



**European Standardization Organizations**

# JTC 24 – Digital Product Passport – Framework and System

CEN CENELEC JTC 24

Chair: Thomas Knothe, Co-Chair: Thomas Rödding

Secretary CEN-CLC JTC 24: Katharina Sehnert (DIN)

Project Manager CEN CENELEC: Benjamin DeVille (CCMC)

# Digital product passports (DPP) as part of European broader regulatory



## European Green Deal

**EU Plan: climate-neutral by 2050, safeguard biodiversity, establish a circular economy and eliminate pollution, while boosting the competitiveness of the European industry**

Entered into force

### Codesign for Sustainable Product Regulation (ESPR)

- Proposed in Mar 2022, as central part to the Commission's strategy for eco-friendly and circular products
- Aims to promote environmental sustainability across a broader range of products

Requires **digital product passports based on harmonized European Standards (hEN)**

Entered into force

### Battery Regulation

- Entered into force in Aug 2023 replacing the EU Battery Directive
- Provides a legal framework aiming to promote sustainability, circularity, safety and transparency

Mandates a **battery passport** for all EV, LMT, and industrial (>2kWh) batteries starting Feb 2027

Proposal

### End-of-Life Vehicle Regulation

- Proposed in Jul 2023
- Will replace the End-of-life Vehicle Directive
- Governs the entire vehicle lifecycle, from design to end-of-life treatment

Mandates a **circularity vehicle passport**

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



## EN

**Increase  
Products safety and quality**

**Lower**    
**Transaction costs and prices** 

## hEN

**To demonstrate** presumption of  
conformity regarding  
**relevant EU legislation**  
**of products, services and process**  
**(listed in official journal of EU)**



# CEN CLC JTC 24 “Digital Product Passport Framework and System”



## Objectives

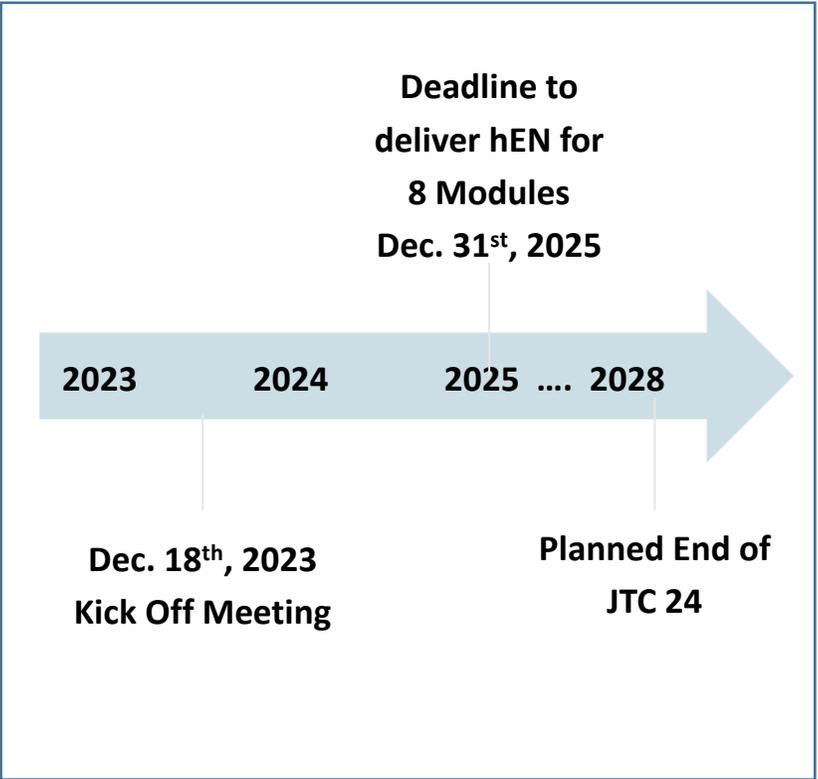
Fulfill the **Standardization Request (SReq)** to define **harmonized standards for the DPP System** according to **Ecodesign for Sustainable Products Regulation (ESPR)** and **Battery Regulation + ...**

## Participants

Appr. 140 Experts in Delegations from 20 Member States + Switzerland, UK

Currently 24 Liaisons requests (European and Global)

