



5 September, 2025

Samarkhel-Khan Yahya
DIN Deutsches Institut für Normung e. V.
Am DIN-Platz
Burggrafenstraße 6
10787 Berlin, Germany

Tel.: +49 30 2601-2796
Fax: +49 30 2601-42796

Dear Samarkhel-Khan Yahya,

On behalf of AIM Global and AIM Europe, we appreciate the opportunity to provide input on the draft documents 18219 *Digital Product Passport – Unique Identifiers* and 18220 *Digital Product Passport – Data Carriers*. Our organizations strongly support the ongoing efforts to establish the Digital Product Passport (DPP) as a cornerstone for a sustainable, circular European economy.

As the trusted global industry alliance for stakeholders in Automatic Identification and Data Capture (AIDC) technologies, including barcoding, RFID, smart devices, and real-time locating systems (RTLS), AIM and AIM Europe represent a broad network of experts and organizations across the AIDC ecosystem. We advocate for technologies that ensure accurate, available, and identifiable data across all industries and supply chains. Formally chartered in 2013, AIM Europe serves as the dedicated voice of the AIDC community within the region, forging deep and productive relationships with the European Commission, regional policymakers, and national standards bodies.

Our member organizations contribute extensive expertise in standards development, including those supporting Blockchain, IoT, and secure digital identity. Through this joint letter and corresponding comment documents, we aim to highlight the importance of utilizing proven, standards-based AIDC technologies within the DPP framework, particularly in the areas of unique identification and data carrier implementation.

General Support for AIDC in the DPP

We strongly endorse the integration of AIDC technologies into the DPP, as these tools are essential for enabling secure, interoperable, and scalable identification and data exchange throughout product lifecycles. The widespread deployment of barcode and RFID technologies across manufacturing, logistics, retail, and healthcare demonstrates their reliability, cost-efficiency, and capacity for automation and traceability.

However, we offer the following recommendations and clarifications to ensure a secure and effective implementation of DPPs across sectors and Member States.

100 Allegheny Drive, Suite 105C
Warrendale, PA 15086 USA

Phone: +1 724 742 4470
Email: info@aimglobal.org

aimglobal.org

Overview of Comments on prEN 18219 – Unique Identifiers

As part of our comments we recommend that the standard expand its list of normative references to include essential specifications such as the EPC Tag Data Standard (TDS), ISO/IEC 15459-3, ISO/IEC 18975, and the GS1 Digital Link. This will ensure consistency with standards already widely deployed in global supply chains. Additionally, terminology concerning issuing agencies should be revised. The use of phrases such as “centralized identification scheme” and “federated identification scheme” creates ambiguity; instead, the definitions provided in ISO/IEC 15459-3 should be used, which describe organizations entrusted by the Registration Authority to assign company identifying numbers.

Another important area is the permanence of identifiers. Identification markings should remain permanent, durable, and readable throughout a product’s life cycle. We recommend explicitly requiring identifiers to persist regardless of environmental conditions or handling. Regarding decentralized identifiers (DIDs), we support their inclusion in principle but caution that only the web method ensures compatibility with existing web infrastructure. In practice, the use of DIDs often requires installation of dedicated decoding applications, which should be acknowledged in the standard. Terminology should also be standardized: the proper term is “QR Code,” which should be used consistently throughout the document rather than the incorrect abbreviation “QR” or hyphenated “QR-code.”

Security provisions in the draft require strengthening. The current text does not adequately address vulnerabilities such as QR Quishing, QRLJacking, and parallel path attacks, which are already exploited by malicious actors. To mitigate these risks, we recommend requiring that all identifiers resolving to a URI or URL comply with RFC 2818 (HTTP over TLS). This ensures HTTPS is mandatory, that server authentication is enforced, and that insecure redirects are prohibited. We further recommend providing guidance on the use of RFID encoding under ISO/IEC 18000-63, including encoding identifiers and URLs in RFID transponder memory banks. Annex B should also be corrected and harmonized to ensure accuracy, consistent use of standards, and avoidance of real-world domains like abc.com.

Overview of Comments on prEN 18220 – Data Carriers

As part of our comments on the data carrier standard focus on clarity, inclusion of broader technologies, and security. The standard should recognize that decoding some identifiers, such as DIDs or EPC URIs, may require dedicated applications. While native operating system support is desirable, it is not always practical, and this should be reflected in the text. Furthermore, the draft should clarify that future delegated acts may impose product-type-specific requirements on data carriers, consistent with the European Commission’s approach.

The list of normative references is incomplete and should include specifications for Data Matrix, QR Code, NFC, EPC TDS, GS1 standards, and barcode print quality requirements. Inclusion of these references will provide implementers with the necessary technical framework. In addition, digital watermarking should be introduced as an alternative or complementary carrier technology. This option is especially relevant for products used in rough environments or recycling contexts, where physical labels may not survive. Digital watermarks are already recognized in EU regulations and have proven effective in retail, industrial, and recycling use cases.

Print quality requirements also require greater precision. Retail point-of-sale scanning depends on compliance with ISO/IEC 15415 and ISO/IEC 15426-2, with a minimum quality grade of 1.5/06/660. These minimum requirements should be mandated to ensure interoperability across diverse scanning environments. Similarly, rewritable RFID and NFC carriers create risks if links are overwritten. To protect data integrity, write protection should be made mandatory.

