



European Standardization Organizations

## Webinar

***'How to become compliant with EU Digital Product Passport legislations: Guidance on the recent published European standards'***

25 June 2026

We start at  
14:00 CET

# Welcome

Els SOMERS

CCMC Project Manager – Public Relations



- ▶ You are all muted during this webinar
- ▶ It's a 'one-way' webinar. You cannot ask questions or comment
- ▶ The webinar is being livestreamed on the CEN-CENELEC YouTube channel: [www.youtube.com/@CENCENELEC](https://www.youtube.com/@CENCENELEC)
- ▶ The webinar is also being recorded
- ▶ Recording and presentation will be made available on the CEN and CENELEC website: <https://www.cencenelec.eu/news-events/events/2026/2026-06-25-webinar-eu-digital-product-passport/>

# Introduction



Benjamin de VILLE de GOYET

CCMC Project Manager – Sustainable Systems & Consumers

Introduction

EU Regulatory Framework

CEN-CLC/JTC 24's work on DPP

Standards on Unique ID & Data Carriers

Standards on Security

Standards on Interoperability

Impact of the Standards

Outlook

# Agenda

# The European Standardization System



## ▶ European

The European standardisation system is based on a “**public – private**” partnership between the ESOs and EC. Standardisation is a voluntary and independent activity but with effects on a number of areas of public concern → public interest to be represented.



Recognised also in Art. 2 (8) and Annex I of EU Regulation 1025/2012

## ▶ National



### Single Standards Model

**1 European Standard (EN)**

**34** identical national standards

& all conflicting standards **removed**

**Access to a market of 600 million consumers**

**43** National Standardization Organizations from **34** countries

## ▶ International



Recognised also in Art. 2 (9) of EU Regulation 1025/2012

# What is a standard?



**Technical documents** designed to be used as a guideline or definition, which are:

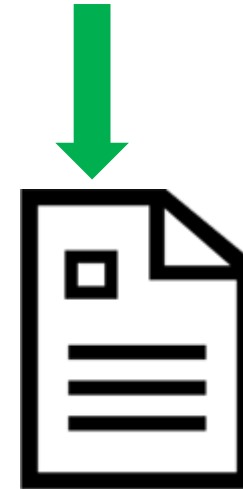
- produced by all interested parties in a transparent, open and consensus-based process
- intended for a common and repeated use
- voluntary in use
- approved by a recognized body
- possible tools to underpin legislation

Standardization deliverables can be a European Standard (EN), a Technical Report (TR), a Technical Specification (TS) or a Workshop Agreements (CWA – other criteria apply)

# EU products harmonization - Workflow



Standardization Request M/604\* [DPP]  
\*and its amendment M/604\_Amd1



Drafting of the European Standard (EN)



Evaluation of the compliance of the EN with the supported Regulation

Publication in OJEU



4000+ harmonized standards listed in the OJEU

Standards cited in OJEU:

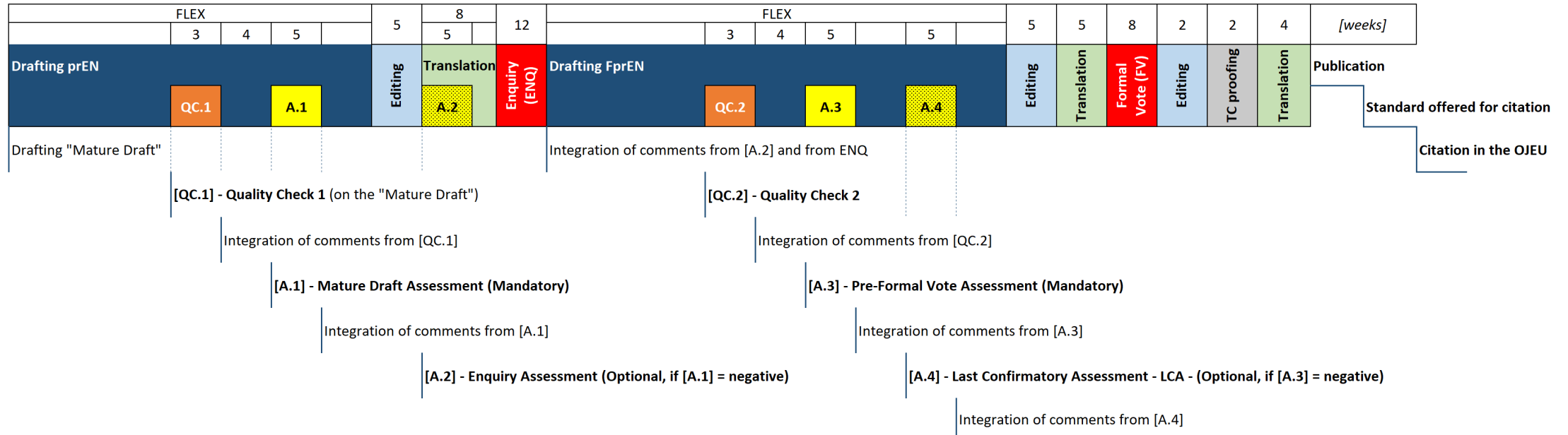
- ✓ Give **presumption of conformity** to the products as regards ESPR legal requirements.
- ✓ Remains of **voluntary** use.



*A Standardization Request is a precondition for citation of harmonized standards in the OJEU*

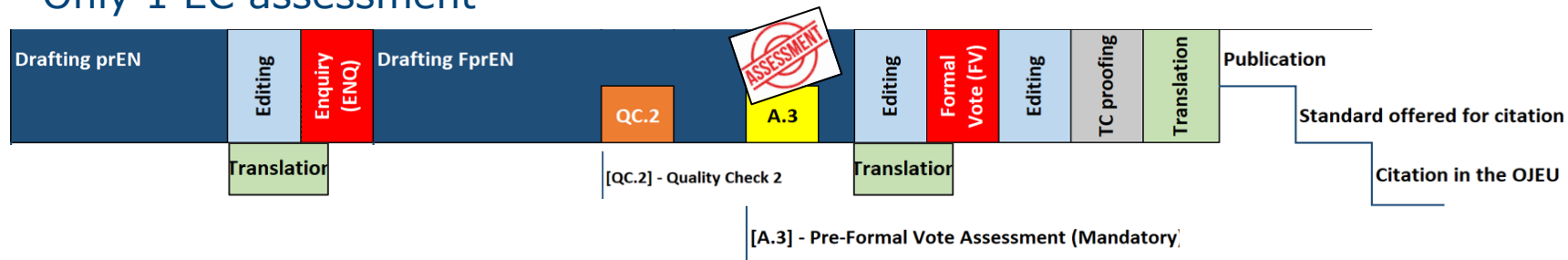
# Innovative Process – homegrown hEN

## Workflow



## Adapted workflow for the DPP standards

- 2 main steps remain (Enquiry + Formal Vote)
- Only 1 EC assessment





# EU Regulatory Framework

Franziska ZIBOLD

European Commission, DG GROW – Policy Officer





# Digital Product Passport

*Directorate-General for Internal  
Market, Industry, Entrepreneurship  
and SMEs  
G2 Digital Product Passport Team*

## Where are we



First **six harmonised standards** by CEN-CENELEC's JTC24 to be published in the OJ in June / early July



**Implementing Act on Registry** discussed with Member States



**European Product Act** – potential integration of DPP



**Product related Delegated Acts**

## What is next



2 harmonised standards by CEN-CENELEC's JTC24 to be published.



Launch of the **DPP Registry** in **July 2026**.

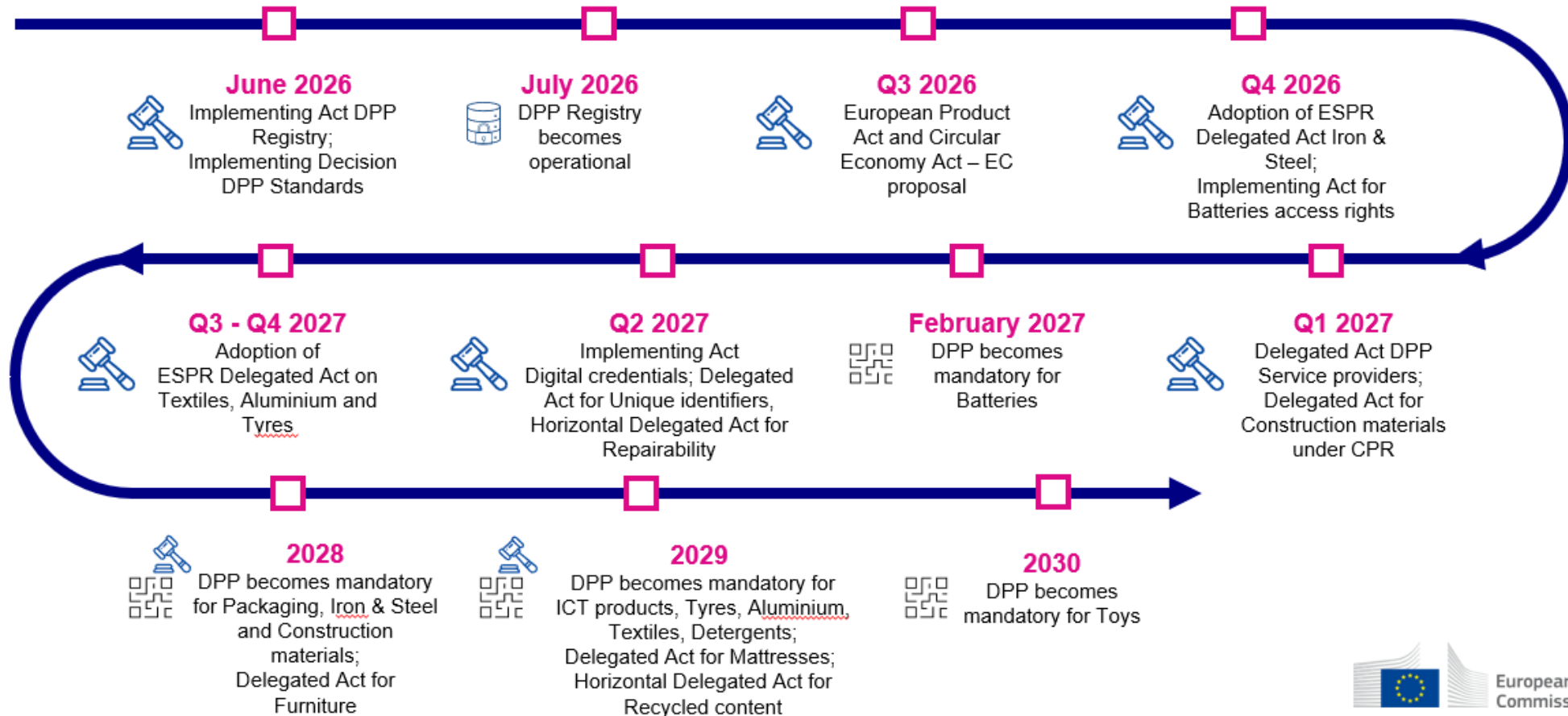


**Certain types of big batteries** are the first product category for which the DPP becomes mandatory in **February 2027**.



