

European Standardization Organizations

JTC 24 – Digital Product Passport – Framework and System

CEN CENELEC JTC 24

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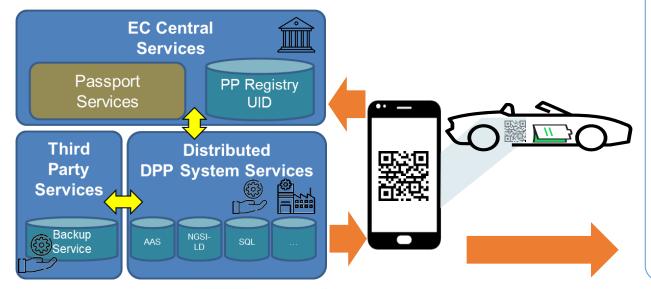
A small theoretical Input – How the EU DPP working Example Battery Pass?

Customers, Partners and Authorities receive dedicated digital Information from product life



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Example Battery Pass



107 Data Points around the product Life



Selection of mandatory Data



Typical voluntary Data

Battery ID: 0101010

General information



Manufacturing info (identity, place, date)

- Compliance Labels Certificates
- Circularity
- **Supply Chain Due Diligence**
- Carbon Footprint
- **∐i** Manuals
- State of Health

Battery ID: 0101010







Connected Products

Service Centres

Upgrades



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DPP Orientation - Helicopter View



Global Allignment



Clean Industrial Deal
Market Surveillance / Customs
Consumer Protection

In EC currently six different directorates are involved into DPP Standardisation



Standardisation



Value Stream / Industry



Value chain
Control
Data Management



Customer
Marketing, Binding
Data Update



Digital Industry
Technology and Service

- > 30 different Standardisation Activities
- > 8 only in and from China

Why DPP are electrifying



Global und regional economy as well as politics meet Chances and Risks for Enterprises

Clean Industrial Deal - Regulation



Ecodesign for Sustainable Product Regulation (ESPR)

Centralized Regulation of Green Deal

Battery Regulation
From Feb. 2027
mandatory
Provision required

ESPR and other Regulations require EU DPP for most of the products to be established on the market Cars: ZEV3, EoL-V, RED III, ESPR (z.B. Tyres), Euro7









Efficiency - Digitization - Business

Market Volume

for Tech-Giants and in the niche (app.300.000 cars/day)



Technology Push

Next chance for existing and upcoming technologies (z.B. Blockchain, Data Spaces)

Digitization

DPP supports digital integration, horizontally and vertically





New Opportunites

e.g for personalized advertisement, know, whats happen with the product after sales.

European Standard (EN) / harmonized European Standard (hEN)



EN

Increase Products safety and quality





hEN

To demonstrate presumption of conformity regarding

relevant EU legislation

of products, services and process

(listed in official journal of EU)

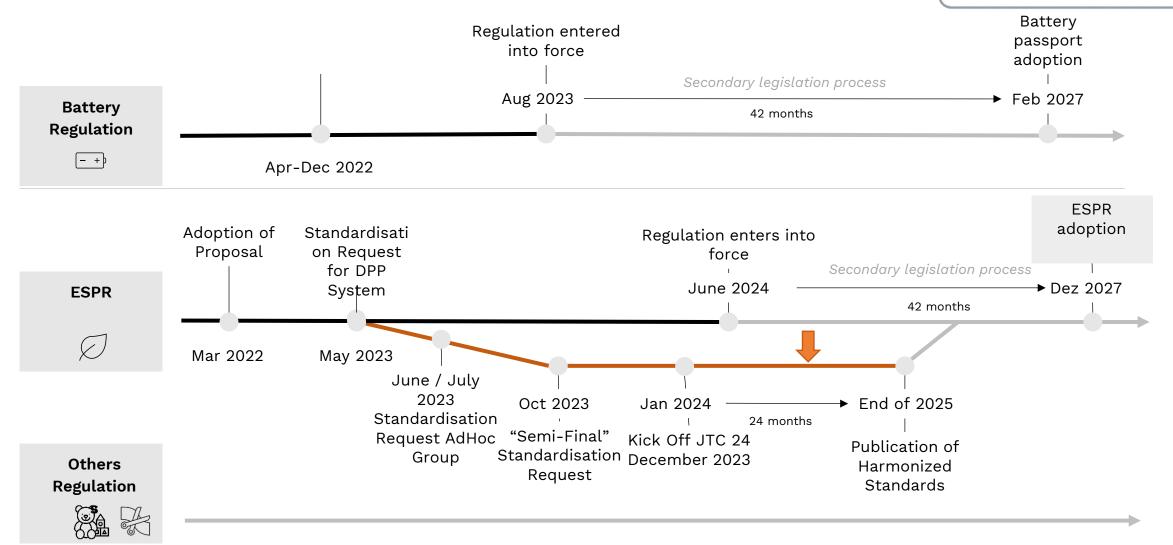




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Tough Timeline for Standardisation





