# GS1 Comments on prEN 18219 on Unique Identifiers

| MB/ NC[1] | Line number (e.g. 17) | Clause/ Subclause (e.g. 3.1) | Paragraph/ Figure/ Table/ (e.g. Table 1) | Type of comment[2] | Comments | Proposed change | Observations of the secretariat |
| --- | --- | --- | --- | --- | --- | --- | --- |
| | | 1 - Scope | | ge | As Annex B3, Reliance of domain name for the unique identifier, clearly shows, in alignment with ESPR, all identification schemes proposed rely upon a Registration Authority external to the individual product manufacturing companies to ensure global, regional, national uniqueness between the identifiers each company issues. As further explained in this document beginning with Section 3.7, the mechanism may differ but all methods require a mechanism beyond self-issuing and self-issuing occurs in every scheme.<br><br>All methods rely on a hierarchal identifier structure and companies-issuing some part of the identifier beyond a segment licensed to them by registration authorities. | Delete sentence:<br><br>"This document describes identification (ID) schemes that use issuing agencies, self-issuing systems, or a combination of both."<br><br>Add sentence:<br><br>"This document describes how identifiers self-issued by product manufacturers utilise various mechanisms to ensure uniqueness. These mechanisms include ISO/IEC 15459, ISO/IEC 6523, ICANN, DOI Registration Authorities or some combination of them." | |
| | | 2 Normative references | | ge | Reference missing. See its normative usage in Section 5.1.2.1 as the GS1 System is fully compliant with ISO/IEC 15459. It must be applied universally to every Section(s) that claims ISO/IEC 15459 compliance but GS1 does not utilise the other methods and therefore is not in a position to determine if they are ISO/IEC 15459 compliant or not. | Add<br><br>"ISO/IEC 15459-3:2015, Information technology — Automatic identification and data capture techniques — Unique identification — Part 3: Common rules"<br><br>to the list of references. | |
| | | 2 Normative references | | ed | As referenced by Section 5.1.2.1 | Add<br><br>"ISO/IEC 18975:2024Information technology — Automatic identification and data capture techniques — Encoding and resolving identifiers over HTTP"<br><br>to the list of references | |

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[2]   **Type of comment:**   **ge** = general      **te** = technical      **ed** = editorial

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| | | Clause | Paragraph | Type | Comments | Proposed change | Observations |
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| | | 2 Normative references | | ge | Reference missing. Per Section 5.1.2.1, the reference to the GS1 Digital Link Standard: URI Syntax is necessary for GS1 users just as IEC 61406 is for users of ANS MH10.2 DIs.<br><br>For the standard, see https://ref.gs1.org/standards/digital-link/uri-syntax/ | Add<br><br>"GS1 Digital Link Standard: URI Syntax, release 1.6.0"<br><br>to the list of references | |
| | | 2 Normative references | | ge | Reference missing. The reference to the EPC Tag Data Standard (TDS) is necessary to go in line with its mentioning in the further sections (e.g., table B14). | Add<br><br>"EPC Tag Data Standard (TDS), release 2.2, https://ref.gs1.org/standards/tds/"<br><br>to the list of references | |
| | | 3 Terms and definitions | | ed | Editorial: According to ISO website the standard ISO/IEC 19762:2016 has been withdrawn by new version ISO/IEC 19762:2025 (see https://www.iso.org/standard/61301.html). | Change sentence from "For the purposes of this document, the terms and definitions given in ISO/IEC 19762:**2016** and the terms and definitions defined in clause 3 apply." to "For the purposes of this document, the terms and definitions given in ISO/IEC 19762:**2025** and the terms and definitions defined in clause 3 apply.". | |
| | | 3 Terms and definitions | 3.1 | ge | Definition of a "batch" differs from the legal definition in the ESPR. If standards at the national, regional, or international level begin to diverge from legal definitions, this will cause confusion in the market. Legal definitions should be given priority and any effort to harmonise regulatory terms and definitions should be done via regulatory harmonisation initiatives so as not to invite unwarranted revisions. For the wording of the revised definition see ESPR, (33), p.9. | Exchange current definition for a batch,<br><br>"subset of a model that is grouped by the economic operator based on the identical properties",<br><br>with the wording provided in the ESPR<br><br>"usually refers to a subset of a specific model composed of all products produced in a specific manufacturing plant at a specific moment in time". | |
| | | 3 Terms and definitions | 3.3 | ge | Definition of a "DPP" differs from the legal definition in the ESPR. If standards at the national, regional, or international level begin to diverge from legal definitions, this will cause confusion in the market. Legal definitions should be given priority and any effort to harmonise regulatory terms and definitions should be done via regulatory harmonisation initiatives so as not to invite unwarranted revisions. For the wording of the revised definition see ESPR, (28), p.28. | Exchange current definition for a DPP,<br><br>"digital record of product characteristics throughout its life cycle",<br><br> with the wording provided in the ESPR,<br><br>"a set of data specific to a product that includes the information specified in the applicable delegated act adopted pursuant to Article 4 and that is accessible via electronic means through a data carrier in accordance with Chapter III". | |

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| | | 3 Terms and definitions | 3.5 | | ge | An object does not have to be registered to be identified. If required by the standard, there could be a separate term for registered identifier but it does not seem to be needed. | Change definition to<br><br>"system for allocating identifiers to be identifiable". | |
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| | | 3 Terms and definitions | 3.6 | | ge | Interoperability definition is insufficient as the benefit, especially within global, open value networks, is not always limited to mutual benefit. | Add to the definition: "ability of independent systems to exchange meaningful information and initiate actions from each other, in order to operate together to mutual benefit **or for the benefit of a system that relies on more than one independent system**". | |
| | | 3 Terms and definitions | 3.7 | | ge | Regarding "centralized identification scheme" and "federated identification scheme":<br><br>These two phrases seem out of place especially centralised unless it was used in the context of centralised rules incumbent upon all Issuing Agencies such as ISO/IEC 15459-3. So long as there are standards for uniqueness and interoperability, these identification schemes have a layered decentralisation approach similar to phone numbers, domain addresses, etc.<br><br>They could perhaps be referred to as hierarchical identification schemes as there is:<br><br>A Registration Authority that authorises Issuing Agencies if they conform to requirements and rules,<br><br>Issuing Agencies who allocate subdivisions of their identification capacity to other companies, and<br><br>companies that use the capacity allocated to them to allocate identifiers to specific entities like a product or location.<br><br>Regarding Issuing Agency: There is already a definition on ISO/IEC level (ISO/IEC 19762:2025, 3.1.5.30) which should be adopted to be in line with international standards. For the purpose of this standard, the definition could be expanded to include 6523 as provided. | Delete<br><br>"centralized identification scheme<br>federated identification scheme"<br><br>and change current definition to<br><br>"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)". | |