The DPP is being introduced for a **wide range of other products**, specified in **ESPR Work Programme**, from the end of 2027 onwards.

## Timeline



## Legal framework and main aspects



### Legal basis

The DPP's original legal basis can be found in the **Ecodesign for Sustainable Products Regulation (ESPR)**.

**+** *Product specific delegated acts (textiles, steel and aluminium, tyres, furniture, ICT, energy related products)*

**Standalone legislation** also refer to the DPP:

Batteries Regulation

Toy Safety Regulation

Detergent Regulation

Packaging and Waste Packaging Regulation

Construction Products Regulation

## Priority Products proposed by ESPR Work Programme


### Products to be included in the work programme



Textiles/Apparel  
2027\*



Furniture  
2028\*




Tyres  
2027\*



Mattresses  
2029\*

### Intermediate products included



Iron & Steel  
2026\*



Aluminium  
2027\*

### Products included under the transition rules



Energy-related products  
2027\*



ICT products  
2029\*

\*indicative timeline for adoption

## DPP across sectoral legislation

Regulation	Status	DPP Implementation
<b>Batteries and waste batteries</b>	In force	Battery passport via QR code
<b>Marketing of construction products</b>	In force	Construction digital product passport system
<b>Packaging and packaging waste</b>	In force	<u>Harmonised</u> labelling system
<b>Safety of toys</b>	In force	Information on compliance, declaration of conformity, CE marking
<b>Detergents and surfactants</b>	In force	Technical requirements to be established via implementing acts

## European Product Act (EPA)

The EPA is envisaged as a **legislative package** bringing together three closely linked pillars:



- **New Legislative Framework (NLF):** Modernises EU product legislation governing market access, CE marking and conformity assessment to reflect digitalisation and the circular economy, including clearer rules for refurbished products.
- **Market Surveillance:** Reinforces enforcement of EU product rules by national authorities and customs, improving coordination and effectiveness against unsafe and non-compliant products, including those sold online or imported.
- **Standardisation:** Updates the EU standardisation framework to ensure timely and coherent harmonised standards underpinning CE marking, conformity assessment and regulatory compliance across the single market.

## DPP as part of EPA

Introducing **horizontal DPP legal framework** as part of the **EU Product Act (EPA)**. This means harmonizing and clarifying the core DPP elements, including:

- **Decreased legal complexity**
- **Simplified compliance rules** for economic operators
- Bringing **cost-savings** for manufacturers and public authorities
- Consolidated data requirements through **single reporting standard** for SMEs across sectors
- Ensuring a **smooth implementation** of the DPP
- **Future proofing the DPP framework**

The introduction of these horizontal rules would not **negatively impact the rollout of the DPP.**

## DPP Standardisation



- Eight harmonised standards are being developed in close collaboration with CEN-CENELEC Joint Technical Committee (JTC24) on the Digital Product Passport.
- Six standards (unique identifiers, interoperability, data carrier, API, data exchange protocols and data storage) were published by CEN/CENELEC and will be published by the European Commission end June / early July.
- Two standards (authentication and access rights management) will be finalized over the summer
- JTC5 at ISO level will start its operations in September 2026 and is an important step to ensure interoperability at international level.

**Thank you to all the technical experts, the convenors of the working groups and the chairs for the exceptional fast delivery.**

## Supporting businesses along the implementation



The Commission plans to develop:

- **Technical guidance documentation** for DPP registration and the use of the DPP registry
- DPP readiness campaign to support the industry, including **webinars and other events**
- **Open-source tools** to help companies (incl. SMEs) to create DPPs and validate their DPPs structure

## Benefits for consumers, businesses and public authorities



### Consumers

- **Digital** instructions of use
- **Verified product data:** origin, materials, sustainability, comparability
- **Product-related services:** use, repair, maintenance, accessories



### Businesses

- **Digitalised product information:** reduced printing, shipping, storage costs
- **Centralised digital product data:** simplified reporting
- **New business models:** connected services via DPP, repair, maintenance, accessories



### Public Authorities

- **Automated** compliance checks and reporting
- **Harmonised digital product data** that allows to perform risk assessment processes
- eSurveillance webcrawler integration: **more effective detection of similar dangerous products**

## Questions? FAQ published



 Ref. Area(2026)5136906 - 20/05/2026

**Digital Product Passport:  
Frequently Asked  
Questions (FAQ)**



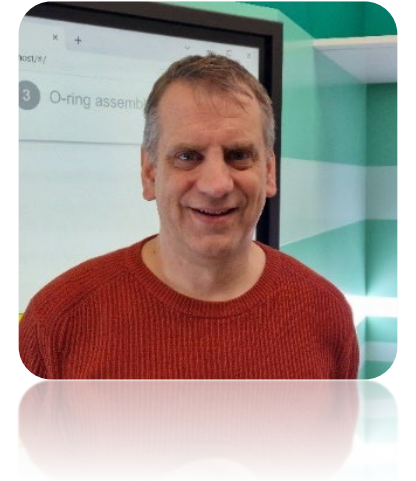
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## Thank you!

Contact: [GROW-DIGITAL-PRODUCT-PASSPORT@ec.europa.eu](mailto:GROW-DIGITAL-PRODUCT-PASSPORT@ec.europa.eu)

# Framework of the Standards from JTC 24

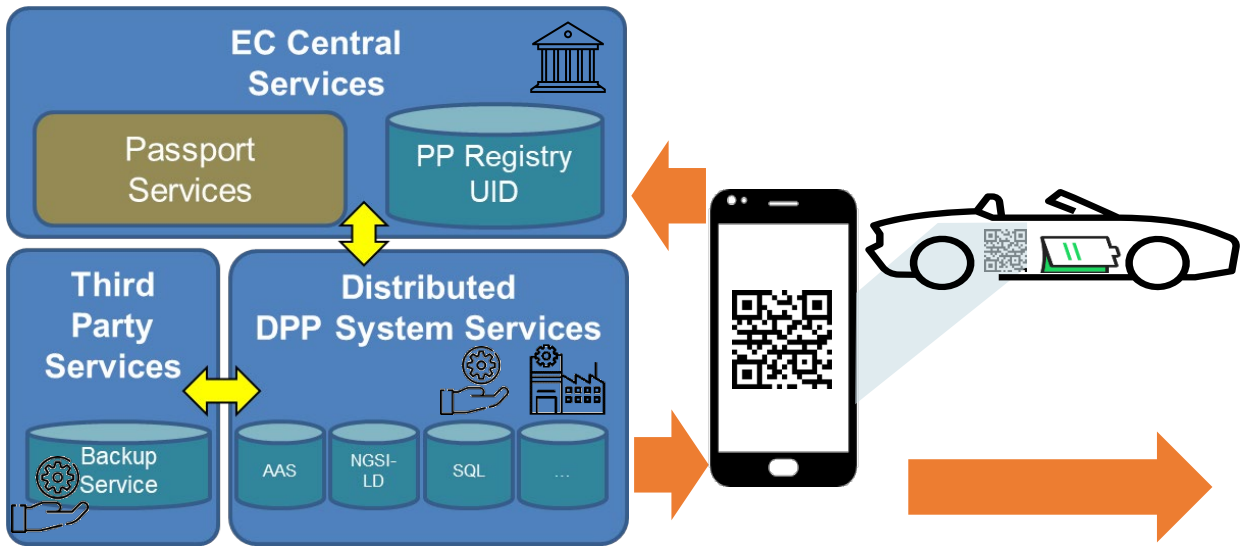
Prof. Thomas KNOTHE  
CEN-CLC/JTC 24 – Chair



# A small theoretical Input – How the EU DPP is working - Example Battery Pass

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

## 107 Data Points around the product Life



Scope of CEN-CLC/JTC 24



Selection of mandatory Data

**Battery ID: 0101010**

**General information**

- Manufacturing info (identity, place, date)
- Compliance Labels Certificates
- Circularity
- Supply Chain Due Diligence
- Carbon Footprint
- Manuals
- State of Health**



Typical voluntary Data

**Battery ID: 0101010**

- Benchmarks
- Repair Manual
- Spare Parts
- Connected Products
- Service Centres
- Upgrades

Data are in scope of product group specific standards and delegated acts.