CEN CLC JTC 24 "Digital Product Passport Framework and System"



Objectives

Participants

Timing

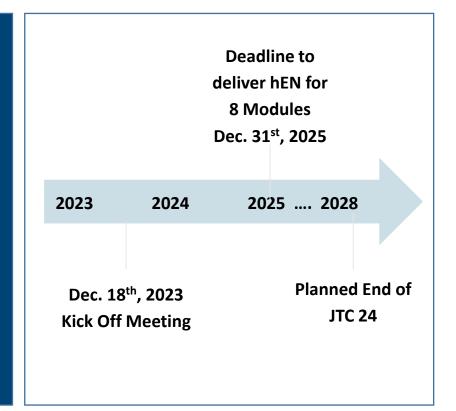
Fulfill the Standardization
Request (SReq) to define
harmonized standards for the
DPP System according to

Ecodesign for Sustainable Products Regulation (ESPR)

Battery Regulation + ...

Appr. 300 Experts in Delegations from 20 Member States + Switzerland, UK, Norway

Currently 32 Liasions requests (European and Global)



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Most product groups require a DPP and are affected by JTC 24, except food, animal food, pharmaceutical



Main Regulations

ESPR

Batteries (Traction and industry)

Toys

Detergents

Construction Materials

Critical Raw Materials

Iron & steel

Aluminium

Textile, notably garments and footwear

Furniture, including mattresses

Tyres

Detergents

Paints

Lubricants

Chemicals

Energy related products

ICT products and other electronics

System Scope of JTC 24 is to deliver harmonised standards for the DPP System





Passport Data is out of Scope in JTC 24

Harmonized technical system for all DPPs:



Data Storage



Data Exchange



Data Carrier Identifier



IT Services / APIs



Trust / Security /
Sovereignty /
Access

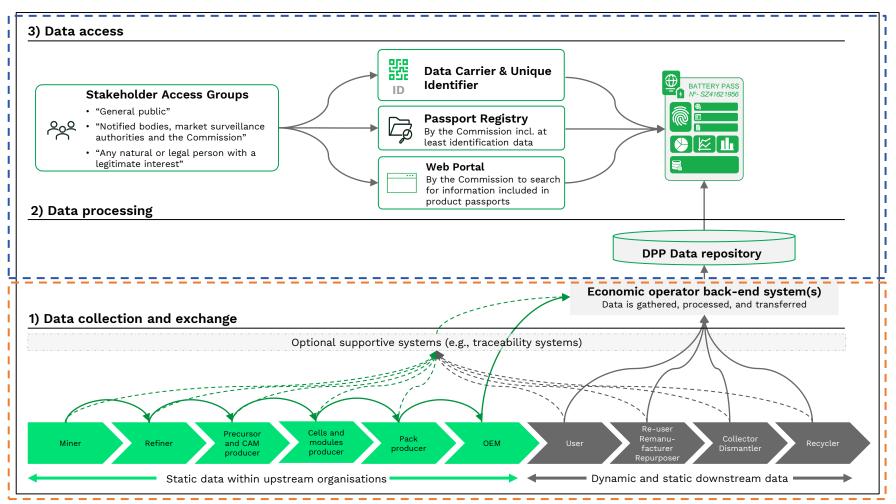


Workflows and Data Processing

Process Scope of JTC24

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Scope in JTC 24: Data Access, Data Processing

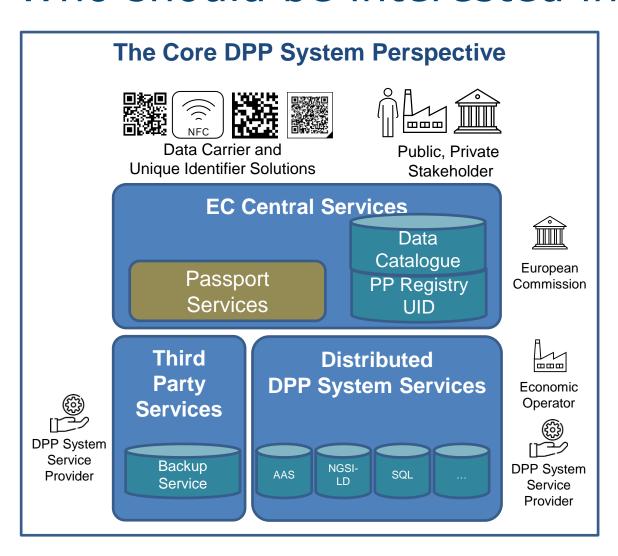
Out of Scope in JTC 24: Data Collection and aggregation

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1) Galatola, M. Digital Product Passport (DPP). Circular Economy Europe. [Online] [Cited: 20 03 2023.] https://circulareconomy.europa.eu/platform/sites/default/files/michele-galatola-european-commission.pdf

Organisation Scope: Who should be interested into JTC24





European Commission and National Authorities

(e.g. Market Surveillance, Tax, Environment)