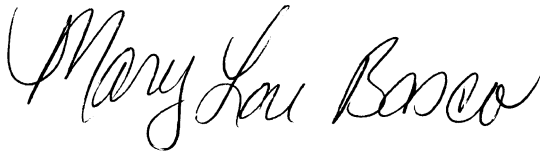
Terminology and references should also be standardized. “QR Code” should be used consistently throughout the draft. Bibliography references should be corrected, and erroneous cross-references such as citing a protective clothing standard instead of OCR-B for human-readable interpretation should be addressed. Lastly, requirements for encoding and air interface protocols for UHF, HF, and NFC should be explicitly tied to ISO/IEC and GS1 standards, ensuring consistency, technical robustness, and interoperability.

Closing Remarks

AIM and AIM Europe are committed to advancing open, interoperable, and secure digital product frameworks. The DPP initiative represents a transformative opportunity for sustainable commerce, but it must be built on proven and scalable technologies that are widely supported and understood.

Our members stand ready to collaborate further and provide technical expertise on symbology, data carrier security, and interoperability frameworks. We welcome continued dialogue with CEN-CLC/JTC 24 to help ensure the successful adoption and implementation of the Digital Product Passport across the European Union.

Sincerely,



Mary Lou Bosco
Chief Executive Officer
AIM Global



Frithjof Walk
President
AIM Europe



AIM Public Review Comment Form

18219 Digital Product Passport – Unique Identifiers

Template for comments and observations

Date:	Document:
-------	-----------

1	2	3	(4)	5	6	(7)	(8)
Org ¹	Comment Number ²	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of comment ³	Comment (justification for change)	Proposed change	Committee Action/Response
AIM	1	2 Normative references		ge	The EPC Tag Data Standard (TDS) should be referenced to align with its usage in later sections, such as table B14.	Add to the list of references EPC Tag Data Standard (TDS), release 2.2,	
AIM	2	2 Normative references	5.1.2.1	ge	Reference is missing. Section 5.1.2.1 shows the GS1 System is fully compliant with ISO/IEC 15459, and this compliance should be consistently applied across relevant sections. GS1 does not use other methods and cannot verify their ISO/IEC 15459 compliance.	Add to the list of references. ISO/IEC 15459-3:2015, Information technology — Automatic identification and data capture techniques — Unique identification — Part 3:	
AIM	3	2 Normative references	5.1.2.1	ed	As referenced by Section 5.1.2.1	Add to the list of references ISO/IEC 18975:2024 Information technology — Automatic identification and data capture techniques — Encoding and resolving identifiers over HTTP	
AIM	4	2 Normative	5.1.2.1	ge	The reference to the GS1 Digital Link Standard: URI Syntax is	Add to the list of references GS1 Digital Link Standard: URI Syntax,	

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** ge = general te = technical ed = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18219 Digital Product Passport – Unique Identifiers

		e referenc es			missing. As stated in Section 5.1.2.1, this reference is essential for GS1 users, just as IEC 61406 is for ANS MH10.2 DI users. For the standard, see	release 1.6.0	
AIM	5	3 Terms and definition s	3.7	ge	On Issuing agency and the terms "centralized identification scheme" and "federated identification scheme": these phrases, particularly "centralized," are inconsistent unless referring to central rules that apply to all Issuing Agencies, as outlined in ISO/IEC 15459-3.	Delete centralized identification scheme and federated identification scheme Please change current definition to: organization entrusted by the Registration Authority to assign company identifying numbers in line with the requirements of the Registration Authority (e.g., ISO/IEC 15459-2 for AIDC unique identification within AIDC technology in the value chain, ISO/IEC 6523 for identification of organisations).	
AIM	6	4 General principle s, requirem ents and guideline s	4.3.2 Syntax Requirem ents	ge	Two requirements are missing referring to ISO/IEC 15459-3 and ISO/IEC 15459-4.	Add the following two requirements: 3) For identifiers conforming to ISO/IEC 15459-3 Unique Identification - Common Rules, see Sections 6 Identity for rules on syntax, structure, length of identity, and character set. 4) For identifiers conforming to ISO/IEC 15459-4: The identity for individual products and product packages shall not contain more than 50 characters.	
AIM	7	4	4.5.2	ge	To enable interoperability, a	Add the following two requirements at the	

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18219 Digital Product Passport – Unique Identifiers

		General principles, requirements and guidelines	Requirements for interoperability		scanning system needs to identify the ID scheme presented.	start of the list, and increment the rest accordingly: 1) An organization may state that it complies with ISO/IEC 15459 (either all parts or a specific part) if it is able to allocate and process identities in accordance with the rules outlined in ISO/IEC 15459-3 (Common rules), ISO/IEC 15459-2 (Registration procedures), and any other relevant sections. 2) For identifiers not governed by ISO/IEC 15459, a specification must be provided that defines how automated systems will distinguish the identifier as unique compared to ISO/IEC 15459 identifiers currently used within the supply chain.	
AIM	8	4.2.2	(3) permanence	te	Clause is vague enough to allow improper product identification methods that do not “persist” - recommend adding standard IUID language:	“Identification markings must remain permanent, durable, and readable throughout the item's lifecycle, regardless of environmental conditions or handling. In situations where the product may undergo a variety of uncertain environmental conditions, select a tested identification technology with proven performance across many different conditions.”	
AIM	9	4.3.2	Requirements	te	As per the requirements under 4.3.2 unique identifiers should	Restrict the use of DIDs to did:web to ensure web compatibility, modify	

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18219 Digital Product Passport – Unique Identifiers