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| | | 3 Terms and definitions | 3.18 | ge | The term and definition of "decentralized identification scheme" conflates decentralised identifiers and internal company identifiers. It would be appropriate to add some precision to avoid confusion. See proposed edits.<br><br>While it is not within the scope of this standard, it may be helpful to the reader to define internal identification schemes based on the way the term "self-issuing system" is being misappropriated in the text to suggest there is no registration authority involved with the IL, DOI, and DID schemes.<br><br>Companies often use internally assigned identifiers (self-issued) to distinguish factors known only to them but when the identifiers are used in the open product value chain they require some mechanism to render them unique vis-a-vie internal identifiers of other organisations. | Change current definition for "decentralized identification scheme" to<br><br>"domains, specifications and rules (mechanisms) used by organisations to generate identifiers unique within that domain and interoperable within the scope of use as defined (e.g., value chain, finance, document exchange).",<br><br>and add an additional definition for the term "company internal identification scheme", defined as<br><br>"system or mechanism that an organization uses to generate and assign unique identifiers to its objects without regard for uniqueness or interoperability of the identifiers outside their organization.". | |
| | | 4 General principles, requirements and guidelines | 4.1.1 Principle for global uniqueness | ge | As stated above, some mechanism, whether it be managed by ICANN, ISO/IEC or other registrars, specifications and rules are necessary to create unique identification within open environments. | Change last sentence to<br><br>"**Uniqueness for any identifier in an open environment of multiple economic operators requires a mechanism (e.g., ICANN domain names or prefixes, issuing agencies such as ISO/IEC 15459-2 or 6523-1), specifications and rules** when placing products on the market (3.13) or putting them into service (3.15).". | |
| | | 4 General principles, requirements and guidelines | 4.2.2 Requirements for persistence | ed | "1) Consistency:" Sentence leaves room for ambiguity as it is unclear what is meant by control of the economic operator. It is recommended to adjust the text as proposed. | Adjust the text as follows:<br><br>"1) Consistency: The unique identifier, once assigned, shall remain unchanged and consistently refer to the same object without ambiguity, for as long as **the declarations made regarding the object** remain within the control of the economic operator.". | |

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| | | 4 General principles, requirements and guidelines | 4.3.2 Syntax Requiremen ts | 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." | |
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| | | 4 General principles, requirements and guidelines | 4.4.1 Semantic principle | ed | Editorial: Identifiers serve as proxies to find data not constructs to derive data from in an open environment. Of course, many organisations may be able to derive meaning internally from the identifiers structure and content (e.g., batch number tells them the factory, machine, Julian date) | Change sentence as follows: "Semantics also enable effective access to the data ~~encoded within~~ **located by** the identifier, supporting interpretation by both systems and users.". | |
| | | 4 General principles, requirements and guidelines | 4.4.2 Semantic requirement s | ge | Regarding "2) Granularity consistency": Rationale for changing the sentence: One unique identifier can serve all three levels of granularity depending on the application they interface with. For example, a product with a model, lot and serial number are encoded together. The product's model level identifier (e.g., GS1's GTIN) is used for online sales and fulfilment processes, the product's model and lot number combined are used for traceability or recall, and the product's model and serial number are used for traceability and warranty return or service records. It is up to the product manufacturer to determine what levels are required for non-regulatory purposes but the level required by the regulation must be used and remain persistent for the duration required by the regulation. | Change sentence to: "The minimum granularity level required by the regulation shall remain available once the product is placed on the market or put into service (3.15).". | |

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| | | 4 General principles, requirements and guidelines | 4.4.2 Semantic requirements | ge | Regarding "3) Change in granularity:"<br><br>The previous wording is correct in principle, but the required linkage differs by identification scheme. For schemes that do not permit parsing of the model number, an entirely new identifier must be linked to the old one. However, for schemes that inherently permit parsing of identification data elements (model, batch, item), the only level of granularity where linkage is relevant is model as there is no rationale to link batches or item level identifiers to one another as the model achieves this. | Exchange current wording by<br><br>"For identifiers that do not utilize ISO/IEC 15418 or equivalent qualifiers with each identifier data element (e.g., model, batch, serial number), if a change in granularity becomes necessary that has not been foreseen, a new or extended unique product identifier shall be required. The new or extended identifier shall be linked to the old unique identifier to maintain traceability<br><br>For identifiers qualified by ISO/IEC 15418 ANSI MH10 Data Identifiers or GS1 Application Identifiers, model and batch and/or item levels of granularity can be supported by application specific requests for the granularity required by using the qualifiers. Granularity finer than model can be introduced or withdrawn without changing the model number (e.g., GTIN) and thereby avoid costly "hard-conversion" product introduction expenses for industry and consumers as well as avoiding potential stock-outs and obsoleted inventory. In the case where a change in the model level identifier is required, the new model number shall be linked to the previous model number to maintain traceability. It should be noted that in the GS1 system of identification, industry relies upon a version extension of the model number to isolate supply chain impacts where communication of minor variations occur and a change to this version extension may constitute a change to the model number for the purposes of DPP reporting and in this case, linkage to the previous model number, with or without the version extension is required.". | |

