



SLOVENSKI STANDARD SIST EN 18223:2026

01-julij-2026

Digitalni potni list izdelka - Interoperabilnost sistema

Digital Product Passport - System interoperability

Digitaler Produktpass - System-Interoperabilität

Passeport numérique des produits - Interopérabilité du système

Ta slovenski standard je istoveten z: **EN 18223:2026**

ICS:

| | | |
|-----------|--------------------------------------|--|
| 13.020.20 | Okoljska ekonomija. Trajnostnost | Environmental economics. Sustainability |
| 35.240.63 | Uporabniške rešitve IT v trgovini | IT applications in trade |

SIST EN 18223:2026

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EUROPEAN STANDARD

EN 18223

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2026

ICS 13.020.20

English version

Digital Product Passport - System interoperability

Passeport 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 reissued by the CEN-CENELEC Management Centre on 2 June 2026.

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European foreword

This document (EN 18223:2026) has been prepared by Technical Committee CEN/CLC/JTC 24 “Digital product passport – Framework and system”, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2026, and conflicting national standards shall be withdrawn at the latest by November 2026.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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EN 18223:2026 (EN)**Introduction****0.1 Background**

A digital product passport (DPP) is a key enabling mechanism to make product information traceable and accessible across value chains - supporting economic operators, manufacturers, distributors, repairers, recyclers and consumers to make informed decisions and to support a circular economy. The implementation of digital product passports will be carried out progressively. Sector-specific initiatives will determine the precise DPP content and requirements for individual product groups.

To support the implementation of DPPs, 8 standards have been developed so far:

- EN 18219:2026 – Digital product passport – Unique identifiers
- EN 18220:2026 – Digital product passport – Data carriers
- EN 18216:2026 – Digital product passport – Data exchange protocols
- EN 18222:2026 – Digital Product Passport – Application Programming Interfaces (APIs) for the product passport lifecycle management and searchability
- EN 18223:2026 – Digital Product Passport – System interoperability (this document)
- EN 18221:2026 – Digital product passport – data storage, archiving, and data persistence
- EN 18239:—¹ – Digital Product Passport – access rights management, information system security, and business confidentiality
- EN 18246:—² – Digital Product Passport – Data authentication, reliability and integrity

0.2 Organizational interoperability

Organizational interoperability covers the following aspects:

- easy integration into existing technology frameworks;
- human and machine (software) access.

0.3 Semantic interoperability

Semantic interoperability covers the following aspects:

- allow data structuring with standardized or established data schema languages;
- enable the usage and re-usage of known ontologies or context namespaces;
- avoid sector specific ontologies – allow parallel usage of different ontologies issued by the European Commission in delegated acts with a horizontal layer as general as possible (technology, ontology and domain agnostic).

0.4 Technical interoperability

Serialization of data with standardized data format.

¹ Under preparation. Stage at the time of publication: prEN 18239:2025.

² Under preparation. Stage at the time of publication: prEN 18246:2025.

1 Scope

The scope of this document includes:

- the semantic description of a product, including its properties where relevant and the semantic aspects to represent the product lifecycle;
- a common information model allowing for the implementation of data dictionary systems;
- metadata models and formats to be used in exchange and representation, allowing for the integration of dictionaries;
- rules on how to systematically use such metadata models when developing product group specific data models and dictionaries;
- technical and organizational interoperability.

This document follows the approach of standard interoperability layers and proposes the following aspects in this regard.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 8601-1:2019,³ *Date and time — Representations for information interchange — Part 1: Basic rules*

EN 18219:2026, *Digital product passport - Unique identifiers*

EN 18221:2026, *Digital product passport - data storage, archiving, and data persistence*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <http://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1

interoperability

capability of two or more entities to exchange items in accordance with a set of rules and mechanisms implemented by an interface in each entity, in order to perform their specified tasks

[SOURCE: ISO 18435-1:2009 [1], 3.12]

³ As impacted by ISO 8601-1:2019/A1:2022.