					<p>either be in the form of a URL or have a specified transformation to a URL to ensure compatibility with web-based systems. Later in the text (5.3) DIDs are mentioned, however DIDs can generally not be mapped directly to unique Web 2.0 URLs (except for did:web DIDs). Is the intention to support Web 2.0 AND Web 3.0 addresses?</p> <p>Furthermore, on most clients (including mobile phones) using a DID (did:web included) will require the use of a dedicated app as translation software on most platforms to map the DID to a URL the client can understand (DID URI to URL). Finally, it is unclear how DIDs would support the required levels of granularity (product model, batch, item level) in a standard way.</p>	<p>requirement 4.3.2 to allow Web 3.0 addresses as well as URLs. Furthermore, in order to support DIDs, the use of a dedicated app should be allowed as a means of accessing the DPP (see 5.3.4 of 18220). Finally, to support the required levels of granularity a supporting standard DID format should be referenced (if there is such a standard format)</p>	
AIM	10	5 ID schemes for products	5.4.1: Description of ID scheme: Product and group	ge	<p>For consistency I recommend common QR Code name throughout as the name changes from QR to QR-code to QR Code</p>	<p>Change all to QR Code as this is the appropriate usage.</p>	

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18219 Digital Product Passport – Unique Identifiers

			identificati on				
AIM	11	5.4.1	Descriptio n	te	The DPP platform has no safeguards against Quishing, QR-Jacking or Parallel path attacks that are already being seen with QR-Code based applications in the supply chain and other services. How does the DPP safeguard against these attacks, especially when they are being deployed by nations state actors and global criminal organizations.	To mitigate risks such as Quishing, QRjacking, and parallel path attacks, all identifiers that resolve to a URI/URL shall comply with the requirements of RFC 2818 – HTTP Over TLS (May 2000). By utilizing this the following requirements would apply:	

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18219 Digital Product Passport – Unique Identifiers

						<p>URI must remain within the HTTPS trust boundary; redirects to plain HTTP are prohibited.</p> <p>5. Optional Enhancements: For environments with elevated risk, certificate pinning or CA-based trust frameworks may be implemented to strengthen protection against spoofing and redirection.</p> <p>We would also suggest that if you want to authenticate the DPP, you should utilize an additional data carrier.</p>	
AIM	12	5.4.1	Description	te	How to use ISO/IEC 18000-63 based encoding in a recommended way should be explained in more detail. This to clarify / specify how to use it.	<p>Add the following paragraph after the sentence:</p> <p>... The scheme standardizes application communication with data processors and operates independently of the ISO/IEC 18000 air interface. If ISO/IEC 18000-63 air interface is used, the identifier, URL and possibly also the serial number can be stored in different memory banks of the RFID transponder chip. For example, the identifier can be encoded in memory bank 01 (UII) and the URL in user memory bank 11. The URL should be encoded in accordance with ISO/IEC 15961-1 or ISO/IEC 15962.</p>	

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18219 Digital Product Passport – Unique Identifiers

						The identifier can be coded in both DI and AI format. Of course, also an encoding according to encoding scheme 2 can be supported, e.g. by encoding the DPP identifier following ISO/IEC 15961-1 or ISO/IEC 15962 standards.	
AIM	13	Annex B	Table B.10	ed	It would be helpful to cite IEC 61406-2 here as distinct from -1.	Protocol and domain (IEC 61406-2 approach)	
AIM	14	Annex B	Table B.12	ed	AS noted earlier "abc.com" is the domain for the American Broadcasting Company. Refer to example domains in RFC 6761 (https://www.rfc-editor.org/rfc/rfc6761).	Change example "did:web:abc.com:model4TR" and "https://resolver.io/did:web:abc.com:model4TR/?service=item-dpp". To use example.com instead of abc.com	
AIM	15	Annex B	Table B.13	ge	The ISO Registration Authority for the RAIN identifier is needed.	When using RAIN RFID with RAIN Identifiers, the identifier must start with the ISO/IEC 15459-2 Registered Issuing Agency Code 'XRA' as specified in Section 5.4.2.1.	
AIM	16	Annex B	Table B.13	ge	The example using a National Drug Code (NDC) is problematic for three reasons as the example is a US-FDA identifier and pharma is not in scope, therefore confusing the reader.	Delete row or replace "Product Code (NDC)"	
AIM	17	Annex B	Table B.8	ed	It would be helpful to cite IEC 61406-2 here as distinct from -1.	IAC + CIN + Product Number (IEC 61406-2 approach)"	
AIM	18	Annex B	Table B.8	ed	Examples in rows "Scheme & Domain" and "Full Example" are	Replace all "https://..." with https://example.com.	

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18219 Digital Product Passport – Unique Identifiers

					recommended to use domains specifically reserved for documentation as outlined in RFC 6761. The domain "domain-abc.com" is not designated for documentation purposes, and https://abc.com/ is assigned to the American Broadcasting Company. Whatever domain is used, it should be applied consistently throughout the examples.		
AIM	19	Annex B	Table B.9	ed	It would be helpful to cite IEC 61406-1 here as distinct from -2.	Unstructured ID string (IEC 61406-1 approach)	
AIM	20	Annex B	Table B1	ed	The chapters in Columns 5.2.2.2 and 5.4.1.2 don't exist.	Remove columns 5.2.2.2 and 5.4.1.2	
AIM	21	Annex B	Table B1	ed	If 5.1.2.1 review determines the standard should allow DIs with a web-enabled structure path scheme, make this edit.	Adjust box of column 5.1.2.1 to: ISO/IEC 15459 + or DI of ISO/IEC 15418.	
AIM	22	Annex B	Table B1	ed	Please ensure that the references in the box of the second column are accurate and complete.	Regarding row Technical standard for syntax column 5.1.2.1: GS1 Digital Link (subset of ISO/IEC 18975) + ISO/IEC 15459-2 and -3 + GS1 Application Identifiers (subset of ISO/IEC 15418) + RFC 3986	
AIM	23	Annex B	Table B1	ed	GS1 Digital Link URI is a technical syntax standard, not an application	Regarding row Application standard syntax column 5.1.2.1:	