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| | | 4 General principles, requirements and guidelines | 4.5.2 Requirements for interoperability | ge | In order to create interoperability, a scanning system must be able to discern what ID scheme it is presented with. | Add the following two requirements at the start of the enumeration:<br><br>"1) For ISO/IEC 15459 identifiers, an organization can claim that it is compliant with ISO/IEC 15459 (all parts or a specific part) if it can allocate and process identities according to the rules defined in ISO/IEC 15459-3, Common rules, ISO/IEC 15459-2, Registration procedures and all or any other part.<br><br>2) For non-ISO/IEC 15459 identifiers, a specification establishing how automated systems will process the identifier as unique versus ISO/IEC 15459 identifiers used in the supply chain today, shall be made available."<br><br>Current numbers 1) to 5) would become 3) to 7) in the enumeration accordingly. | |
| | | 4 General principles, requirements and guidelines | 4.5.2 Requirements for interoperability | ge | Regarding "Digital copy":<br>This amendment clarifies the way through which economic operators must give access to the DPP to retailers and online marketplaces:<br><br>- It replaces the word "copy" – which could be prone to misinterpretation – with access.<br><br>- It clarified that access should be provided via a link. The link is the most practical way to provide access to the DPP, as this can be easily accessible from both a computer and a mobile phone.<br><br>This is in line with Article 10 of ESPR, according to which,<br><br>*"3. The economic operator shall:*<br><br>*(b) provide the digital copy referred to in point (a) or a webpage link free of charge promptly and in any event within five working days of receiving a request to do so."* | Adjust text to:<br><br>"2) Digital **access** ~~copy~~: The economic operator shall give retailers and online marketplaces ~~access, via a~~ **the link,** to ~~the~~ **its** unique product identifier ~~that they need to lead~~ **to enable** consumer~~s~~ **access** to the DPP of ~~a given~~ **this** product". | |

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| | | 4 General principles, requirements and guidelines | 4.5.2 Requirements for interoperability | ge | Regarding "Compatibility": This sentence requires more precision to be measured for conformity as it does not specify what makes the product identifier compatible with devices vis-a-vie other identifiers. It also does not require the unique product identifier to be implemented which could be its own requirement, but if not, it must be expressed somewhere as the organisations who intend to implement product identifiers not currently supported pervasively by AIDC encoding, printing, scanning, reading, verification systems MUST provide the specifications and rules for their deployment and drive their adoption within a critical mass of AIDC systems without burdening those using already pervasively deployed identification systems. We also add "broadly available" with the aim of narrowing the compatibility concept to a reasonable level to ensure the compatibility requirement is attainable. By inserting the words "broadly available", the standard would clarify that there should not be compatibility with every single device that may exist (e.g. niche scanners or obsolete gadget), and that compatibility should be with broadly available external components. Note that in the same spirit, 4.6.3 of the Draft standard mentions "state-of-the-art smartphones" and "major operating systems and browsers". | Adjust the sentence to: "The unique product identifier shall be **encoded via a syntax that is** compatible with **and implemented within broadly available** external components, such as professional scanning devices, smartphones and similar digital consumer devices.". | |
| | | 4 General principles, requirements and guidelines | 4.5.2 Requirements for interoperability | ge | Regarding "Portability": The first sentence is not specific enough to determine if conformity with the requirement exists for users of ISO/IEC 15459 compliant identifiers. It is unclear if it is sufficient for the novel identifiers being proposed for product identification in the open value chain. | Add at the end the following sentence: "For ISO/IEC 15459 identifiers, compliance with ISO/IEC 15459-3 Common Rules ensures portability and interoperability for unique identifiers (e.g., requires one the ISO/IEC 15418 qualifier methods such as GS1 Application Identifiers or ANS MH10 Data Identifiers to ensure portability.". | |
| | | 4 General principles, requirements and | 4.5.2 Requirements for interoperabil | ge | Regarding "Existing ID": The term existing ID does not distinguish between 'existing internal IDs' that cannot be used externally and 'existing open IDs' that can. | Add at the end the following sentence: "The method differs by identification scheme (e.g., use of internet domain address preceding their existing scheme, use of ISO/IEC 15459 as their | |

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| | | guidelines | ity | | | Additional detail is required to make this distinction clear. | existing scheme).". | |
| | | 4 General principles, requirements and guidelines | 4.6.1 Principle for Openness | | ge | An example would be very helpful in terms of measuring conformity to the normative requirements of this standard. If there are any other 'widely accessible rules' for product identification encoded in AIDC data carriers in today's value chain, they could be added to the example, but GS1 users rely on those mentioned. | Add in second sentence:<br><br>"The use of widely accessible rules and procedures **(e.g., ISO/IEC 15459-3 Common Rules)** foster broad adoption and interoperability." | |
| | | 4 General principles, requirements and guidelines | 4.6.2 Requirements for openness | | ge | Regarding "1) Transparency":<br><br>The requirement can be met by ISO/IEC 15459 standards and industry standards like GS1 as sufficient transparency exists for the policies, processes and standards. However, for this requirement to be met by DOIs or DIDs, as well as any novel RFID identification scheme, AIDC systems developers need to know where these policies, processes, and standards exist.<br><br>For example, are DOIs prefaced by an ISO/IEC 15459-2 Issuing Agency Code XID still DOIs? Are they conformant with ISO/IEC 15459-3 and if so, by whom, how, and where are the specifications and rules developed to ensure conformity to ISO/IEC 15459 and this European Standard?<br><br>For DIDs, by whom, how, and where are the specifications and rules developed to ensure conformity to this European Standard?<br><br>For RFID, industry wide agreements are pending on what to use for smart device encoding/decoding. Without these specifications and rules, this requirement cannot be measured for conformity nor implemented in a uniform manner by AIDC service offerings. Please see the comment regarding the timing of these specifications from GS1 in the Data Carrier Standard Section 6.3.4.3. | Dissolve these open questions. | |
| | | 4 General principles, requirements and | 4.6.2 Requirements for openness | | ge | Regarding "3) No undue restrictions":<br><br>Editorial: Per Section 5.1.2.1, adding examples here would benefit the standard. | Adjust second sentence to<br><br>"It shall also not impose limitations on use, except where such restrictions are technically necessary | |

