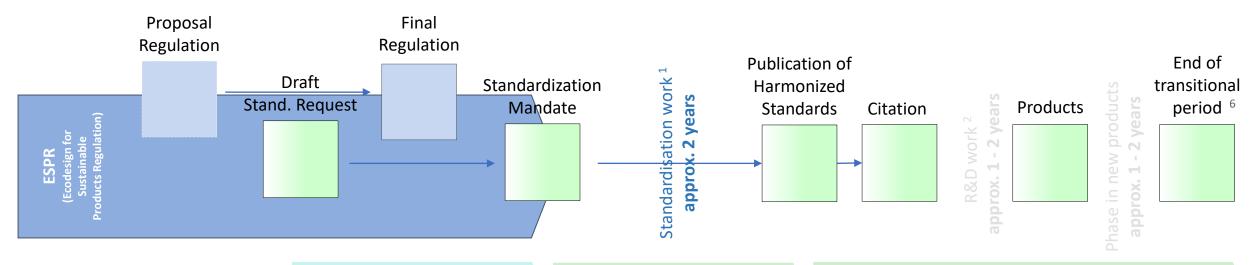


- a holistic concept for the DPP
   which takes into account the different requirements
   (different stakeholders, sectors and motivation)
- > the use of existing and in application
- ➤ a meta-structure/framework that creates interoperability of sector- and system-specific solutions/implementation
- international connectivity
- > a long-term view
  - → openness to innovation
  - → anticipation of upcoming complementary regulations
- and the avoidance of fragmentation (both on the level of policy and standardization)



## next steps towards a harmonized DPP-System





Work of Standardisation Request AdHoc Group SRAHG Work of Standardisation Commitee(s) on the first hEN

(harmonized European Norm)

Work of Standardisation Commitee(s) on maintanance and further development of the hEN

(harmonized European Norm)



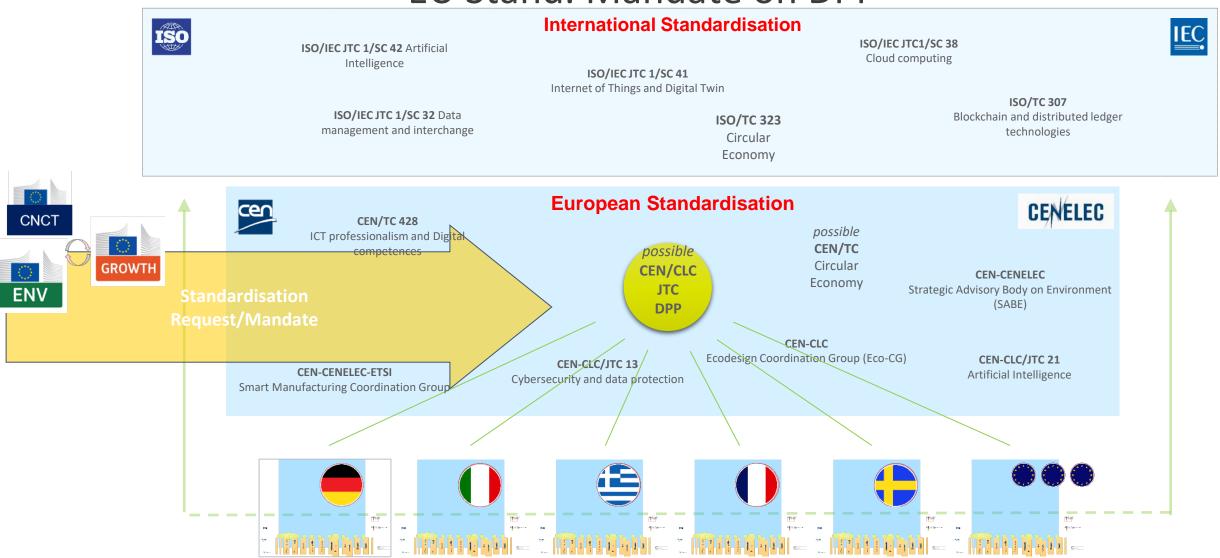




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### CEN/CLC JTC DPP to answer the EU Stand. Mandate on DPP







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