# Interoperability: EU DPP System has to handle seamlessly heterogeneous objects and conditions

## Handle different Product specific requirements



### Data Sets



Conformity level  
Eco Design  
Certificates  
Declarations  
Labels

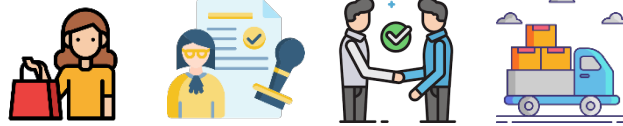
### Identifier

<https://xyz.1234>  
DOI: 2635sxy2  
12345678910

### Data Carrier



## Allow Stakeholder for individual access to support IPR protection



## Enable Digital Business Models



Whats to be taken into account when creating a Digital Product Ecosystem

## Reflect Status of Product in its Life Cycle



Bring a product into the market

Use

Refurbish Repair

Recycling

## Support Global Alignment



## Enable various data access channels



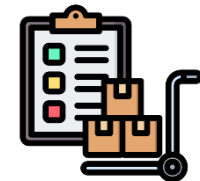
B2C  
Web Shop  
Retail



B2C  
Store  
Retail



B2G  
Customs  
Market  
Surveillance

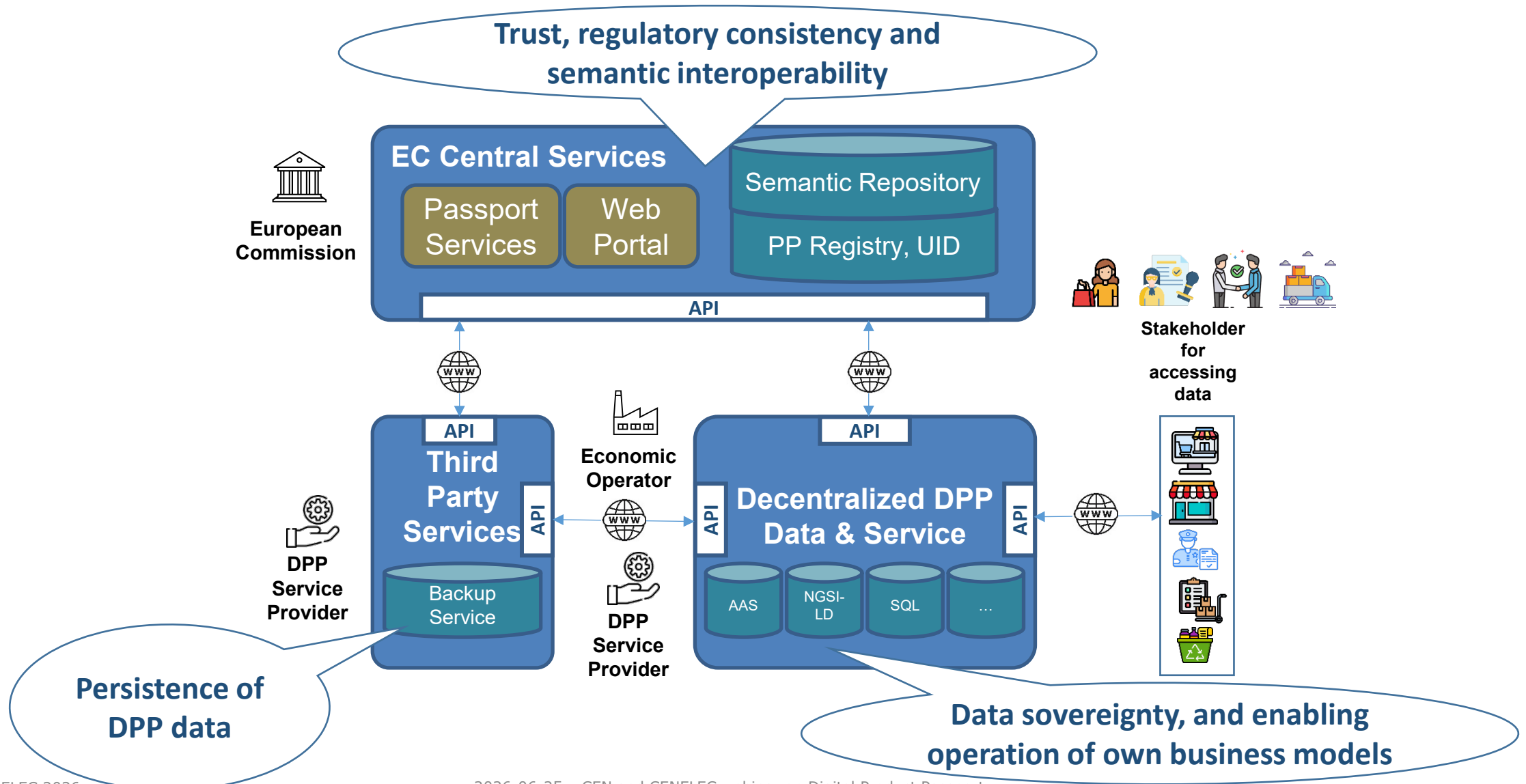


B2B  
Industry  
Incoming  
Inspection



B2B  
Recycling

# The EU DPP System consists of three major components in a public private partnership



# Example: How the EU DPP System is used under responsibility of economic operators

Product should enter into the EU market



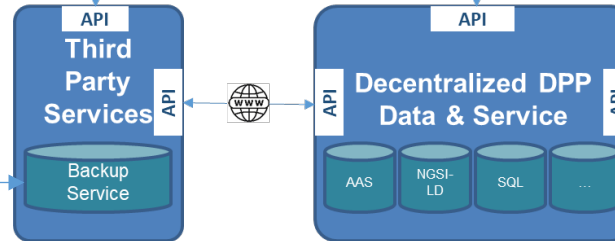
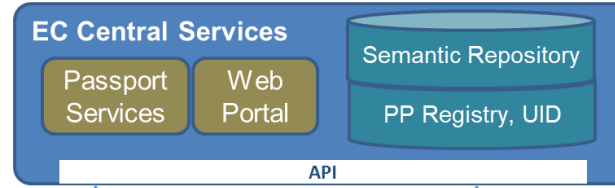
1. Create a Unique Identifier for the product
2. Create a Data Carrier with Unique Identifier and physically attached to the product

01234



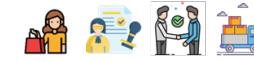
3. Store the DPP Data for the product (Item, Batch Model)

4. Store DPP Data into Backup



5. Register the DPP and link to DPP Data via Unique Identifier and API

01234



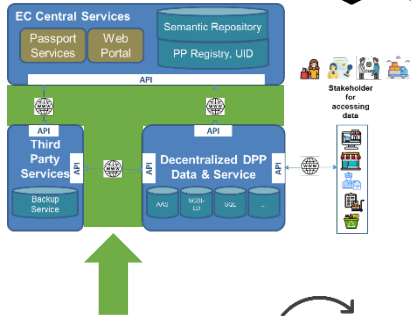
Stakeholder for accessing data

Manage access and access rights



Ensure integrity of DPP data for the products

## Module 4 : EN 18223 Interoperability



## Module 5 : EN 18216 Data processing, data exchange protocols and data formats



## Economic Operator Tasks

1. Create a Unique Identifier for the product
2. Create a Data Carrier with Unique Identifier and physically attached to the product
3. Store the DPP Data for the product (Item, Batch Model)
4. Store DPP Data into Backup
5. Register the DPP and link to DPP Data via Unique Identifier and API
6. Manage access and access rights
7. Ensure Integrity of DPP Data for a certain product

## CEN CLC JTC 24 Standards

01234

**Module 1 : EN 18219 Unique identifiers**



**Module 2 : EN 18220 Data carriers and links between physical product and digital representation**



**Module 6 : EN 18221 Data storage, archiving, and data persistence**



**Module 8 : EN 18222 API for the DPP lifecycle management and searchability**

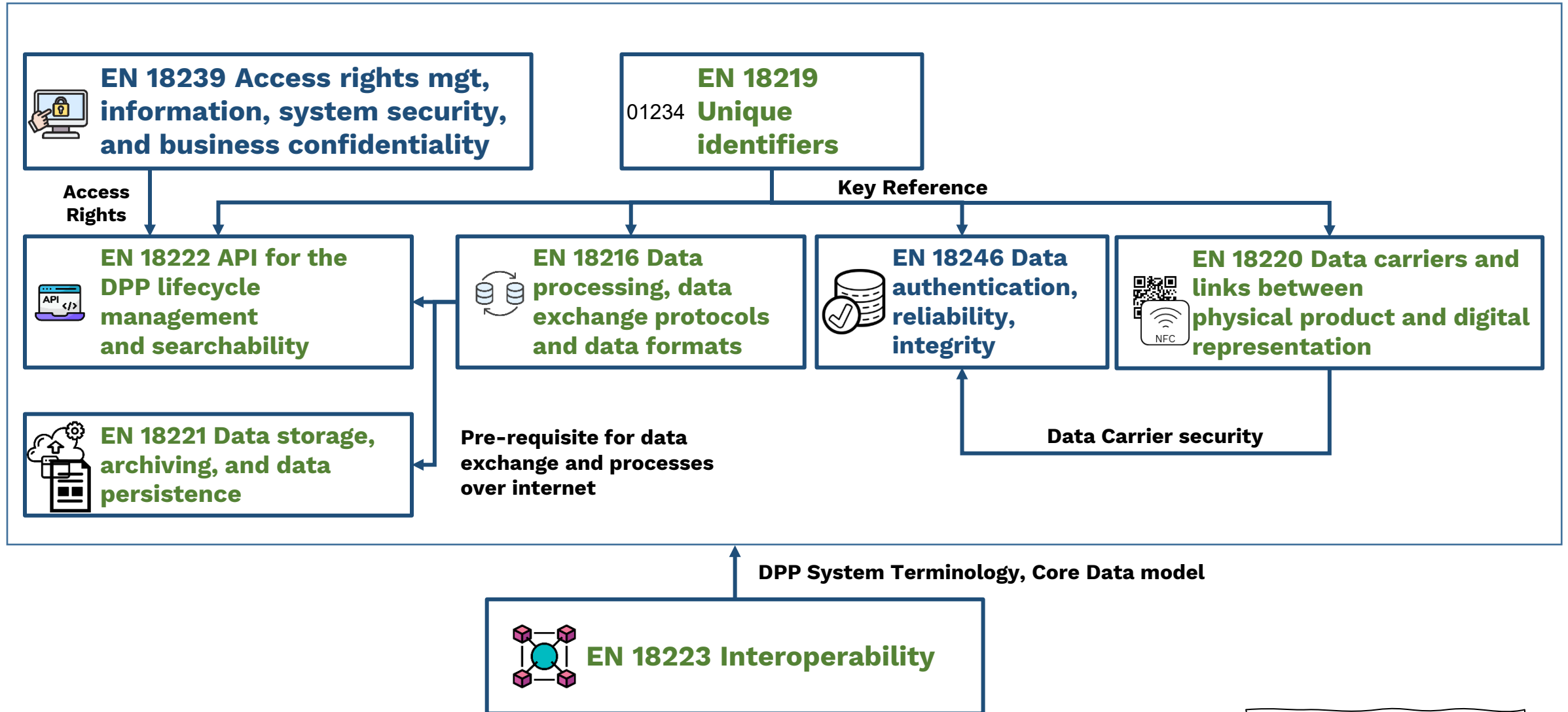


**Module 3 : EN 18239 Access rights mgt, information, system security, and business confidentiality**



**Module 7 : EN 18246 Data authentication, reliability, integrity**

# The standards are modular and interlinked



# DPP standards: overview



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM  
ICS 35.240.63  
English version  
Digital product passport - Data exchange protocols