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| | | guidelines | | | | to ensure uniqueness and interoperability (e.g., for ISO/IEC 15459-2 identifiers, ISO/IEC 15459-3 Common Rules).". | |
| | | 5 ID schemes for products | 5.1.2.1 Web enabled, structured path ID for products requirements | te | Regarding "b)": <br><br> This method, while not used by non-GS1 15459 Issuing Agencies involved in the CEN/CENELEC process, is not specified for use by GS1 only. It therefore is appropriate to permit its use with ASC MH10 Data Identifiers and therefore to state the Issuing Agency Code could be alphanumeric (see point d). If the European Standard prohibits the use of ISO/IEC 18975's Web enabled, structured path ID approach to all except GS1, the word numeric would then be appropriate even if this restriction is not mentioned in ISO/IEC 18975, but this is inconsistent with the use of this Scheme presumably by non-GS1 Issuing Agencies for organisation and facility identification. | Change sentence to <br><br> "b) apply the GS1 Application Identifier (AI) format **or the ASC MH10 Data Identifiers (DI) format** in accordance with ISO/IEC 15418:2016". | |
| | | 5 ID schemes for products | 5.1.2.1 Web enabled, structured path ID for products requirements | te | Regarding "d)": <br><br> ISO/IEC 15459 enables unique identification (part 2) and interoperability (part 3). Scanning systems deployed rely on the rules of part 3 such as requiring qualifiers in front of identifier strings in order to allow their parsing and subsequent processing and storage. <br><br> GS1 uses Web enabled, structured path ID (GS1 Digital Link URI) and requires conformity to ISO/IEC 15459-2 and -3 as both are necessary for GS1 to claim the GS1 System is compliant with ISO/IEC 15459. An organisation that complies with part 2 but not 3 or the reverse cannot claim compliance. <br><br> For example, getting an ISO/IEC 15459-2 Issuing Agency Code allows an identifier to be unique vis-a-vie all other identifiers beginning with an Issuing Agency Code but unless the organisation using that Issuing Agency Code conforms to the Common Rules, they do not have an ISO/IEC 15459 compliant system. For this reason, both part 2 and 3 must be normatively referenced in | Change text of d) to <br><br> "d) use a registered numerical issuing Issuing agency Agency Code according to ISO/IEC 15459-2:2015, and conform to ISO/IEC 15459-3 Common Rules as per ISO/IEC 15459-3, Section 6.4 "Compliance with ISO/IEC 15459: An organization can claim that it is compliant with ISO/IEC 15459 (all parts or a specific part) if it can allocate and process identities according to the rules defined in ISO/IEC 15459-3, Common rules, ISO/IEC 15459-2, Registration procedures and all or any other part.". | |

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| | | | | | Section 5.1.2.1 and actually any other section in the standard that references one but not the other (if the section(s) claim 15459 compliance). | |
| | | 5 ID schemes for products | 5.1.2.1 Web enabled, structured path ID for products requirements | te | Additional enumeration "e)": <br><br> Per the previous comment, if the European Standard intends to limit the use of web enabled, structured path identification only to GS1, then the Section title should either be "Web enabled, structured path ID per GS1 Digital Link URI Standard". If however the European Standard does not intend to prohibit non-GS1 Issuing Agencies from using this method, then the Section title should remain as is and point e) added for GS1 standards users where the GS1 Digital Link URI Standard SHALL be used. Either way, GS1 Digital Link URI must be added to the Normative References of this standard. | Add an additional enumeration e) <br><br> "e) For users of GS1 Application Identifiers, conformance with GS1 Digital Link URI SHALL be required.". | |
| | | 5 ID schemes for products | 5.1.2.2 Web enabled, query string ID for products | ed | Regarding "d)": <br><br> Editorial: Edit for consistency with the previous sub-section. | Adjust text to: <br><br> "d) use a registered ~~alphanumerical~~ **Issuing Agency Code (IAC)** according to ISO/IEC 15459-2:2015" | |
| | | 5 ID schemes for products | 5.2.1 Description of the ID scheme: Identification Link (IL) | ge | Regarding "The IL is based on …": <br><br> This further illustrates the confusion between "self-issuing systems" which would logically not require any "third party involvement" versus this method that, like ISO/IEC 15459 or 6523 that relies on a registration authority to ensure uniqueness and licensing to ensure persistence of the identifier. IL, DOI, and DID all rely on ICANN to register domains (mechanism) which, when coupled with specifications and rules of other organisations, provide for uniqueness provided these methods produce a pattern which AIDC service providers can use with a high degree of certainly to distinguish one scheme from another as all methods, including those relying on ISO/IEC 15459, 15418, and 18975, are web-enabled. | Change sentence to: <br><br> "The IL is based on internet domain names issued via registrars ultimately by ICANN. This approach ensures …". | |

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| | | 5 ID schemes for products | 5.2.1 Description of the ID scheme: Identification Link (IL) | ge | For clarity this sentence should be added covering the subject of persistency. | Add the following sentence at the end:<br><br>"These identifiers are only persistent for as long as the domain address license remains active as it is integral to the identifier." | |
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| | | 5 ID schemes for products | 5.2.3 Guidelines in conjunction with 5.1.2.1 | ge | Regarding "b)", last sentence:<br><br>Would it be also appropriate to mention that IEC 61406-2 could be used to encode ANS MH10 Data Identifiers in the web enabled, structured path identification scheme or is there a prohibition against this?<br><br>If this is prohibited then no edits should be made, but if this is permitted, there should be a point f) added to 5.1.2.1 that states, "f) For users of ANSI MH10 Data Identifiers, conformance with IEC 61406-2 provides conformity with this method." | If permitted add in 5.1.2.1 an additional enumeration stating:<br><br>"f) For users of ANSI MH10 Data Identifiers, conformance with IEC 61406-2 provides conformity with this method.". | |
| | | 5 ID schemes for products | 5.3.2: Requirements for 5.3 ID scheme: DID | ge | Regarding "The economic operator should also use one of the following:"<br><br>To measure conformity to this standard in terms of implementation by AIDC service providers, this must be SHALL and the organisation(s) determining the allowable DID methods for product identification via AIDC in the open product value chain MUST be identified so that the service providers know who is using this scheme. This will allow them to make business decisions regarding the value of implementing DIDs (based on the number of users) within their service offerings by 2027 in a manner that will not compromise existing service performance levels. | | |
| | | 5 ID schemes for products | 5.3.2: Requirements for 5.3 ID scheme: DID | ge | Regarding "b)":<br><br>If these methods are subject to succession by other methods | Adjust sentence to:<br><br>"b) DID methods: did:web [4], did:ethr [5] or did:ebsi [6] **or their successors**.". | |