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18219 Digital Product Passport – Unique Identifiers

					standard. The reference has been updated; please correct and complete the second column references accordingly.	Delete: GS1 Digital Link (subset of ISO/IEC 18975) Add: GS1 General Specifications + ESPR DPP AIDC Application Standard	
AIM	24	Annex B	Table B1	ge	Regarding row “Syntactic interoperability”: This row should be deleted or clarified regarding its intended location for interoperability (EU Registry). For instance, a DID with the 'XID' prefix in the EU Registry ensures syntactic interoperability and uniqueness with GS1 and NATO identifiers, but does not offer syntactic compatibility with other DID implementations.	Delete row “Syntactic interoperability”	
AIM	25	Annex B	Table B1	ed	Regarding row “Decoding of level of uniqueness ...”: Column 5.1.2.1: Revised for consistency with the adjacent column and removed "model, batch, item" since these appear in the row title. Column 5.1.2.2: add reference Column 5.2.2.1: Note the granularity is unclear from decoded data and must be accessed online.	Column 5.1.2.1: From encoded structure for GS1 Application Identifiers and ANSI MH10 Data Identifiers: model, batch, item Column 5.1.2.2: From query parameters and ANSI MH10 Data Identifiers” Column 5.2.2.1: Delete: Parse URL parameter s (RFC 3986) and exclude names starting with a dot. Add: Not available from decoded data Column 5.2.2.2: “From encoded structure for ANSI MH10 Data Identifiers Structured identifiers support decoding of level (model, batch,	

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18219 Digital Product Passport – Unique Identifiers

					<p>Column 5.2.2.2: Wording should be consistent across columns 2, 3, and 5</p> <p>Column 5.3: Note the granularity is unclear from decoded data and must be accessed online</p> <p>Column 5.4.1.1: Provide a clear example of tag content, specifically illustrating what is meant by system data model.</p> <p>Column 5.4.1.2: GS1 does not use ISO/IEC 15434, so that Mode is excluded from inclusion.</p> <p>Column 5.5: Note the granularity is unclear from decoded data and must be accessed online</p>	<p>item)”</p> <p>Column 5.3: Delete: On QR codes: decode QR code, get link, open browser and let Internet resolve it. Add: Not available from decoded data”</p> <p>Column 5.4.1.1: From tag content (e.g., EPC Tag Data Standard) or system data model (e.g., ??)</p> <p>Column 5.4.1.2: From 2D symbol content (ISO/IEC 15434 Format Header “06” for ANS MH10 Data Identifiers)</p> <p>Column 5.5: Delete: “Resolution provides access to descriptive data that will specify level of uniqueness Add:Not available from decoded data”</p>	
AIM	26	Annex B	Table B16	ge	<p>GS1 identifiers are not used in examples of ISO/IEC 15434 encoding, as GS1 does not implement this method within its Application Standards. Any introduction of this syntax would require approval from the GS1</p>	<p>Change example by using another Issuing Agency’s use case such as Format 6 (MH10 data identifiers).</p>	

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18219 Digital Product Passport – Unique Identifiers

					General Assembly. The revised example should specify the Format Header used, likely Format Header 6 for ANSI MH10 Data Identifiers.		
AIM	27	Annex B	Table B17	ge	Title is confusing as 15459 is not a structure	Change title of table B.17 to Table B.17 — Identification using DOI with ISO/IEC 15459 Registered Issuing Agency Code (DOI + IAC)	
AIM	28	Annex B	Table B17	ge	Regarding “XID”: XID is needed when adding an identification scheme to a new domain or where it’s not implemented (e.g., encoded AIDC data carriers in open value chains). Since XIDs start with ‘10’, which conflicts with GS1’s ISO/IEC 15459-2 code ‘1’, using them as DOIs breaks DOI specifications. Instead, these are hybrid identifiers that should be called DOI+IAC, signaling to AIDC services that they are not standard DOIs but include an ISO/IEC 15459-2 prefix. It is important to specify that any identifier purporting to comply with ISO/IEC 15459 must meet the requirements of both parts 2 and 3, rather than solely part 2.	Change text to: Identifier prefix indicates ISO/IEC 15459-2 compliance; full 15459 compliance also requires adherence to 15459-3 Common Rules.	

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18219 Digital Product Passport – Unique Identifiers

AIM	29	Annex B	Table B2	ge	<p>Regarding row “Type of issuing”: These edits are needed because every instance of “self-issuing” involves a registration authority to prevent identifier overlap. Whether it’s a domain, Issuing Agency Code, or 15434 format header, some mechanism must be in place before self-issuing can occur.</p>	<p>Column 5.1.2.1: “ISO/IEC 15459 Issuing agency then self issuing by product manufacturer” Column 5.1.2.2: “ISO/IEC 15459 Issuing agency then self issuing by product manufacturer” Column 5.2.2.1: “ICANN domain then self issuing by product manufacturer Self- issuing system” Column 5.2.2.2: “ISO/IEC 15459 Issuing agency then self issuing by product manufacturer Self-issuing system” Column 5.3: “ICANN prefix then self issuing by product manufacturer Self- issuing system” Column 5.4.1.1: “ISO/IEC 15459 Issuing agency then self issuing by product manufacturer Issuing agency” Column 5.4.1.2: “ISO/IEC 15459 Issuing agency then self issuing by product manufacturer Issuing agency” Column 5.5: “ICANN domain plus DOI Registration Agencies then self issuing by product manufacturer Issuing agency”</p>	
-----	----	---------	----------	----	--	---	--

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18219 Digital Product Passport – Unique Identifiers