**EN 18216:2026**  
DPP - Data exchange protocols

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM  
ICS 35.240.63  
English version  
Digital product passport - Unique identifiers

**EN 18219:2026**  
DPP - Unique identifiers

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM  
ICS 35.240.63  
English version  
Digital product passport - Data carriers

**EN 18220:2026**  
DPP - Data carriers

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM  
ICS 35.240.63  
English version  
Digital product passport - Data storage, archiving, and data persistence

**EN 18221:2026**  
DPP - Data storage, archiving, and data persistence

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM  
ICS 35.240.63  
English version  
Digital product passport - Data authentication, reliability and integrity

**EN 18246:2026**  
DPP - Data authentication, reliability and integrity

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM  
ICS 13.020.20  
English version  
Digital Product Passport - Application Programming Interfaces (APIs) for the product passport lifecycle management and searchability

**EN 18222:2026**  
DPP - Application Programming Interfaces (APIs) for the product passport lifecycle management and searchability

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM  
ICS 13.020.20  
English version  
Digital Product Passport - System interoperability

**EN 18223:2026**  
DPP - System interoperability

**Under approval**  
FINAL DRAFT  
FprEN 18239  
May 2026  
English version  
Digital Product Passport - Access rights management, information system security, and business confidentiality

**EN 18239:2026**  
DPP - Access rights management, information system security, and business confidentiality

**Under approval**  
FINAL DRAFT  
FprEN 18246  
May 2026  
English version  
Digital product passport - Data authentication, reliability and integrity

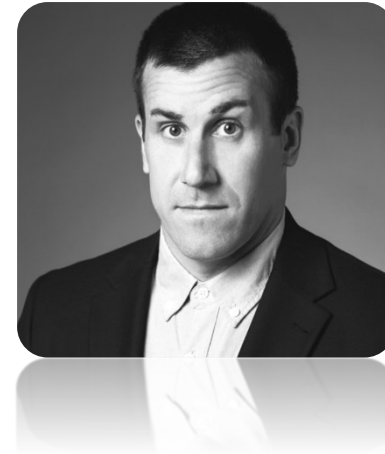


CEN-CENELEC Management Centre  
Rue de la Science 23, B-1040 Brussels

# Unique ID & Data Carriers

Johan DAHLGREN

CEN-CLC/JTC 24/WG 2 - Convenor



# Unique ID & Data Carriers: overview

1,5 year & 61 formal meetings



Johan Dahlgren  
Convenor WG 2



Laura Linnala  
Secretary WG 2

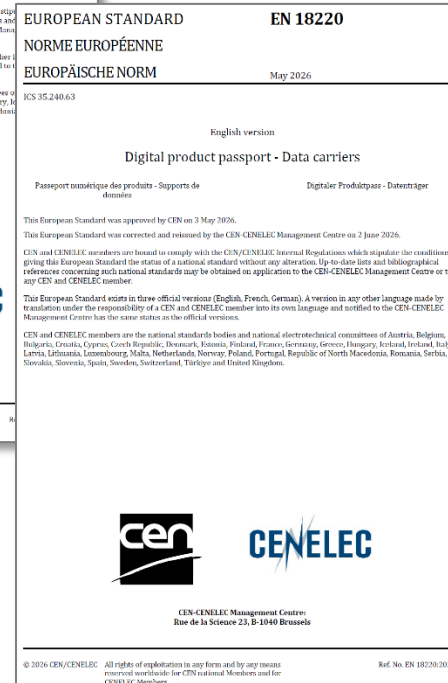


Jean-Christophe Gilbert  
Project leader

252 experts



EN 18219:2026  
DPP - Unique identifiers



EN 18220:2026  
DPP - Data carriers

Connecting the physical product with its digital product passport through a link

### Unique identifiers

Product ID

Economic operator ID

Facility ID

### General requirements

Globally unique

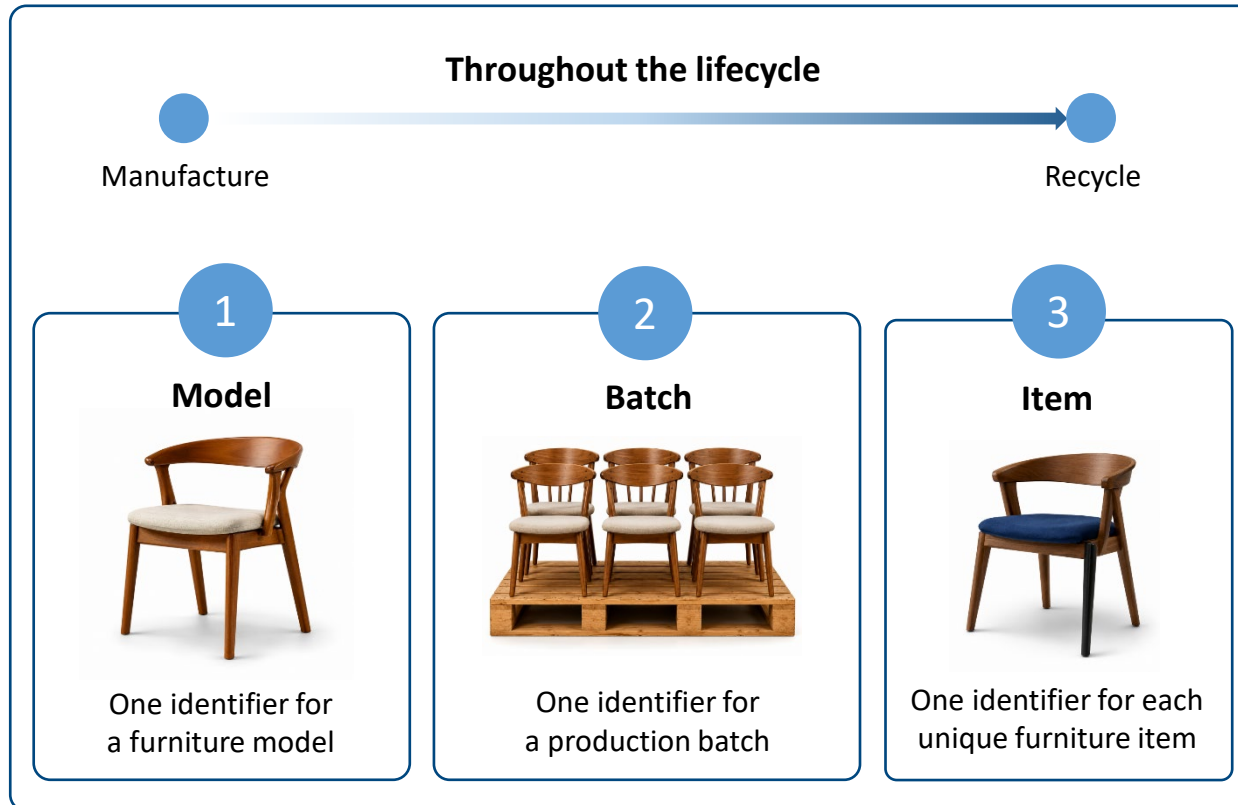
Persistent

Machine-readable

Usable across systems

Level of granularity

### Level of granularity



5

ID schemes for products

4

ID schemes for economic operators & facilities

# Easy access through a data carrier



Enabling users to access digital product information from the physical product

## Data Carrier Requirements

Data encoding

Scannable

Accessibility

Data carrier design

Durability

Quality

Performance

Placement & marking

Other considerations

### QR code



High-capacity 2D code readable by most cameras and smart devices.

### Data Matrix



High-density 2D code for direct part marking at small print area.

### NFC



Short-range contactless communication tap-to-read.

### HF RFID



High-frequency RFID for short-range interactions.

### RAIN RFID



UHF RFID for long-range, fast identification in supply chains.

### Need to work for:

- Consumers
- Businesses
- Repairers
- Recyclers
- Market surveillance
- Automated systems

# Security

Torgeir WATERHOUSE

CEN-CLC/JTC 24/WG 3 - Convenor



**FINAL DRAFT**  
**FprEN 18239**

**Under approval**

May 2026

English version

Digital Product Passport - Access rights management, information system security, and business confidentiality

Passport numérique des produits - Gestion des droits d'accès, sécurité du système d'information et confidentialité des affaires

Digitaler Produktpass - Management der Benutzerrechte, IT-Sicherheit und Geschäftsgeheimnisse

This draft European Standard is submitted to CEN members for formal vote. It has been drawn up by the Technical Committee CEN/CLC/TC 24.


If this draft becomes a European Standard, CEN and CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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## EN 18239:2026

### DPP - Access rights management, information system security, and business confidentiality

**FINAL DRAFT**  
**FprEN 18246**

**Under approval**

May 2026

English version

Digital product passport - Data authentication, reliability and integrity

Passport numérique des produits - Authentification, fiabilité et intégrité des données

Digitaler Produktpass - Datenauthentifizierung, Zuverlässigkeit und Integrität

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## EN 18246:2026

### DPP - Data authentication, reliability and integrity

- ▶ **Develop in less than two years** standards coherent with the principles laid down in Union legislation relating to processing of personal data, protection of privacy, security of network and information systems, cybersecurity and protection from fraud and with the technical mechanisms established in support thereof.
- ▶ **Bring together new stakeholders** in standardization, coming from different horizons, towards a common goal.