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| | | 5 ID schemes for products | 5.4.1: Description of ID scheme: Product and group identification | ge | Regarding first sentence:<br><br>This method requires the use of resolvers. Are there expected number of requests, service level agreements, etc.? | | |
|---|---|---|---|---|---|---|---|
| | | 5 ID schemes for products | 5.4.1: Description of ID scheme: Product and group identification | ge | Regarding second last sentence:<br><br>Part 2 of ISO/IEC 15459 covers uniqueness. ISO/IEC 15459-3 covers identification allocation and syntax within Common Rules including the reference to ISO/IEC 15418. | Change sentence to<br><br>"It supports offline processing of product details and follows ISO/IEC 15459-**3 and ISO/IEC 15418** for identifier allocation and syntax.". | |
| | | 5 ID schemes for products | 5.4.2.1 Product and group identification , RFID | ge | Regarding "a)":<br><br>The proposed addition is required for compliance for GS1 identification users. | Change sentence to<br><br>"a) adhere to ISO/IEC 15459-4:2014 for individual products, and/or ISO/IEC 15459-6:2014 for groupings of products, to ensure the uniqueness of product identifiers **(for GS1 identification users, per the EPC Tag Data Standard (TDS))**,". | |
| | | 5 ID schemes for products | 5.4.2.1 Product and group identification , RFID | ge | Regarding "b)":<br><br>Edits to a) and b) for completeness and clarity for the many products covered by ESPR using GS1 standards. | Change sentence to<br><br>"b) follow ISO/IEC 15961-1:2021, ISO/IEC 17360:2023 **or the EPC Tag Data Standard (TDS)** for semantic structuring and logical representation of data, and". | |
| | | 5 ID schemes for products | 5.4.2.1 Product and group identification , RFID | ge | Regarding "c):<br><br>Editorial: For consistency with the ISO/IEC term. | Change sentence to<br><br>"c) use a registered **Issuing Agency Code (IAC)** according to ISO/IEC 15459-2:2015." | |

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| | | 5 ID schemes for products | 5.4.2.2 Product and group identification, 2D symbols | ge | Regarding "b)": <br><br> Proposed edits are needed to ensure the reader does not use Format Header "05" as this is approved for use in GS1 standards and any introduction of it in any existing application standard would require approval at the GS1 General Assembly level. | Change text to <br><br> "b) structure the data transfer syntax for high-capacity automatic data capture media according to ISO/IEC 15434:2019. **Format Header "06" - Data using ASC MH 10 Data Identifiers** to encode, for instance, URLs in QR-codes. **Format Header "05" - Data using GS1 Application Identifiers is not a part of this specification as GS1 Application Standards do not utilise ISO/IEC 15434.**" | |
|---|---|---|---|---|---|---|---|
| | | 5 ID schemes for products | 5.4.2.2 Product and group identification, 2D symbols | ge | Regarding "c)": <br><br> Cannot be numeric as GS1 does not use this method. Were GS1 ever to use a method for switching between AIs and DIs, it would likely embrace a simpler approach that equates to DI 4N. | Change text to <br><br> "c) use a**n alpha Issuing Agency Code** ~~registered issuing agency~~ according to ISO/IEC 15459-2:2015.". | |
| | | 5 ID schemes for products | 5.4.3: Guidelines for ID scheme: Product and group identification | ge | Regarding "a)": <br><br> 13] which references TDS in the Bibliography should be moved alongside [7] in point a) | Adjust sentence to <br><br> "a) [7] **or [13]** for RFID data encoding and decoding**; [13] defines Electronic Product Code (EPC) encodings for ISO/IEC 18000-63 complaint tags to identify serialized product instances**.". | |
| | | 5 ID schemes for products | 5.5.1 Description of ID Scheme DOI | ed | Regarding first sentence: <br><br> Editorial: This might be helpful for clarity. | Adjust sentence to <br><br> "This ID scheme, based on ISO 26324, enables unique identification of products using Digital Object Identifiers (DOI) **that can be expressed** in URL format. **which is consistent with the structured path approach defined in ISO/IEC 18975 (see Section 5.1.2.1)**. | |
| | | 5 ID schemes for products | 5.5.2 Requirements | ge | Regarding "a)": <br><br> Without the specifications, it is hard to determine how DOIs designate the qualification of identification components as they are typically used to work in other areas (e.g., publications) rather than product identification. | Adjust sentence to <br><br> "a) **Declare whether the DOI applies to the product model, batch or item as set out in ISO 26324:2025** ~~adhere to ISO 26324:2025 for model, batch or item identification~~.". | |

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| | | 5 ID schemes for products | 5.5.2 Requirements | ge | Regarding "b)": <br><br> The use of an ISO/IEC IAC does not mean interoperability with 15459 compliant systems. <br><br> It also should be clarified if a DOI prefaced by an 15459 IAC remains a DOI or if this method is in fact a compound 15459/DOI identifier. <br><br> The number of organisations intent on using the DOI method for product identification via AIDC in the open product value chain should be quantified to incentivize service providers to make business decisions regarding the value of implementing DOIs with a leading IAC (based on the number of users) within their service offerings (by 2027 in a manner that will not compromise existing service performance levels). | Change text to: <br><br> b) use the ISO/IEC 15459-2:2015 **Issuing Agency Code** ~~assigned code~~ at the start of the DOI **to ensure uniqueness vis-a-vie ISO/IEC 15459 product identifiers currently used in the open value chain. This does not represent an ISO/IEC 15459 compliant system as ISO/IEC 15459-3 Common Rules are not used**.". | |
|---|---|---|---|---|---|---|---|
| | | 6 ID schemes for economic operators and facilities | | ge | It is important to clarify that ID schemes for economic operators and facilities are non-mandatory according to the ESPR (pending the Commission's Delegated Acts): <br><br> • "*In addition, where appropriate, the digital product passport should be linked to a unique operator identifier and a unique facility identifier which would allow the actors and manufacturing facilities related to that product to be traced*" (Recital 36) <br><br> • ID schemes for economic operators and facilities are not mentioned as the essential requirements for Digital Product Passports (Art. 10 (1), but Annex III provides that these UI can be requirements that the Commission decides to include in the DPP in Delegated Acts. | Add after the title of chapter 6 as first sentence: <br><br> "ID schemes for economic operators and facilities are not mandatory according to the ESPR and should only be set where appropriate and where required by delegated acts setting EcoDesign requirements.". | |