AIM	30	Annex B	Table B2	ge	Regarding row “Translation mechanism”: This inconsistently combines multiple concepts. If this row is for the AIDC level, providers must identify the scheme, process it as specified, and ensure there are no ID collisions based on these specifications.	Delete row “Translation mechanism”	
AIM	31	Annex B	Table B3: Row Physical data carrier 2D	ed	Regarding text in box of column 5.4.1.1: “Possible but not typically used” Is product identification genuinely a viable option? If it is not anticipated, the text should be revised accordingly.	Change text to: “not applicable”	
AIM	32	Annex B	Table B3: Row Physical data carrier 2D	ed	The phrase “Any AIDC media, technology independent” should be changed to specify 2D media only, as it does not apply to biometrics, magstripe, OCR-B, or similar. Edits ensure consistency with the first column and others as needed.	Change text in columns 5.1.2.1, 5.1.2.2, 5.2.2.1, 5.2.2.2, 5.3, 5.4.1.2 and 5.5 to: Can be represented using 2D symbols, such as QR Codes and Data Matrix.	
AIM	33	Annex B	Table B3: Row Physical data carrier	ed	For consistency	Change title to “Physical data carrier RFID/NFC”	

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18219 Digital Product Passport – Unique Identifiers

			RFID				
AIM	34	Annex B	Table B3: Row Physical data carrier RFID	ge	Column 5.1.2.1: revise for clarity	Update to: “Yes, this can be encoded in RFID/NFC (e.g., EPC URIs). Note that web-enabled, structured product IDs using EPC RFID encoding align only with the additional GS1 Application Identifiers in additional (+) AIDC data, following EPC as per TDS 2.0.”	
AIM	35	Annex B	Table B3: Row Physical data carrier RFID	ed	Column 5.4.1.2: change or consistency	“Not typically used. Not applicable”	
AIM	36	Annex C	Table C.1	ge	Regarding 6.1: For AIDC media, interoperability is maintained with all identifiers issued under ISO/IEC 15459 by an issuing agency, as they share the same structural format and logical framework. The method for achieving interoperability between DIDs and ISO/IEC 15459 remains unclear, particularly as DIDs begin with NATO’s Registered Issuing Agency Code. Further clarification on this matter would be appreciated.	Clarify interoperability issue between NATO and DID identifiers.	

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18220 Digital Product Passport – Data Carriers

Template for comments and observations

Date:	Document:
-------	-----------

1	2	3	(4)	5	6	(7)	(8)
Org ¹	Comment Number ²	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of comment ³	Comment (justification for change)	Proposed change	Committee Action/Response
AIM	1	5.3.4	Decoding Software	te	The notion of “DPP-specific” software could be further refined. Is the download of an app to be able to read the data carrier and or translate its unique identifier into a URL acceptable? UHF RFID certainly would require this for the foreseeable future. Similarly, the use of DIDs as identifiers (document 18219) requires installing software on a mobile phone or other client platforms (e.g., handheld scanners) to carry the translation of a DID into a Web address (URI to URL)	Change the text to accommodate for the need to install an app: “[...] decoding software should ideally be natively available in the operating system however, some data carriers or unique identifiers (e.g., DID, EPC) might need an application to be read and resolved (e.g., from URI to URL)”	
AIM	2	5.4.1	General	ge	Will these considerations not be part of the product type specific delegated acts? While the explanation of the different strategies is valuable it would be	Mention that the applicable methods might depend on product type specific requirements provided in (upcoming) delegated acts.	

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18220 Digital Product Passport – Data Carriers

					worth explaining that there might be product type specific requirements.		
AIM	3	6	Data carrier technologies	ge	<p>The current document focuses on 2D barcodes and RFID/NFC technologies. While these 2 types of carriers are likely to cover the needs of a number of product categories, they are unlikely to be practical for other product categories. In particular, when a product type is used in rough environments (e.g., construction products, agricultural products, production of raw materials, etc.) or when products enter the recycling stream and are partially destroyed (e.g., sortation of plastic). For these use cases digital watermarking technology is a proven and significantly better option.</p> <p>Furthermore, we believe that digital watermarks meet the list of requirements expressed in the ESPR is available in Annex A and Annex B:</p>	<p>We suggest adding an additional section 6.3.5 highlighting the need for digital watermarks for specific product categories. This also ensures continuity with the ESPR mention of watermarks (paragraph 31) as a carrier technology. It is also worth noting that digital watermarks may also be used as an additional data carrier to 2D / RFID as the ESPR requires the use of “one or more data carriers [...]” (Art 9):</p> <p>6.3.5 Other data carriers</p> <p>For certain product categories, the use of alternative data carrier such as digital watermarks may be required. This may be the case for example when products are used in rough environments (e.g., construction products, agricultural products, production of raw materials, etc.) or when products enter the recycling stream and are partially destroyed (e.g., sortation of plastic). Products may also require a covert technology for safety or authentication purposes.</p>	

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18220 Digital Product Passport – Data Carriers

				<p>1. data capacity for URI and additional data; Digital watermarks can support (ideally short) URIs either directly or with a translation (similar to EPC to URL support specified in the GS1 TDS https://ref.gs1.org/standards/#tds).</p> <p>2. ability to use ISO/IEC 15459 conformant identifier; Digital watermarks have been extensively used in production with ISO/IEC 15459 identifiers such as GS1 GTINs.</p> <p>3. granularity: ability to identify the product item at model, batch and item level; Digital watermarks can be serialized to support batch and item level as well as SKU level.</p> <p>4. recognised by international standards; There are different implementations of digital watermarks, they are used as a supported technologies in a</p>	<p>Additional data carriers may also need to be used in combination with 2D or radio frequency-based data carriers.</p>	
--	--	--	--	--	---	--