Economic Operators, brings products on the market (e.g. manufacturers, importers)

DPP System and Service Providers

(e.g. for operating services, backup services)

DPP System Component Suppliers

(e.g. for Data Carrier)

Partners in the value chain (e.g. supplier, dealer, recycler) to know how data has to be provided, how to get access

Standardisation Bodies

(e.g. for sector specific data standardisation)

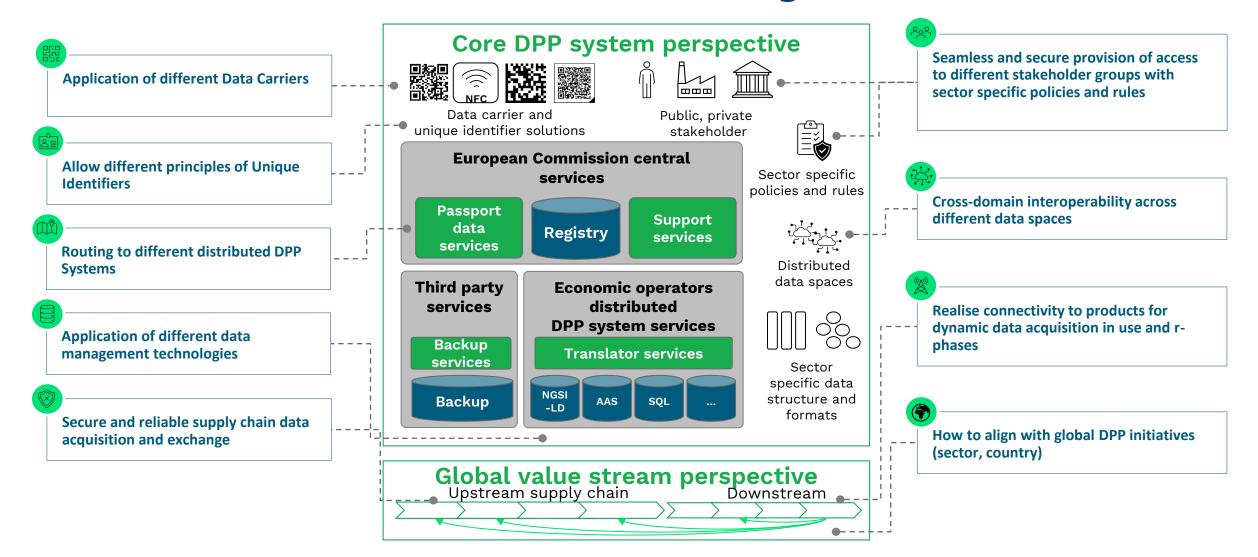
Consumer Organisations

to ensure applicability of DPP

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Major Interoperability Goal – Co-existence of standards/technologies





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How to participate in JTC 24



Work Group Overview

Strategic Advisory	Unique identifiers and data carriers	Security	Interoperability framework
Work group 1	Work group 2	Work group 3	Work group 4
Facilitate, coordinate and exchange between working groups	Unique Identifier for Product	Individual decentral Data Repository	API for CRUD (Create, read, update, delete) of data
Liaisons	Unique Identifier for Economic Operator	System for (role /function/attribute-based) access rights management	Querying of Passport Data
Clarify non-technical issues	Unique Identifier for Facilities	Verification of authentication	Back Up Data Base
Interaction with sector specific data standardisation	Data Carrier	Verification of DPP conformance	Data Modelling:
Business plan	Registry	Cryptographic verification of DPP (digital signature check)	DPP Issuing Service
	Routing Services	Data verification of data integrity and originality	Data modelling services
		Logging Monitoring	Schema Definition

Technical Expert for elaborating harmonised standards (hEN) for system elements

- Select and adopt existing standards
- Elaborate interoperability solutions
- Elaborate new standards

Meetings

Plenary Meeting – app. 3 times/year Work Group Meetings – Elaboration – weekly Alignment with European Commission - monthly

Time FrameDelivery of hEN until end of 2025

Status Workgroups



WG 1 Strategic Advisory Group Convener: Martin Schreck (SN)

- Common Time Line elaborated
- System Picture
 (Architecture) elaborated
- Use Cases and User
 Stories elaborated
- Business Plan
- Liaisons
- Monthly Update with EC

WG 2 Unique identifiers and data carriers Convener: Johan Dahlgren (SIS)

 NWIP for Data Carrier and Unique Identifier

established

 Drafts for Data Carrier and Unique Identifier elaborated

WG 3 Security

(Torgeir Waterhouse, SN)

- NWIP established
- Convenor appointed and approved
- Drafts realized in February2025

WG 4 Interoperability framework

Convener: Otto Handle (ASI)
Co-Convener: Richard Merkel (DIN)

- NWIP established for all related modules:
 - Data processing and exchange
 - Data storage
 - API
 - Data Modelling

First Drafts elaborated in December 2024

Complete Drafts expected for official assessment end of March 2025



Thank you very much



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