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| | | 6 ID schemes for economic operators and facilities | 6.1 ID scheme: Structured path identification for organizations | ed | Regarding title: Editorial: For alignment with content presented in Section 6.1.1 | "6.1 ID scheme 6.1: Structured path identification for organizations **and facilities**" | |
|---|---|---|---|---|---|---|---|
| | | 6 ID schemes for economic operators and facilities | 6.1.1 Description | ed | Regarding last sentence: Editorial: For clarity as this section title omits the words "web enabled" from the method. | Add in last sentence: "… in supply chain and administrative workflows **and is fully compatible with Product ID Scheme 5.1.2.1**.". | |
| | | 6 ID schemes for economic operators and facilities | 6.1.2 Requirements for ID scheme structured path identification | ge | Where there is a requirement to know the facility where a product was manufactured, a look-up via a model + batch in the data carrier could be used, but an alternative could also be a model + facility identifier. As this would require facility identifiers used in AIDC data carriers, this should be added. | Add the following additional enumeration c) "c) where the economic operator identifier or facility identifier will never be used in an AIDC data carrier, any ISO/IEC 6523-1:2023 identifier will be unique, but where an economic operator identifier will be used within an AIDC data carrier, the subset of ISO/IEC 6523-1:2023 identifiers that conform to ISO/IEC 15459 shall be used to ensure uniqueness.". | |
| | | 6 ID schemes for economic operators and facilities | 6.1.3 Guidelines for ID scheme structured path identification | ge | Regarding "b)": EN IEC 61406-2: 2024 is not included in the web enabled, structured path identification scheme for products but is included here. Per earlier comments, use of IEC 61406-2 should be clarified in Section 5.1.2.1. In addition, GS1 Digital Link URIs are conformant with the ISO/IEC 18975 web-enabled, structured path identifier method. GS1 Digital Link URI must be included to cover the consumer goods industry using GS1 standards. | Change text to "b) ~~[3] and/or~~ **[2] and/or GS1 Digital Link URI Syntax** for constructing identifiers as URLs.". | |

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| | | 6 ID schemes for economic operators and facilities | 6.2.1 Description | ge | If this scheme is included, how will it be unique to the ISO/IEC 15459 compliant identifiers used in AIDC data carriers in the open value chain today. It was intended for financial institutions and begins with numeric values that overlap GS1's ISO/IEC 15459 Issuing Agency Code (IAC) just as DOIs and DIDs overlap NATO's. | | |
|---|---|---|---|---|---|---|---|
| | | 6 ID schemes for economic operators and facilities | 6.3.1 Description of ID scheme DID | ed | Editorial: For clarity as a DID does not "include" a DID document, it resolves to one. | Adjust sentence to: "Each DID ~~includes~~ **resolves to** a public DID document …" | |
| | | 6 ID schemes for economic operators and facilities | 6.3.1 Description of ID scheme DID | ed | Editorial: For precision. | "A DID becomes an Economic Operator Identifier when a**n authoritative** Company Register.". | |
| | | 6 ID schemes for economic operators and facilities | 6.3.2 Requirements regarding ID scheme DID | ed | Regarding "b)": Editorial: The current version, whatever that is, is always at https://www.w3.org/TR/did-resolution/. The immutable version 0.3 is at https://www.w3.org/TR/2025/WD-did-resolution-20250619/. This is the same approach used at ref.gs1.org. There is a URL for the latest version, which may point to different versions over time, and a versioned URL that leads to an immutable document. There could be a different version of that document published every day for the rest of the year (each with its own version number and immutable copy at the dated URL) so it's unhelpful to include the year in the reference. | "b) follow Verifiable Credentials Data Model ~~v1.1:2022~~ **v2.0:2025** to associate …". | |
| | | 6 ID schemes for economic operators and facilities | 6.3.2 Requirements regarding ID scheme DID | ge | Regarding "c)": DID Docs may, but do not need to, point to VCs. Suggest simply removing the clause. | "c) use Decentralized Identifier Resolution (DID Resolution) v0.3:2025 to find the DID document ~~and the attached verifiable credentials~~". | |

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| | | 6 ID schemes for economic operators and facilities | 6.3.3 Guidelines for ID scheme DID | ed | Regarding "a)": Editorial: With vLEI GLEIF binds a DID to a LEI, not to a company. | "To bind a DID to **an LEI** ~~a company~~, GLEIF…". | |
|---|---|---|---|---|---|---|---|
| | | 6 ID schemes for economic operators and facilities | 6.3.3 Guidelines for ID scheme DID | ed | Regarding "c)": Editorial: For clarity. | "c) for facilities, trusted companies or registries, such as the US Facility Registry or a GS1 GLN, can issue identification credentials to the facility DID **perhaps supported by a Verifiable Credential**. Auditors …". | |
| | | 6 ID schemes for economic operators and facilities | 6.4 ID scheme Digital Object Identifiers (DOI) for organizations | ge | The term digital object identifier is about a digital identifier for an object. Is an organization an object? Well, theoretically it could be, but can someone qualify who is using or talking about using a DOI for an organizational ID. No harm in leaving this as is technically, but again it is a question about who needs this. | | |
| | | Annex A | | ge | Annex A appears to be advising product manufacturers to deploy finer levels of granularity as a default, but this comes at great expense and complexity for many product categories and ignores the fact that granularity can easily be introduced or withdrawn for identification scheme 5.1.2.1 and perhaps 5.1.2.2. Should this Annex remain, the guidance should be based on whether the ability to introduce or withdraw granularity levels is possible without having to reallocate the identifier used to reach DPP content. A change to the name of the Annex and the additional text is recommended to be more inclusive of the products covered by the regulation. | Change title to: "Guidance on selecting ~~item-level~~ identification **granularity levels** for products". Add after first paragraph: "… the product's life-cycle. **For most retail consumer products that utilize GS1 identifiers, are qualified by GS1 Application Identifiers, and encoded per ISO/IEC 18975 web enabled, structured path identification using GS1 Digital Link URI syntax, finer granularity levels can be introduced or withdrawn at any time per the discretion of the product manufacturer as long as the minimum granularity level required by ESPR is maintained. Therefore, default identification would be:** — **at the model level (e.g., GTIN) is advisable. This level of identification is required for most online order and retail store fulfilment, used to manage inventory, and for** | |