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18220 Digital Product Passport – Data Carriers

				<p>number of standards such as ISO/IEC 15424:2025 and are listed as Type B data carriers for GS1 standards (see https://www.gs1.org/sites/default/files/docs/architecture/2021-03-17_RFF_DataCarriersAndGS1_RFF.pdf)</p> <p>Furthermore, digital watermarking is part of the requirements for other EU regulations such as the directive for driving licenses: https://www.europarl.europa.eu/doceo/document/TA-9-2024-0095_EN.html</p> <p>The ratified ESPR document (paragraph 31) also mentions watermarks as a carrier technology.</p> <p>Similarly, the US FDA Food Safety directive (FSMA) included digital watermarking as an AIDC technology that facilitates accurate data acquisition and food safety tracking information.</p> <p>5. adoption by the market; Digital watermarks are a proven technology that has been used</p>		
--	--	--	--	--	--	--

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18220 Digital Product Passport – Data Carriers

				<p>extensively in the real world on a very large number of products. They are actively used at checkout (https://www.packworld.com/sustainable-packaging/news/22869732/german-retailer-netto-hits-milestone-in-commitment-to-a-future-with-optimized-checkout-and-more-efficient-plastic-recycling, https://www.warehouseautomation.ca/news/walmart-testing-digital-watermarking-technology-terix) , to facilitate sortation of plastics (https://www.digitalwatermarks.eu/) , to facilitate the authentication of products, to improve industrial automation (https://industrial.omron.eu/en/news-discover/news/digimarc-and-omron-partner-to-modernize-industrial-automation), etc.</p> <p>A number of industries already identified digital watermarks as a carrier of choice because 2D codes or RFID tags do not meet the real-world requirements of these products. For example,</p>		
--	--	--	--	--	--	--

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18220 Digital Product Passport – Data Carriers

				<p>construction products such as flooring (see for example the report from the Vinyl flooring industry - https://www.vinylplus.eu/wp-content/uploads/2025/01/Vinyl-Plus-Digital-Passport.pdf). The constraints (rough life cycle, lack of line of sight, etc.) of these product categories make it practically impossible to operate with 2D or RFID carriers. For these use cases technologies digital watermarking is a proven and significantly better option.</p> <p>6. data carrier scannable and readable with smart devices; Digital watermarks are compatible with all smart phones. Many industrial scanners and checkout systems readily support digital watermarks (e.g., Cognex, Datalogic, Zebra, Honeywell, Newland, Omron)</p> <p>7. native scanning software at the operating system level;</p> <p>Native scanning at the operating</p>		
--	--	--	--	--	--	--

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18220 Digital Product Passport – Data Carriers

				<p>system level is available on large number of platforms including in the operating systems of Cognex, Datalogic, Omron, Newland, Honeywell and Zebra devices. Windows 10 also supports digital watermarks at the operating system level (https://learn.microsoft.com/en-us/windows/uwp/devices-sensors/pos-camerabarcode-symbologies)</p> <p>8. supports error correction; Digital watermarks have a high level of redundancy and extensive support for error correction.</p> <p>9. persistence/longevity.</p> <p>Printed digital watermarks are applied similarly to 1D/2D but since they are printed on large portions of products or packaging their persistence level is improved. Digital watermarks (referred to as 3D digital watermarks) can also be engraved into the moulds (e.g., via</p>		
--	--	--	--	--	--	--

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18220 Digital Product Passport – Data Carriers

					laser etching). The longevity of 3D watermarks matching the longevity of the substrate they are engraved on.		
AIM	4	6.2.3	QR Code	ge	There is inconsistent naming throughout the document between “QR Code” and “QR-Code”. To verify search the document for each term and review the results.	Naming should be standardized to QR-Code throughout the document when talking about the 2D symbology.	
AIM	5	6.2.3	QR Code	te	The DPP standard should incorporate guidance that identifiers can be vulnerable to phishing techniques such as Quishing, QRjacking, and parallelpath attacks, which have increasingly been observed in supply chain and related contexts.	<p>To mitigate risks such as Quishing, QRjacking, and parallel path attacks, all identifiers that resolve to a URI/URL shall comply with the requirements of RFC 2818 – HTTP Over TLS (May 2000).</p> <p>By utilizing this the following requirements would apply:</p> <ol style="list-style-type: none"> 1. HTTPS Mandatory: Identifiers that resolve to a web resource shall use HTTPS (HTTP over TLS) and shall not allow fallback to insecure HTTP. 2. Server Authentication: Clients must validate the server certificate presented during TLS negotiation. The hostname in the URI shall match the certificate’s Subject Alternative Name (SAN) or Common Name (CN), in accordance with RFC 2818. 3. Data Integrity: All data 	

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18220 Digital Product Passport – Data Carriers

						<p>exchanged in the resolution process must be encrypted and protected against modification in transit.</p> <p>4. No Insecure Redirects: Redirects from an identifier URI must remain within the HTTPS trust boundary; redirects to plain HTTP are prohibited.</p> <p>5. Optional Enhancements: For environments with elevated risk, certificate pinning or CA-based trust frameworks may be implemented to strengthen protection against spoofing and redirection.</p> <p>We would also suggest that if you want to authenticate the DPP, you should utilize an additional data carrier.</p>	
AIM	6	Annex C	C.6	ed	Delete as this is redundant with C.1	Delete C.6	
AIM	7	Bibliography		ed		Add to the list: "[54] GS1 General Specifications, V25"	
AIM	8	Chapter 2		ge	The Normative References section currently only lists RFID, vocabulary, and direct part marking standards, omitting important ones such as Data Matrix, QR Code, NFC, 61406-1 and -2, barcode print quality standards, GS1 Digital	Add: EN IEC 61406-1:2022, Identification Link - Part 1: General requirements EN IEC 61406-2:2024, Identification link - Part 2: Types/models, lots/batches, items and characteristics ISO/IEC 646:1991, Information	