- ▶ Make available **quality and consensus-based standards** on top of which organizations can build robust, effective and appropriate security measures that address the DPP-related cybersecurity risks

## Considering key assets

- From customer personal data, economic operator confidential data to core infrastructure components – all relevant for end-to-end resilience of the DPP ecosystem

## Considering key threats

- Identity and deception attacks (QR/quishing, system faking), data interception (man-in-the-middle, transport layer attacks), non-trustworthy insider/partner access

## Considering key risks

- Materializing threats translate into critical risks: leakage of sensitive business data, infrastructure failure, consumer & operator exposure (direction to malicious websites, data integrity breaches)

- ▶ Finalization of two European harmonized standards:
  - **FprEN 18239** *Access rights management, information system security and business confidentiality*
    - Specifies the requirements for DPP access rights management, including IT security, data protection and responsibility transfer between economic operators
  - **FprEN 18246** *Data authentication, reliability and integrity*
    - Defines the framework for secure information processing and communication to safeguard integrity, authenticity and reliability in the DPP data exchange

Under Formal Vote until 2026-07-16

# Interoperability

Otto HANDLE

CEN-CLC/JTC 24/WG 4 - Convenor



# Interoperability: overview



**EUROPEAN STANDARD** **EN 18216**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM** May 2026

ICS 35.240.63

English version

**Digital product passport - Data exchange protocols**

Passport numérique des produits - Protocoles d'échange de données Digitaler Produktpass - Datenaustausch

This European Standard was approved by CEN on 3 May 2026.

CEN and CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which give this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN or CENELEC member.

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## EN 18216:2026 DPP - Data exchange protocols

**EUROPEAN STANDARD** **EN 18221**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM** May 2026

ICS 35.240.63

English version

**Digital product passport - Data storage, archiving, and data persistence**

Passport numérique des produits - Stockage, archivage et persistance des données Digitaler Produktpass - Archivierung

This European Standard was approved by CEN on 3 May 2026.

This European Standard was corrected and released by the CEN-CENELEC Management Centre on 2 June 2026.

CEN and CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which give this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN or CENELEC member.

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## EN 18221:2026 DPP - Data storage, archiving, and data persistence

**EUROPEAN STANDARD** **EN 18222**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM** May 2026

ICS 13.020.20

English version

**Digital Product Passport - Application Programming Interfaces (APIs) for the product passport lifecycle management and searchability**

Passport numérique des produits - Interfaces de programmation d'applications (API) pour la gestion du cycle de vie et la recherche du produit Digitaler Produktpass - Programmierschnittstellen

This European Standard was approved by CEN on 3 May 2026.

This European Standard was corrected and released by the CEN-CENELEC Management Centre on 2 June 2026.

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## EN 18222:2026 DPP - Application Programming Interfaces (APIs) for the product passport lifecycle management and searchability

**EUROPEAN STANDARD** **EN 18223**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM** May 2026

ICS 13.020.20

English version

**Digital Product Passport - System interoperability**

Passport numérique des produits - Interopérabilité du système Digitaler Produktpass - System Interoperabilität

This European Standard was approved by CEN on 3 May 2026.

This European Standard was corrected and released by the CEN-CENELEC Management Centre on 2 June 2026.

CEN and CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN or CENELEC member.

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## EN 18223:2026 DPP - System interoperability

making wide adoption possible:

- ▶ easy participation and access for any person and any software, anytime, anywhere, without barriers, burdens and avoiding vendor lock-in
- ▶ using common technologies and standards
- ▶ sector agnostic fulfilment of industrial and supply chain needs, having SME participation in mind

## EN 18216:2026 DPP Data exchange protocols:

- ▶ widely adopted, secure protocols, endpoints and formats
- ▶ allow for voluntary extensions
  
- ▶ easily accessible for any software and people
  
- ▶ comprehensive tooling support for developers available
- ▶ system-agnostic and vendor independent

### EN 18221:2026 DPP

### Data storage, archiving, and data persistence:

- ▶ ensures accurate, unaltered, complete up-to-date data in any phase of the lifecycle
- ▶ allows for versioning, archiving and high trustability by Back-Up Service providers
- ▶ technology agnostic implementation

## EN 18222:2026 DPP

### Application Programming Interfaces (APIs) for product passport lifecycle management and searchability:

- ▶ detailed, unambiguous API definitions fully integrated in JTC 24 framework of standards
- ▶ includes all relevant lifecycle operations according M/604
- ▶ allow for highly interoperable, low threshold implementation in any software environment

## EN 18223:2026 DPP System interoperability:

- ▶ interoperability of DPP over all product sectors, software and use cases
- ▶ easy adoption to existing systems and processes
- ▶ consider access to security, registry and repository
- ▶ unambiguous rules for semantics, data model & serialization



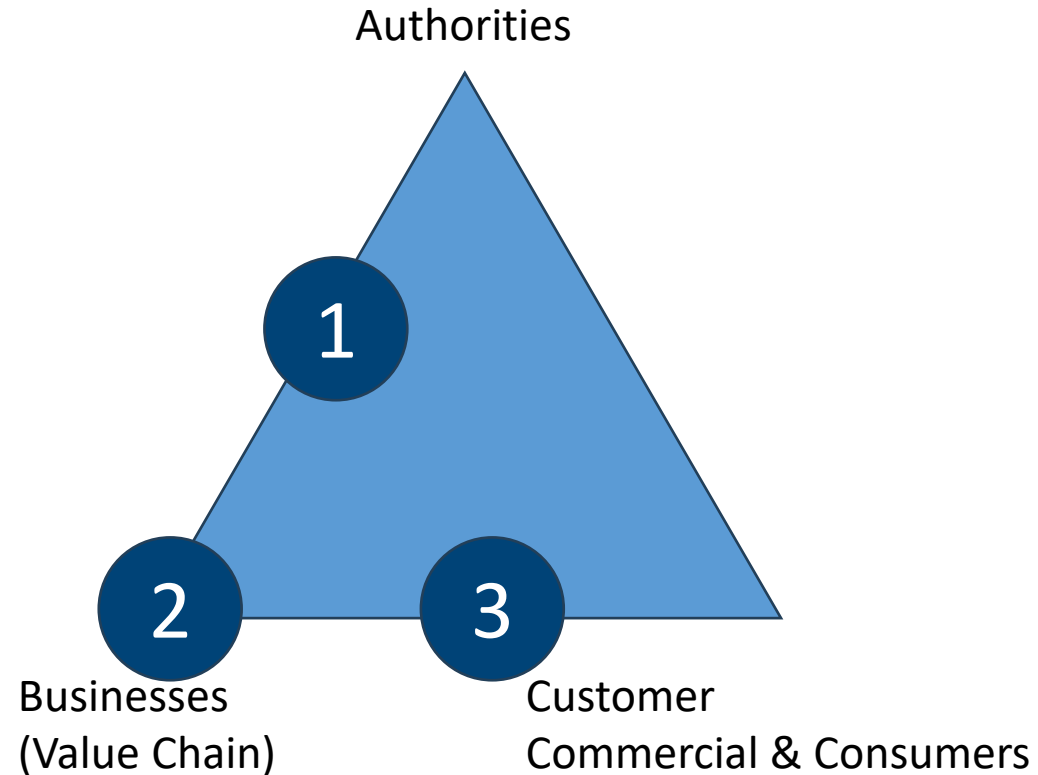
# Impact of the standards

Thomas RÖDDING

CEN-CLC/JTC 24 – Co-Chair

# Triple impact driving a secondary shift

- 1** Business ↔ Government:  
Dual Impact on both parties
- 2** Value Chain Actors  
Along the Chain & Cross-Sectoral
- 3** Business ↔ End-User  
Commercial & Household



- ▶ EU Law defines high **level objectives and framing**.



- ▶ Businesses apply (harmonized!) **standards** (voluntarily).
- ▶ Businesses compile **solid documentation** of application.
- ▶ Businesses declare **conformity**.

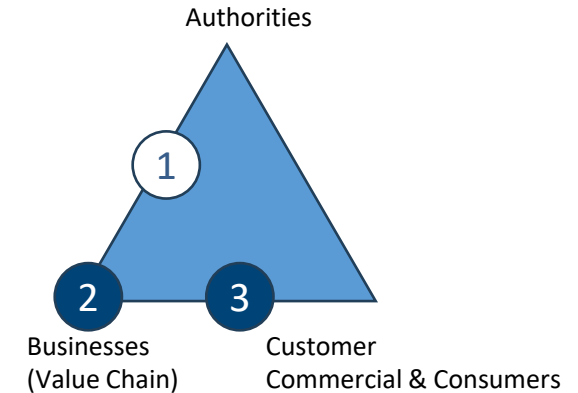


- ▶ Authorities **assume conformity**.

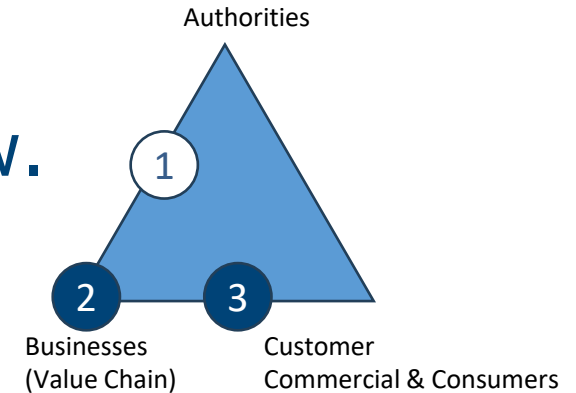


- ▶ **Major cost savings compared to conformity assessment!**

- ▶ **Dual Cost Reduction Bureaucracy** by digital infrastructure
  - ▶ **Authorities** gain streamlined, digital processes for processing multiple government applications
  - ▶ **Businesses** gain streamlined, digital processes for preparing government submissions
- ▶ **Beyond ESPR:** multiples applications with multiple purposes



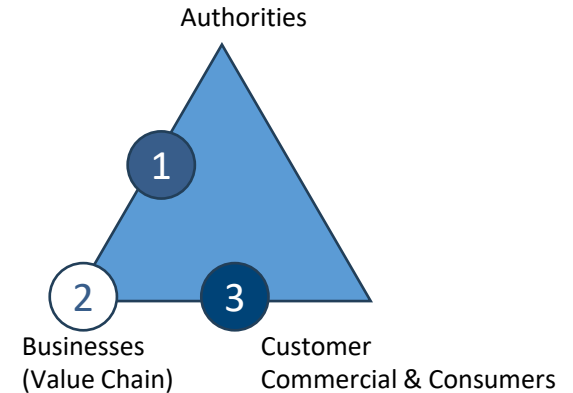
- ▶ Standards establish **common and universal infrastructure** for the product information flow.
- ▶ **Common Infrastructure** enables efficiency and synergy for multiple involved stakeholders, e.g. different government authorities use the same record based on these standards
- ▶ **Universal Infrastructure** enables multiple applications for different purposes, e.g. Ecodesign for Circularity, Market Surveillance, Customs, Conformity, Product Safety and many more