## Timing



# Standardization Request - Scope

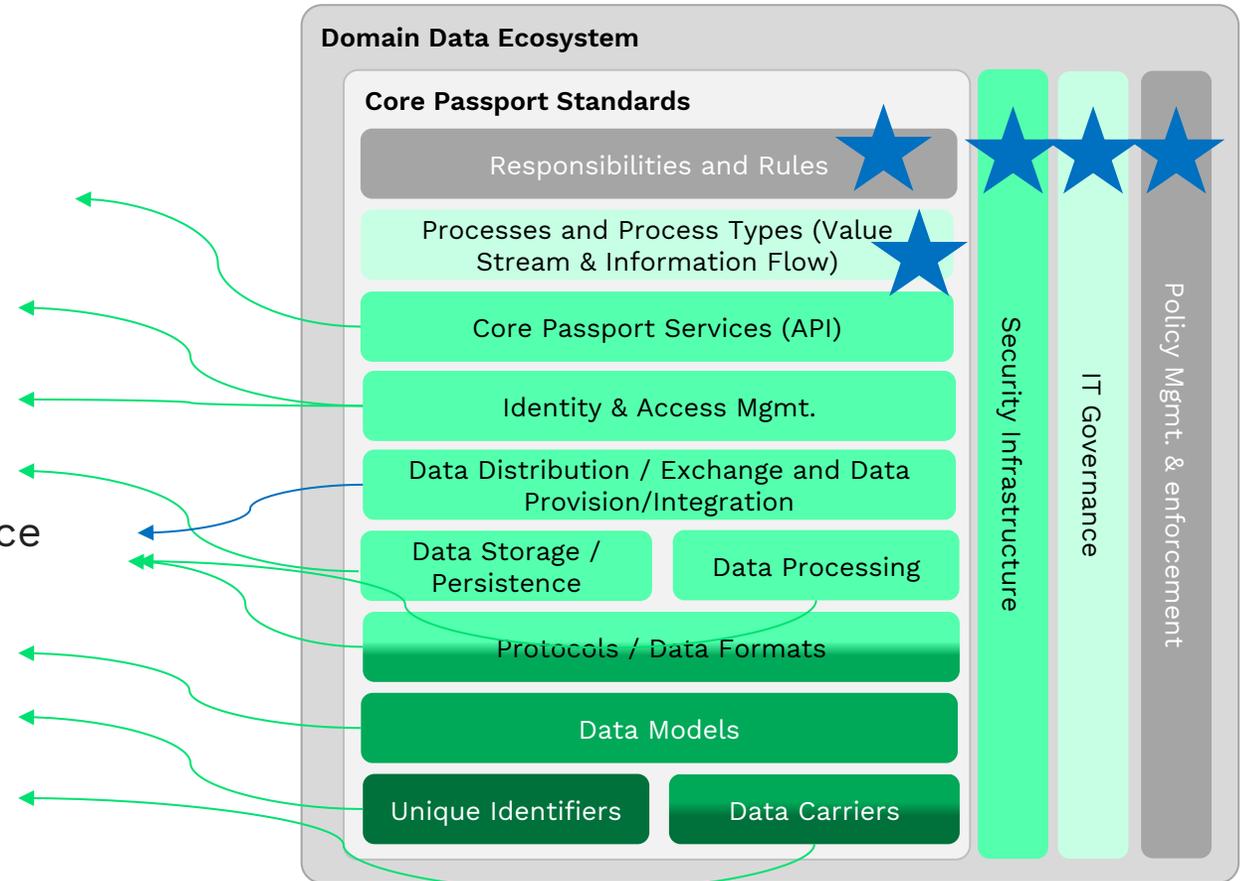
- ▶ Module 1 : Unique identifiers
- ▶ Module 2 : Data carriers and links between physical product and digital representation
- ▶ Module 3 : Access rights management, information, system security, and business confidentiality
- ▶ Module 4 : Interoperability
- ▶ Module 5 : Data processing, data exchange protocols and data formats
- ▶ Module 6 : Data storage, archiving, and data persistence
- ▶ Module 7 : Data authentication, reliability, integrity
- ▶ Module 8 : APIs for the DPP lifecycle management and searchability

# Scope of JTC 24 - META Structure

★ EC foresee implementing acts for this elements – need interfaces

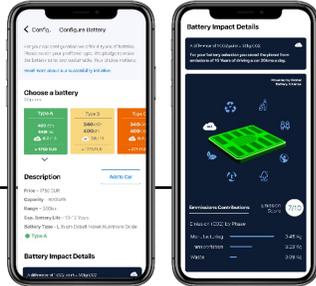
## CEN CLC JTC 24 – Delivery Structure

- Module 8 : APIs for the DPP lifecycle management and searchability
- Module 3 : Access rights management, information, system security, and business confidentiality
- Module 7 : Data authentication, reliability, integrity
- Module 6 : Data storage, archiving, and data persistence
- Module 5 : Data processing, data exchange protocols and data formats
- Module 4 : Interoperability
- Module 1 : Unique identifiers
- Module 2 : Data carriers and links between physical product and digital representation