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18220 Digital Product Passport – Data Carriers

				Link URI, and EPC Tag Data Standard. Others should verify if more gaps exist.	technology — ISO 7-bit coded character set for information interchange ISO/IEC 8859-1:1998, Information technology — 8-bit single-byte coded graphic character sets — Part 1: Latin alphabet No. 1 ISO/IEC 15418:2016, Information technology — Automatic identification and data capture techniques — GS1 Application Identifiers and ASC MH10 Data Identifiers and maintenance ISO/IEC 15459-3:2015, Information technology — Automatic identification and data capture techniques — Unique identification — Part 3: Common Rules ISO/IEC 15459-4:2014, Information technology — Automatic identification and data capture techniques — Unique identification — Part 4: Individual products and product packages ISO/IEC 15459-6:2014, Information technology — Automatic identification and data capture techniques — Unique identification — Part 6: Groupings ISO/IEC 18975:2024, Information technology — Automatic identification and data capture techniques — Encoding and resolving identifiers over HTTP GS1 Digital Link Standard: URI Syntax,	
--	--	--	--	---	--	--

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18220 Digital Product Passport – Data Carriers

					<p>V1.6.0 ISO/IEC 15415:2024, Automatic identification and data capture techniques — Bar code symbol print quality test specification — Two-dimensional symbols ISO/IEC 15424:2025, Information technology — Automatic identification and data capture techniques — Data carrier identifiers (including symbology identifiers) ISO/IEC 15426-2:2023, Information technology — Automatic identification and data capture techniques — Bar code verifier conformance specification — Part 2: Two-dimensional symbols ISO/IEC 16022:2024, Information technology — Automatic identification and data capture techniques — Data Matrix bar code symbology specification ISO/IEC 18004:2024, Information technology — Automatic identification and data capture techniques — QR Code bar code symbology specification ISO/IEC 29158:2020, Information technology — Automatic identification and data capture techniques — Direct Part Mark (DPM) Quality Guideline GS1 EPC Tag Data Standard, V2.2</p>	
--	--	--	--	--	---	--

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18220 Digital Product Passport – Data Carriers

					<p>ISO/IEC 15961-1:2021, Information technology — Data protocol for radio frequency identification (RFID) for item management — Part 1: Application interface</p> <p>ISO/IEC 15961-2:2019, Information technology — Data protocol for radio frequency identification (RFID) for item management — Part 2: Registration of RFID data constructs</p> <p>ISO/IEC 15961-3:2019, Information technology — Data protocol for radio frequency identification (RFID) for item management — Part 3: RFID data constructs</p> <p>ISO/IEC 15963-1:2020 Information technology — Radio frequency identification for item management</p> <p>ISO/IEC 18046-1:2011, Information technology — Radio frequency identification device performance test methods — Part 1: Test methods for system performance</p> <p>ISO/IEC 18046-2:2020, Information technology — Radio frequency identification device performance test methods — Part 2: Test methods for interrogator performance</p> <p>ISO/IEC 18046-3:2020, Information</p>	
--	--	--	--	--	--	--

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18220 Digital Product Passport – Data Carriers

						technology — Radio frequency identification device performance test methods — Part 3: Test methods for tag performance ISO/IEC 18092:2023, Telecommunications and information exchange between systems — Near Field Communication Interface and Protocol 1 (NFCIP-1) ISO/IEC 21481:2021, Information technology — Telecommunications and information exchange between systems — Near field communication interface and protocol 2 (NFCIP-2) ISO/IEC 19762:2025, Information technology — Automatic identification and data capture (AIDC) techniques — Vocabulary	
AIM	9	Chapter 3	3.15 definition of RAIN	ed	Missing reference to standard	Change to: UHF passive radio-frequency identification as per ISO/IEC 18000-63 (3.14)	
AIM	10	Chapter 5	5.2.2 Data syntax	ge	Regarding second paragraph: ISO/IEC 15459-3 establishes the foundation for interoperability among syntaxes that are fully compliant with ISO/IEC 15459. Compliance with this standard requires, at a minimum, adherence	Change to: Data syntaxes as specified in Module 1 shall comply to ISO/IEC 15459: 2016 — Part 3: Common Rules, ISO/IEC 18975:2024 or EN IEC 61406-1:2022 or EN IEC 61406-2:2024 or ISO/IEC 15424:2025 or ISO/IEC 15418:2016 or	

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18220 Digital Product Passport – Data Carriers

					to Part 2 (Unique Identification) and Part 3 (Common Rules for Issuing Agencies).	GS1 Digital Link Standard: URI Syntax, V1.6.0. syntaxes as specified in Module 1 in [5] or [6] or [7] or [8] or [9]	
AIM	11	Chapter 5	5.4.1 General	ge	The sentence should be changed so it better aligns with the ESPR text (Recital 37), which states that standards should specify that delegated acts may allow data carriers to be provided on packaging or within documentation, following an impact assessment that takes into account the nature, size, or intended use of the product in question.	Adjust text to: "There shall be at least one data carrier containing the product identifier of the DPP provided either on the product (preferred), embedded in the product (preferred), on the packaging or in the documentation. The method used will vary according to the product type as outlined in this document. Following an impact assessment that takes into account the nature, size, or use of the product, the relevant delegated acts may require that the data carrier be included on the packaging or in the accompanying documentation.	
AIM	12	Chapter 5	5.4.3 Marking on packaging	ge	Further methods should be added.	Add to the list of techniques: — Digital printing presses which the barcode can be incorporated into the design and index for batch or serialisation. — Conventional printing processes such as gravure, flexographic where the product model identifier is sufficient. For example Data Matrix.	
AIM	13	Chapter	5.6.1	ge	If UHF/NFC tags are capable of	Change text to:	