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| | | | | | | **alignment of data between trading partners.**<br><br>— **In cases where a Delegated Act requires the product's manufacturing facility be known, but no other requirement for finer granularity of identification is present, the use of a product model and facility identifier may be a suitable alternative to consider.**<br><br>— **Where item level granularity is required by some trading partner agreements on consumer products (e.g., those with EPC RFID tags) but is not required by the regulation, this should remain a commercial agreement**.<br><br>Default identification …". | |
| | | Annex A | | ge | | Regarding paragraph "Default identification at the item level …":<br><br>The legal text of the Ecodesign for Sustainable Products Regulation (ESPR) does not refer to any default mode of identification. Article 9 (2) clearly defers any decision on the level of granularity to the future delegated acts setting ecodesign requirements. Recital 33 of the ESPR reiterates that "*the impact assessments carried out when preparing the delegated acts setting ecodesign requirements should analyse the costs and benefits of setting information requirements through digital product passports at model, batch or item level*". When making such a decision, Recital 33 further highlights that the choice of the level of granularity shall "*avoid costs for companies and for the public that are disproportionate to the wider benefits*" and that such a cost-benefits assessment depends on "*for example, the complexity of the value chain, the size, nature or impacts of the products considered.*"<br><br>As a background, the identification of a product at an item level (default item-level IDs) entails | Adjust text to:<br><br>"~~Default~~ Identification at the item level **may be considered, based on the impact assessments carried out when preparing the delegated acts setting ecodesign requirements,** ~~is advisable~~ for products that meet any of the following criteria: (…)" | |

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| | | | | | significant costs:<br><br>- High economic costs for companies to manage UPI at batch or item level due to the need to invest in online label printing ability at all manufacturing plants.<br><br>- Environmental costs due to the need to store large quantities of data.<br><br>- Limited benefits, since products belonging to the same model have similar environmental characteristics, in such a way that it is redundant to go to the batch/item level.<br><br>Any decision to select the item level should balance the costs above with potential benefits. This is more important at a time where the EU Commission has set competitiveness and reduction of administrative burden as its key priorities.<br><br>To sum up, EN standard shall not refer to any default mode of identification since this runs counter to the legal text of the ESPR that defers this decision to the product-specific delegated acts. While for product groups complying with certain criteria the item level may be considered, the selection of the granularity level should only come at the end of a thorough impact assessment. That is why EN standards should not refer to any notion of "default" identification. | | |
| | | Annex A | | ge | Regarding paragraph "In scenarios not explicitly …":<br><br>This paragraph has no relevance to the regulatory requirements, focuses on non-regulatory requirements that are subject to trading partner agreements or commercial requirements, and should be removed. | Delete<br><br>"In scenarios not explicitly covered above, but where item-level identification emerges as beneficial during the product life cycle, economic operators are encouraged to default to this mode of identification. For instance, gathering data on the installed product base for strategic product planning purposes may warrant such an approach.". | |

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | Annex A | | | ge | Regarding paragraph "In exceptional circumstances, a product …": This paragraph appears to be written as guidance for those utilising identification schemes where any change in granularity would result in a new product identifier. It is not advisable to introduce this guidance for those who utilise an identification scheme where granularity levels can be introduced or withdrawn per the product manufacturers discretion to allow them to incur the expense and complexity of it only as required | Adjust text: "~~In exceptional circumstances~~ **For products where additional levels of identification granularity cannot be introduced without changing the product identifier (Section 4.4.2, 3)**, a product typically identified at the model level may require subsequent identification at the **batch and/or** item level later in its life cycle. In such cases, economic operators needing **batch and/or** item-level identification should generate and apply a unique product identifier according to the standard practices outlined herein. This approach maintains the linkage to the original economic operator's product information (typically associated with ~~batch~~ **model**-level identification) while enabling the assignment of specific data to the **production batch or** individual item through the additional identifier." | |
| | | Annex B | Table B1 | ed | Columns 5.2.2.2 and 5.4.1.2: No such chapters exist. | | |
| | | Annex B | Table B1 | ed | Editorial: If after review of 5.1.2.1, it is decided that the standard should not prohibit the use of DIs with the web enabled, structure path scheme, this edit is needed. | Adjust box of first column to: "ISO/IEC 15459 + AI ~~subset of~~ **or DI of** ISO/IEC 15418". | |
| | | Annex B | Table B1 | ed | Editorial: Adjust references in box of second column to be correct and complete. | Regarding Technical standard for syntax: "**GS1 Digital Link (subset of ISO/IEC 18975)** ISO/IEC 15459**-2 and -3** **GS1 Application Identifiers (subset of ISO/IEC 15418)** RFC 3986" | |

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| | | Annex B | Table B1 | ed | Editorial: GS1 Digital Link URI is a technical syntax standard, not an application standard. The correct reference has been added. Therefore, adjust references in box of second column to be correct and complete. | Regarding Application standard syntax:<br><br>"~~GS1 Digital Link (subset of ISO/IEC 18975)~~<br><br>**GS1 General Specifications, ESPR DPP AIDC Application Standard**" | |
|---|---|---|---|---|---|---|---|
| | | Annex B | Table B1 | ge | Regarding row "Syntactic interoperability":<br><br>This row should be deleted or clarified as to where this interoperability will occur (EU Registry). For example, a DID that is prefaced by 'XID' within the EU Registry will provide syntactic interoperability and uniqueness vis-a-vie GS1 and NATO identifiers, but would not be syntactically interoperable with any other DID implementation.<br><br>That said, the GS1 communication on implementation, pages 4 and 5, to the Commission and the GS1 DPP Standards WG provides some initial thinking on how AIDC service providers could process the scanned data for the various identification schemes for storage in the EU Registry if these specifications are known.<br><br>That paper is available here. | Delete row "Syntactic interoperability" | |
| | | Annex B | Table B1 | ge | Regarding row "Semantic interoperability":<br><br>GS1 shared a communication with the Commission and its Global Standards Management Process WG related to Interoperability and Implementation. On pages 4 and 5, the document begins to explore how patterns could be used within encoded strings to determine what identification scheme is present and how it should be processed.<br><br>Without this level of differentiation specified for the new identification schemes being introduced, how would a scanner or reader know what specification to follow to parse the string? If this is not clarified, this row should be deleted until it is. | Delete row "Semantic interoperability". | |