- ▶ Efficiency and **cost-effective by internal use and inter-organizational use**

- ▶ DPP key to **public procurement**

- ▶ Incoming DPP for **procurement, retailer or marketplace**



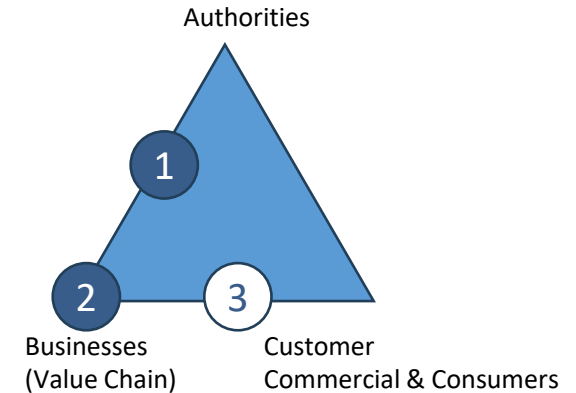
- ▶ **Cross-sectoral** information flow based on common product data standards

- ▶ Voluntary data & services unlocking **new business models**

# End customers (business & household)

benefit from

- ▶ **Comparable** Product Information
- ▶ **Machine-readable** product information
- ▶ **Product-integrated hub** for relevant info & services
- ▶ **Preserved value** through verified history and more



- ▶ Foundational infrastructure for **interoperable product data**
- ▶ One model, many DPP applications: **same or similar needs abroad**: government, business, and consumer abroad
- ▶ **Authoritative source of truth** for European product data
- ▶ For AI: **reliable semantics instead of probabilistic** ones
- ▶ DPP becomes the **primary data source for AI**

## ...turns compliance into economic infrastructure

Dimension	Economic effect
<b>Value</b>	Higher trust, better market access, stronger digital commerce, new services, higher residual value
<b>Cost</b>	Less manual documentation, fewer duplicate processes, lower transaction and compliance costs
<b>Risk</b>	Reduced regulatory, reputational, greenwashing, counterfeit, and supply-chain risk
<b>Strategy</b>	Product data becomes a reusable asset and a foundation for product intelligence and AI

# Outlook

Martin SCHRECK

CEN-CLC/JTC 24/WG 1 - Convenor



## TODAY'S MODEL

### Reporting

Operators report data to authorities.

Each authority collects separately.

Redundant filings, fragmented data.

Heavy bureaucracy for industry.

## DPP MODEL

### Data sovereignty

Operator places data once in the passport.

Authorities and the value chain pull from there.

One source of truth for product information.

**The obligation shifts: from delivering data on request, to making data available once.**

NLF — 2011

*via revision and Omnibus IV →*

EUROPEAN PRODUCT ACT

# The European DPP — four principle clusters

01

## System architecture

Open, neutral system solutions.

Web-based, using URL standards.

Decentralised data, held by the manufacturer or by notified service providers.

02

## Data management

Structured, machine-readable data.

Data flows freely.

Graduated access, set by delegated acts.

Backup always available.

03

## Ownership

The DPP must satisfy regulatory information requirements — but may carry more.

The producers own the data.

04

## The user

Free of charge for consumers.

Easy access to structured information.

Efficient comparison between similar products.

# Remaining Deliverable: Meta Structure

It's a technical standard stack. It's the interface layer between the eight DPP standards.

01

## Background

Meta Structure was the backbone of Standardisation Request: 15 elements including governance, processes, responsibilities, security infrastructure, and a domain data ecosystem — categories that extend well beyond the eight technical standards the final SREQ commissions. It's the battery-pass-flavoured, ISO-11354-grounded superset.

02

## Legal ground

SREQ: Art. 1(2) — the requested standards "shall meet the requirements set out in Annex II"

Annex II, Part A, point 2.10 — interfaces between the eight modules "shall be presented in a meta-structure"

03

## Why it is important

Substitutability (swap in any standard doing the same function) + decoupling (changing one module doesn't force changes in the others)

Enables parallel standardisation work and reduces the risk for vendor lock-in

04

## Delivery scope

Meta Structure is part of a wider piece of work

The update of that work will start after the summer break.

It needs to fit the standards, satisfy today's and upcoming legal requirements (ESPR 6 EPA)

It will act as the main guarantee of flexibility and future-proofing.

# Pre-existing modules organized by the Meta Structure

## M/604 (+ M/604\_Amd1) 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

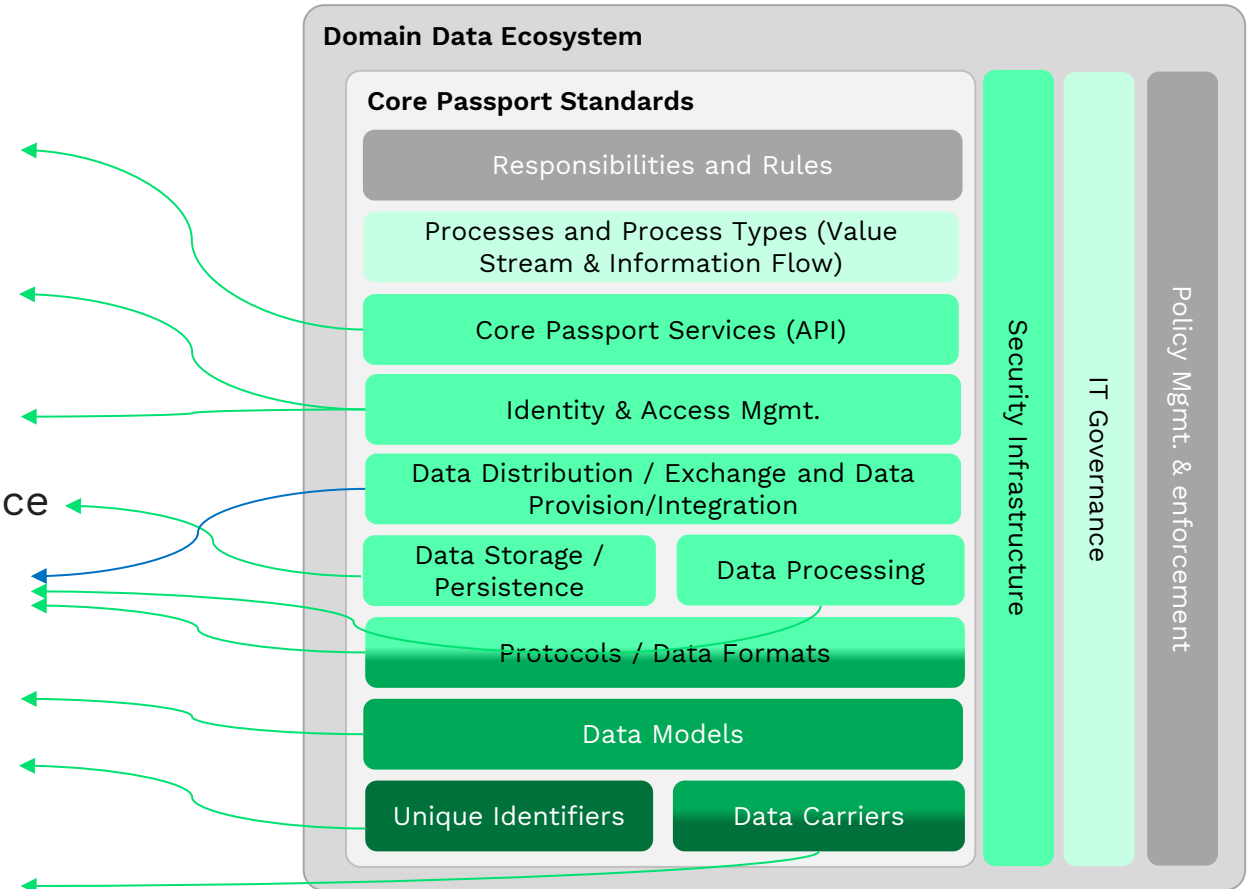
Module 6 : Data storage, archiving, and data persistence

Module 5 : Data processing, data exchange protocols and data formats

Module 4 : Interoperability

Module 1 : Unique identifiers

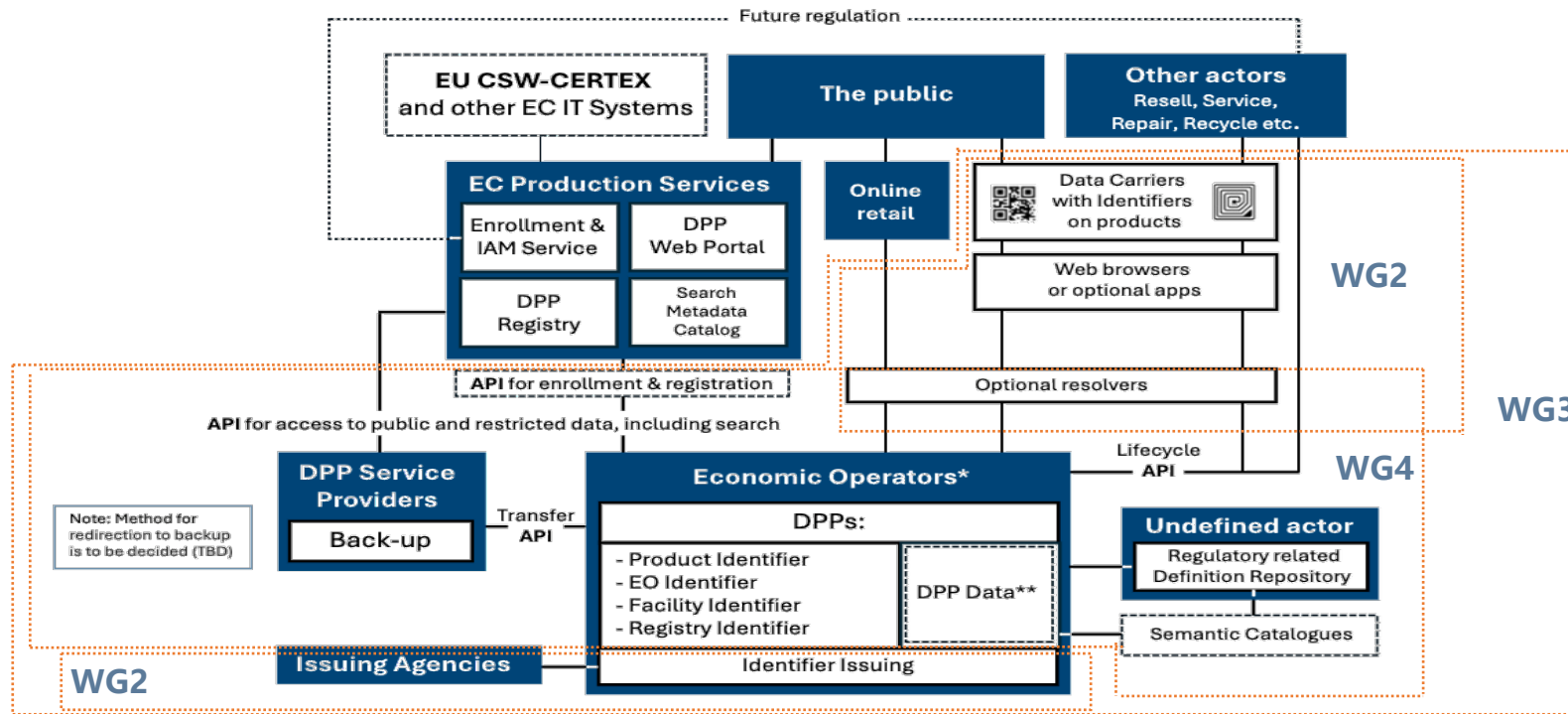
Module 2 : Data carriers and links between physical product and digital representation