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18220 Digital Product Passport – Data Carriers

		5	General		being rewritten, there is a risk that the DPP link could be lost. Consequently, write protection must be established as a mandatory requirement.	Data carriers (UHF, NFC, ...) shall should be write protected.	
AIM	14	Chapter 5	5.6.2 Two-dimensional symbols	ge	It's important to note that quality requirements for retail scanners differ from those for smart devices or specialised equipment used on permanent 2D carriers. Therefore, while the methodology should be uniform for all 2D barcodes, industry standards must set minimum quality levels due to the wide variety of products covered by ESPR.	Change text to: Minimum print quality grades are determined according to the scanner's operating environment, transportation and logistics, or smart devices. These specifications, standardized within industry application conventions, generally adhere to the following requirement to The minimum quality grade is typically 1.5 / 80% / 660, where: Any product that is intended to be scanned at the retail point of sale shall meet the red light print quality standard 1.5/06/660	
AIM	15	Chapter 5	5.7.2 HRI	ed	This section refers to [14] EN 1073-2:2002, Protective clothing against radioactive contamination - Part 2: Requirements and test methods for non-ventilated protective clothing against particulate radioactive contamination. Which is an incorrect reference	Correct [14] to ISO 1073-2:1976 – Alphanumeric character sets for optical recognition – Part 2: Character set OCR-B – Shapes and dimensions of the printed image. Update last sentence: Additional legislations may specify rules applicable to different product groups and should defer to existing industry	

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18220 Digital Product Passport – Data Carriers

						application standards wherever possible (e.g., GS1 General Specifications Section 4.14, ANS MH10 Data Identifier Standard Section 7.3).	
AIM	16	Chapter 5	5.7.3 Signage	ge	The graphical symbol marking is specified for use on equipment, where it may be suitable. However, its use on retail consumer products could lead to confusion with symbols used for “peel-off coupons” or information leaflets. Any potential standardisation of a mark intended to influence consumer behaviour in retail settings would likely require extensive research and testing with consumer focus groups.	Change sentence to: When an optional graphical marking is used for equipment, it should comply with [15][16], symbol 6452 or 6452-1.	
AIM	17	Chapter 6	6.2.2 Data Matrix	ge	Compliance with the symbol specification is mandatory for Data Matrix 2D barcode symbols.	Change sentence to: Data Matrix shall be implemented as specified in [17] ...	
AIM	18	Chapter 6	6.2.3 QR Code	ge	Compliance with the symbol specification is mandatory for QR Code 2D barcode symbols.	Change sentence to: QR Code (Quick Response Code) shall be implemented as specified in [18] ...	
AIM	19	Chapter 6	6.2.4.2 Specific Characteristics	ed	Content of line is not correct.	Exchange “linear” with “2D”: Table 1 describes the following characteristics of each linear 2D barcode under consideration:	
AIM	20	Chapter 6	6.2.4.2 Specific	ge	Regarding row “Native software smart devices”/Data Matrix:	Delete the word “Pervasive” in the Data Matrix column.	

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18220 Digital Product Passport – Data Carriers

			Characteristics		"Native scanning of Data Matrix is yet to be pervasive in all major smart device manufactures.		
AIM	21	Chapter 6	6.2.4.2 Specific Characteristics	ge	Regarding row "Native software smart devices"/Data Matrix: QR Code use with URIs is considered pervasive not partial per to GS1's 90%+ threshold but perhaps it is useful to quantify what is meant by pervasive.	Delete the word "Partial" in the QR Code column.	
AIM	22	Chapter 6	6.3.2.1 General	ge	These specifications are required.	Change to: The different HF (High Frequency) RFID technologies shall be implemented as specified in: [22], [23], [24], [25], [26], [27], [28] and [29].	
AIM	23	Chapter 6	6.3.2.3 Data encoding	ge	These specifications are required.	Change to: Data encoding of HF RFID tag shall be as defined in [30], [31], [32] and [33].	
AIM	24	Chapter 6	6.3.3.2 Air interface protocols	ge	These specifications are required.	Change to: NFC air interface protocols shall be as defined in [37] and [38]. Additional information can also be found in NFC Forum Analog and Digital Specifications [39](type2, type 3, type 4, type 5).	
AIM	25	Chapter 6	6.3.3.3 Data Encoding	ge	These specifications are required.	Change to: Data Encoding of UHF RFID shall be as idescribed in [30], [31], [32] and [33]. To be natively read by smart devices, NFC Forum Technical Specifications provides	

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.



AIM Public Review Comment Form

18220 Digital Product Passport – Data Carriers

						ways encode data in NFC tags [39].	
AIM	26	Chapter 6	6.3.4.2 Air interface protocols	ge	These specifications are required.	Change to: The air interface protocol for UHF RFID shall be as defined in [40] and. It is also defined in [41].	
AIM	27	Chapter 6	6.3.4.3 Data encoding	ge	These specifications are required.	Change to: ... as a GS1 EPC global application and the data encoding shall be as described in GS1 Tag Data Standard [42].	

1 **Org.** = Name of entity submitting comments 2. **Comment Number:** itemize each comment 3. **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 3, 5, and 6 are compulsory.

NOTE: If you have a concern about or objection to a particular section, you must suggest a proposed change for your concern to be addressed by the Review Committee.

Email your comments to info@aimglobal.org.