Meta Structure based on ISO 11354  
From Battery Pass Project

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



## DPP Data

## DPP System

DPP data sector specific for:

- Batteries
- Electronics
- Textiles
- Construction Materials



→ Defined in different regulations (e.g., the Battery Regulation with further information available in the Battery Passport Content Guidance)

Harmonized technical system for all DPPs:



Data Storage



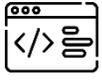
Data Carrier Identifier



Trust / Security / Sovereignty / Access



Data Exchange

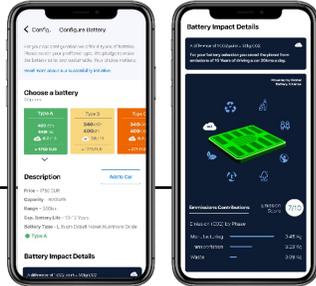


IT Services / APIs



Workflows and Data Processing

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



DPP Data

DPP System

Passport Data is out of Scope in JTC 24

Harmonized technical system for all DPPs:



Data Storage



Data Carrier Identifier



Trust / Security / Sovereignty / Access



Data Exchange

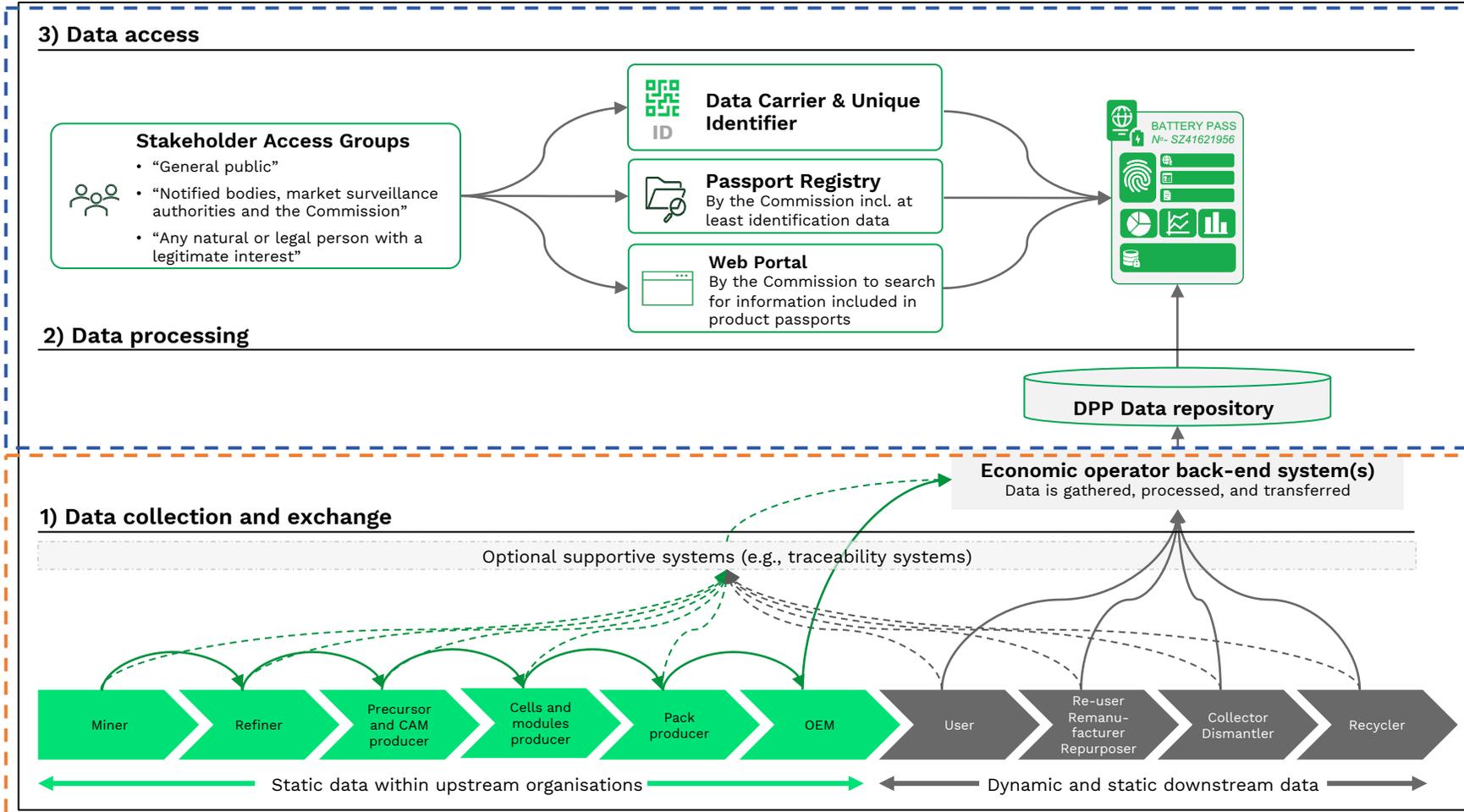


IT Services / APIs



Workflows and Data Processing

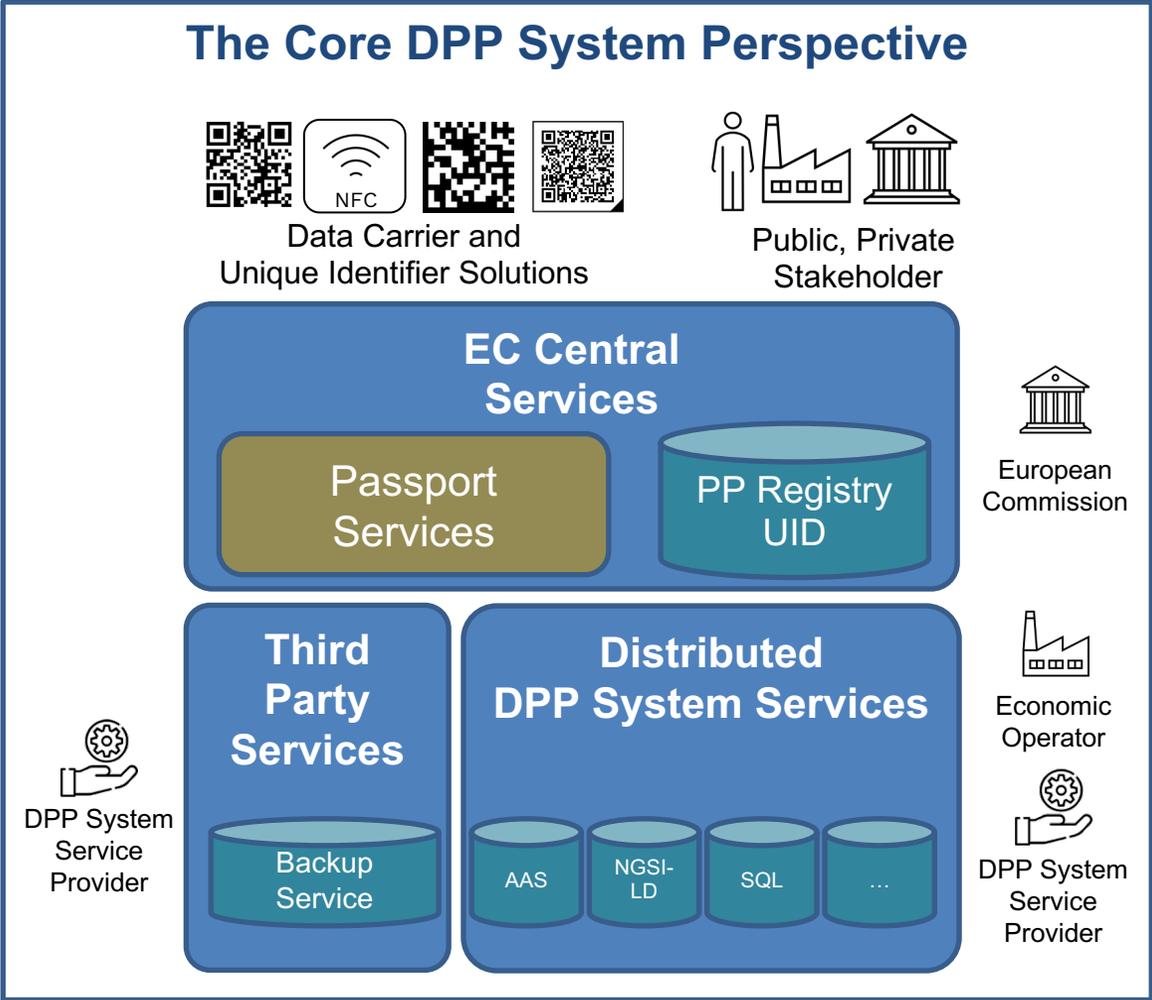
# Process Scope of JTC24



**Scope in JTC 24:  
Data Access,  
Data Processing**

**Out of Scope in JTC 24:  
Data Collection and  
aggregation**

# Organisation Scope : Who should be interested into JTC24



**European Commission and National Authorities**  
(e.g. Market Surveillance)

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

**DPP System and Service Providers**  
(e.g. for operating services, backup services)

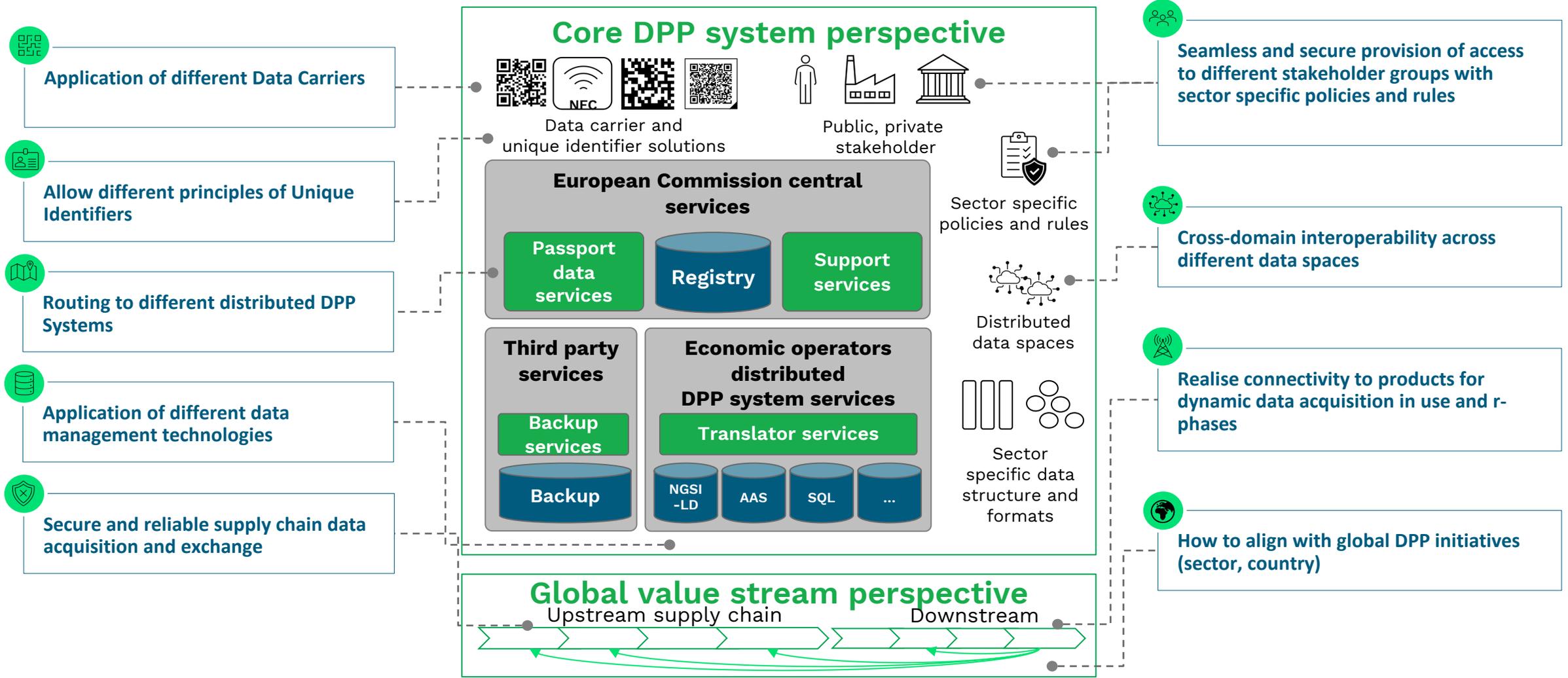
**DPP System Component Suppliers**  
(e.g. for Data Carrier)

**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

# Major Interoperability Goal – Co-existence of standards/technologies



# 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
- 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

## 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

# Thank you very much



Chair JTC 24  
Thomas Knothe

[thomas.knothe@ipk.fraunhofer.de](mailto:thomas.knothe@ipk.fraunhofer.de)



Co-Chair JTC 24  
Thomas L. Rödding

[thomas.roedding@narravero.com](mailto:thomas.roedding@narravero.com)

[www.cencenelec.eu](http://www.cencenelec.eu)

Follow us:



Tag us @standards4EU

Secretary JTC 24  
Katharina Sehnert

[katharina.sehnert@din.de](mailto:katharina.sehnert@din.de)