Meta Structure based on ISO 11354

## THE VISUAL MAP

Eight standards, one framework. The April 2025 map is due an update — the Commission's implementing act for the registry has landed, and the standards have moved on. Lower-right, the Definition Repository is where the semantic gap gets closed.



VMP-2025\_04\_07-05\_00\_01\_00

\* Placing the product on the market. DPP Service Providers can act on their behalf.

\*\* Different per product category as defined in delegated acts – not within scope of JTC 24. Data is split in values and definitions.

### WG 2 · IDENTIFIERS

EN 18219 : 2026 Unique identifiers

EN 18220 : 2026 Data carriers

### WG 3 · SECURITY

prEN 18239: 2026 Access rights mgt, information, system security, and business confidentiality  
 prEN 18246: 2026 Data authentication, reliability, integrity

### WG 4 · DATA EXCHANGE

EN 18216 : 2026 Data exchange protocols, searchability

EN 18222 : 2026 APIs for the DPP lifecycle

EN 18223 : 2026 System interoperability

EN 18221 : 2026 Data storage, archiving and data

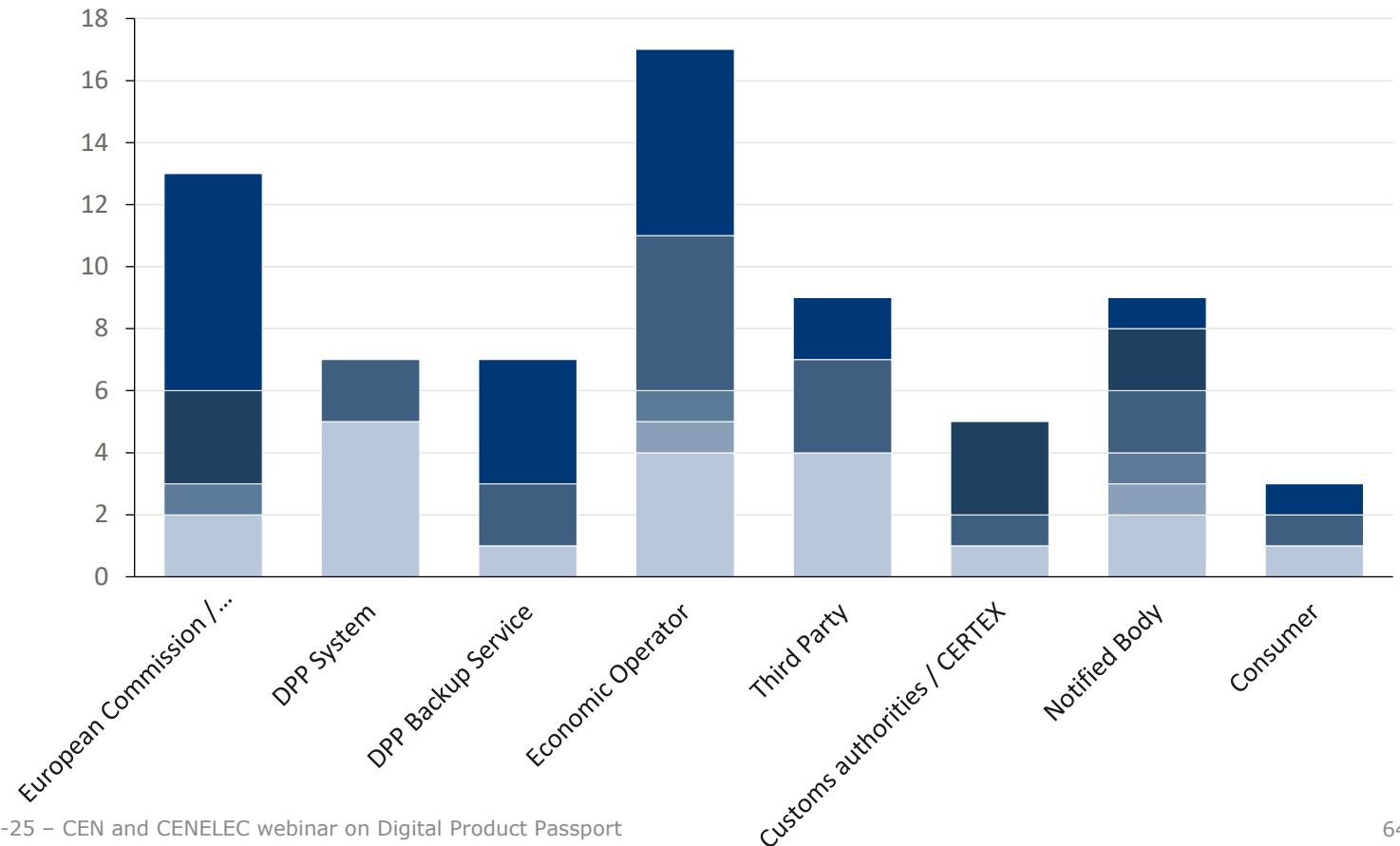
## USE CASES × ROLES

38 use cases serve different 8 roles. Each role carries its own access rights and functionality.

Each use case can be utilised by different actors if they have the correct rights. The 8 roles describe the principal function or affiliation of the user and so far we have thought that the access is on use case level and not subdividable. This needs to be discussed further, now that we have a clearer picture.

*To-Do next — revisit as the standards update; confirm every required function is still covered, flag gaps.*

- 1. Lifecycle Management
- 2. Create DPP
- 3. Validators Sign
- 4. Data Operations
- 5. Monitoring & Analyses
- 6. Governance



## THE EUROPEAN FRAMEWORK

The DPP is anchored in EU regulation — ESPR, the registry implementing act, and supporting legislation. CEN/CLC/JTC 24 develops the European standards that operationalise it. The European Union and CEN and CENELEC are the first mover in the DPP domain and other regions in the world are invited to benefit from this technology.

## OTHER REGIONS ARE COMING

Other jurisdictions are starting to write their own digital-product-passport system and framework — they might be mirroring the EU model or the global community might define their own frameworks which will co-exist under civil-law and common-law. Europe needs to be compatible with them.

## ISO/IEC/JTC 5 — THE GLOBAL VENUE

ISO and IEC have set up Joint Technical Committee 5 to develop global DPP standards. CEN/CLC/JTC 24 aims to work in close cooperation with ISO/IEC/JTC 5 — the goal is one coherent set, globally aligned by standardization principles (Vienna and Frankfurt Agreements).

## 01 · META STRUCTURE

Describe how the standards function and how they are modularised through the meta-structure.

## 02 · USE CASES

Revisit use cases, roles and module interconnections; confirm every required function is covered and flag any gaps.

## 03 · VISUAL MAP

Update the visual map so it illustrates how the eight standards interact within a clear architectural layout.

## 04 · STAKEHOLDERS

Collect industry feedback as the standards are applied and involve key stakeholders such as CERTEX / the EU Customs Single Window in the review process.

## 05 · GLOBAL ALIGNMENT

Engage with ISO/IEC/JTC 5 — observe, cooperate and keep the European standards aligned with the international work they extend.

# Conclusion

Benjamin de VILLE de GOYET

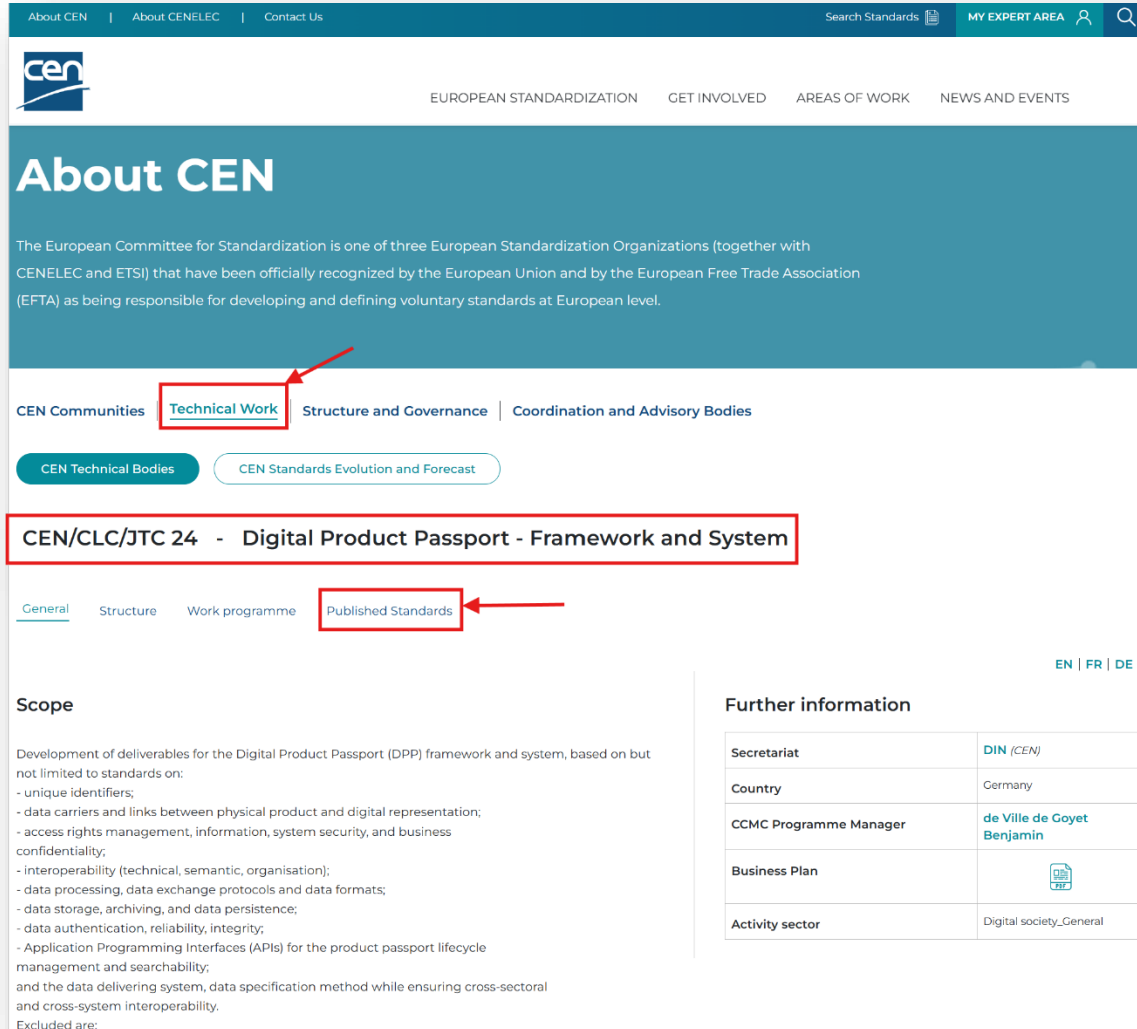
CCMC Project Manager – Sustainable Systems & Consumers



- ▶ New standards are regularly created, and the existing ones need to be updated to **continue reflecting the state-of-the art** and to remain aligned with the sectoral evolutions.
  
- ▶ Frequently, there is the need to extend available expertise and to have on board new contributors.
  - ❖ Principle: The CEN and CENELEC members are responsible to appoint their delegates in the (Joint) Technical Committee [(J)TC] and topic experts in the Working Groups [WG].
  
- ▶ If you want to contribute to the future work of CEN-CLC/JTC 24, please contact one of the CEN members or CENELEC members.

# Where to find our standards ?

## ► Visit CEN Technical Bodies - CEN/CLC/JTC 24



The screenshot shows the CEN website's 'About CEN' page. The 'Technical Work' tab is highlighted with a red box and an arrow. Below it, the 'CEN Technical Bodies' button is visible. The main heading 'CEN/CLC/JTC 24 - Digital Product Passport - Framework and System' is also highlighted with a red box. Underneath, the 'Published Standards' tab is highlighted with a red box and an arrow. The 'Scope' section lists various technical requirements for the Digital Product Passport framework.

Navigation: About CEN | About CENELEC | Contact Us | Search Standards | MY EXPERT AREA

EUROPEAN STANDARDIZATION | GET INVOLVED | AREAS OF WORK | NEWS AND EVENTS

## About CEN

The European Committee for Standardization is one of three European Standardization Organizations (together with CENELEC and ETSI) that have been officially recognized by the European Union and by the European Free Trade Association (EFTA) as being responsible for developing and defining voluntary standards at European level.

CEN Communities | **Technical Work** | Structure and Governance | Coordination and Advisory Bodies

CEN Technical Bodies | CEN Standards Evolution and Forecast

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

General | Structure | Work programme | **Published Standards**

EN | FR | DE

#### Scope


Development of 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.

Excluded are:




#### Further information

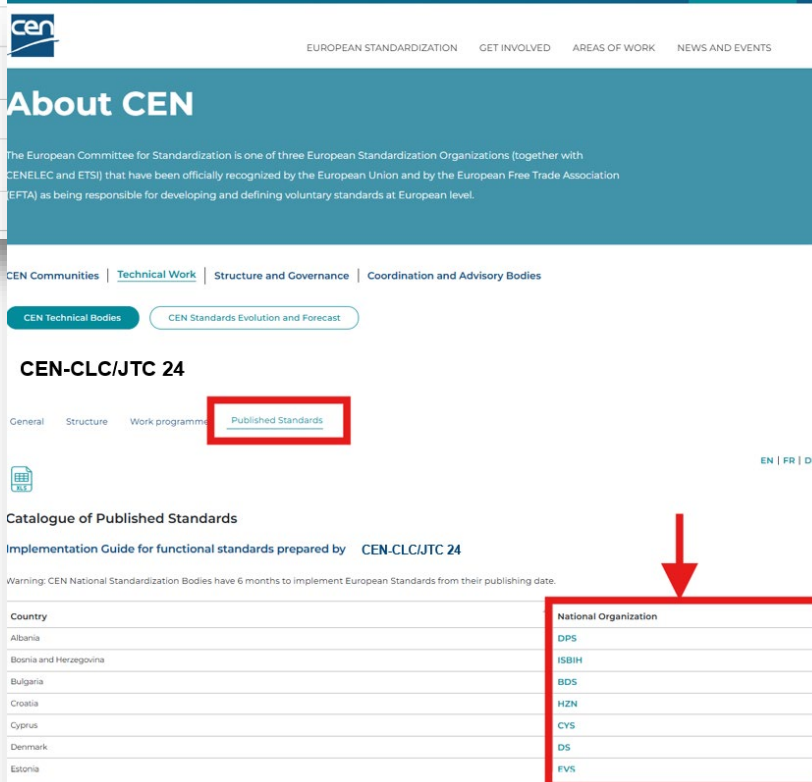
Secretariat	DIN (CEN)
Country	Germany
CCMC Programme Manager	de Ville de Goyet Benjamin
Business Plan	
Activity sector	Digital society_General

# Where to find our standards ?

► Standards are sold by the CEN and CENELEC Members.

Standards: 9

Committee	Reference, Title	Status	Sales Points
CEN/CLC/JTC 24	[WI+JT024009] Digital Product Passport - Dictionary referencing: Concepts and principles	Under Drafting	
CEN/CLC/JTC 24	EN 18216:2026 (WI+JT024003) Digital product passport - Data exchange protocols	Published	
CEN/CLC/JTC 24	EN 18219:2026 (WI+JT024001) Digital product passport - Unique identifiers	Published	
CEN/CLC/JTC 24	EN 18220:2026 (WI+JT024002) Digital product passport - Data carriers	Published	
CEN/CLC/JTC 24	EN 18221:2026 (WI+JT024006) Digital product passport - Data storage, archiving, and data persistence	Published	
CEN/CLC/JTC 24	EN 18222:2026 (WI+JT024004) Digital Product Passport - Application Programming Interfaces (APIs) for the product passport lifecycle management and searchability	Published	
CEN/CLC/JTC 24	EN 18223:2026 (WI+JT024005) Digital Product Passport - System interoperability	Published	
CEN/CLC/JTC 24	FprEN 18239 (WI+JT024007) Digital product passport - Access rights management, information system security, and business confidentiality	Under Approval	
CEN/CLC/JTC 24	FprEN 18246 (WI+JT024008) Digital product passport - Data authentication, reliability and integrity	Under Approval	



CEN Communities | Technical Work | Structure and Governance | Coordination and Advisory Bodies

CEN Technical Bodies | CEN Standards Evolution and Forecast

**CEN-CLC/JTC 24**

General | Structure | Work programme | **Published Standards**

EN | FR | DE

Catalogue of Published Standards

Implementation Guide for functional standards prepared by CEN-CLC/JTC 24

Warning: CEN National Standardization Bodies have 6 months to implement European Standards from their publishing date.

Country	National Organization
Albania	DPS
Bosnia and Herzegovina	ISBIH
Bulgaria	BDS
Croatia	HZN
Cyprus	CYS
Denmark	DS
Estonia	EVS



## Good to know

- The EN standards are originally developed in English and translated in French and German.
- CEN and CENELEC members have the possibility to translate them in any other EU languages.



## Good to know

- Webinar organized by CCMC are frequently recorded.
- Both video and presentation are publicly available.

### ▶ **Previous webinars** available on the CEN-CENELEC website ([here](#))

- ▶ Recording and presentation of this session can be found on: <https://www.cencenelec.eu/news-events/events/2026/2026-06-25-webinar-eu-digital-product-passport/>

### ▶ **Future events** - Agenda are available online ([here](#))

- ▶ Do not forget to register !
- ▶ Participation is free of charge

# Thank you very much to ...

- ▶ the EU Commission
  - ▶ for the financial support through the EISMEA funding projects.
  - ▶ for the technical contribution provided by several experts from different DG's

- ▶ DIN for providing the JTC 24 Secretariat



Samarkhel-Khan YAHYA  
CEN-CLC/JTC 24 Secretary

- ▶ all +300 experts from JTC 24 for sharing their expertise and for their incredible commitment to deliver 8 standards in parallel.
- ▶ CCMC colleagues who actively supported the project in the back office.
- ▶ the speakers of today
- ▶ and to all of you for attending !

# Thank you!



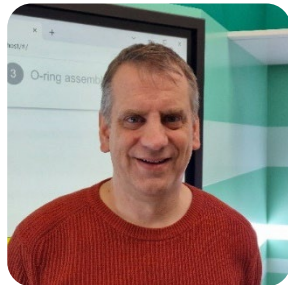
Els SOMERS



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Franziska ZIBOLD



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Otto HANDLE



Thomas RÖDDING



Martin SCHRECK

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