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| | | Annex B | Table B1 | ed | Regarding row "Decoding of level of uniqueness …": | | |
|---|---|---|---|---|---|---|---|
| | | | | | - Second column:<br>Editorial: Edited to be consistent with the column to the right and to delete model. Batch, item as this is on the title of the row. | Second column:<br>"From encoded structure **for GS1 Application Identifiers and ANS MH10 Data Identifiers: model, batch, item**" | |
| | | | | | - Third column: | Third Column:<br>"From query parameter s and **ANS MH10 D**ata **I**dentifiers" | |
| | | | | | - Fourth column:<br>Editorial: This is required for three columns as the level of granularity is not known from the decoded data. It can only be obtained via online access. | Fourth column:<br>"~~Parse URL parameter s (RFC 3986) and exclude names starting with a dot.~~<br><br>**Not available from decoded data**" | |
| | | | | | - Fifth column:<br>Editorial: Wording consistent across columns 2, 3, and 5 | Fifth column:<br>"**From encoded structure for ANS MH10 Data Identifiers** ~~Structured identifiers support decoding of level (model, batch, item)~~" | |
| | | | | | - Sixth column: | Sixth column:<br>"~~On QR codes: decode QR code, get link, open browser and let Internet resolve it~~.<br><br>**Not available from decoded data**" | |
| | | | | | - Seventh column:<br>Editorial: An example for tag content is helpful but it should be clarified by example what system data model means. | Seventh column:<br>"From tag content **(e.g., EPC Tag Data Standard)** or system data model **(e.g., ??)**" | |
| | | | | | - Eights column:<br>Editorial: This is required as GS1 does not utilise ISO/IEC 15434 and therefore that Mode is not to be included. | Eights column:<br>"From 2D symbol content **(ISO/IEC 15434 Format Header "06" for ANS MH10 Data Identifiers)**" | |
| | | | | | - Ninth column: | Ninth column:<br>"~~Resolution provides access to descriptive data that will specify level of uniqueness~~<br><br>**Not available from decoded data**" | |

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| | | Annex B | Table B2 | ge | Regarding row "Type of issuing": | 2. column: |
|---|---|---|---|---|---|---|

Regarding row "Type of issuing":

These edits are necessary as, again, the term "self-issuing" occurs in every case and there is some form of registration authority (mechanism) to ensure no two identifiers overlap. This could be a domain, an Issuing Agency Code, a 15434 format header, but all require some mechanism before "self-issuing" occurs.

2. column:
"**ISO/IEC 15459** Issuing agency **then self issuing by product manufacturer**"

3. column:
"**ISO/IEC 15459** Issuing agency **then self issuing by product manufacturer**"

4. column:
"**ICANN domain then self issuing by product manufacturer** ~~Self- issuing system~~"

5. column:
"**ISO/IEC 15459 Issuing agency  then self issuing by product manufacturer** ~~Self- issuing system~~"

6. column:
"**ICANN prefix then self issuing by product manufacturer** ~~Self- issuing system~~"

7. column:
"**ISO/IEC 15459 Issuing agency then self issuing by product manufacturer** ~~Issuing agency~~"

8. column:
"**ISO/IEC 15459 Issuing agency then self issuing by product manufacturer** ~~Issuing agency~~"

9. column:
"**ICANN domain plus DOI Registration Agencies then self issuing by product manufacturer** ~~Issuing agency~~"

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| | | (1) | | (2) | | | |
|---|---|---|---|---|---|---|---|
| | | Annex B | Table B2 | ge | Regarding row "Translation mechanism": <br><br> Translation of what? To what? For what? Clarify or delete this row. <br><br> This mixes several concepts but in a non-uniform manner. <br><br> Translation for DPP access? <br> ID use directly? <br> Autodiscrimination? <br> Resolver? <br><br> If this row is intended for the AIDC level, then AIDC service providers need to know what identification scheme has been encountered, how to process the scheme according to specifications, and must be assured with a high degree of certainty that no collisions of identification will occur based upon these specifications. Please see GS1's communication to the Commission and its standards WG on Interoperability and Implementation considerations as referenced previously. | Delete row "Translation mechanism" | |
| | | Annex B | Table B3: Row Physical data carrier 2D | ge | Regarding row "Physical data carrier 2D": <br><br> Encoding is mentioned. But what about decoding by professional scanners and smart devices? Clarification needed how the decoding of ID schemes is performed. <br><br> Please see GS1's communication to the Commission and GS1 Standards WG related to pattern recognition by AIDC scanning and reading systems. The first column is filled in for GS1 users based on the DRAFT decision tree approach to discern patterns for decoding but the other columns should be filled in by users of the other identification schemes. | Change title of row to "Physical data carrier **encoding** 2D". <br><br> Add additional row "**Physical data carrier decoding 2D**" <br><br> Add for column 2 for the decoding: "**String begins with https:// followed by GS1 ID patterns (e.g., /01/{14digits})** " | |
| | | Annex B | Table B3: Row Physical data carrier 2D | ed | Regarding text in box of column 7: "Possible but not typically used" <br><br> Editorial: Is it really an option for product identification? If it is not foreseen, text should be changed as proposed. | Change text to: <br><br> "not applicable" | |

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| | | Annex B | Table B3: Row Physical data carrier 2D | ed | Editorial: "Any AIDC media, technology independent" needs to be revised as this row is about 2D and not "any AIDC media" which would include biometrics, magstripe, OCR-B, and others. Edited for consistency with the first column across this and other columns where applicable. | Change text in columns 2-6 and 8-9 to<br><br>"**Can be encoded in 2D symbols, including QR codes and DataMatrix** " | |
|---|---|---|---|---|---|---|---|
| | | Annex B | Table B3: Row Physical data carrier 2D | ge | Regarding column 2:<br><br>This 'frame' graphical symbol is problematic for consumer products as explained in GS1's position paper. Furthermore, some consumer product companies have commented that the graphical symbol frame with one highlighted corner is already used on some consumer products to indicate this is a peel-off coupon. Consumer product companies would conduct extensive research to determine how consumers will interact with any mark that is intended to influence uniform consumer behavior. | Add in column 2:<br><br>"Can be encoded in 2D symbols, including QR codes and DataMatrix **(without graphical symbol of IEC 61406 on consumer products)**" | |
| | | Annex B | Table B3: Row Physical data carrier RFID | ed | Editorial: For consistency | Change title to "Physical data carrier: RFID**/NFC**" | |
| | | Annex B | Table B3: Row Physical data carrier RFID | ge | Regarding column 2 | "Yes, can be encoded in RFID/NFC ~~(e.g., EPC URIs)~~ **noting that web-enabled, structured path ID for products using EPC RFID encoding would correspond only to the supplementary GS1 Application Identifiers encoded in +AIDC data, following the EPC, as introduced in TDS 2.0**" | |
| | | Annex B | Table B3: Row Physical data carrier RFID | ed | Regarding column 8 | "~~Not typically used.~~ Not applicable" | |

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| | | Annex B | Table B3: Row Physical data carrier RFID | ed | Regarding column 9: <br><br> Editorial: For consistency | "**Yes, can be encoded in** RFID, NFC" | |
|---|---|---|---|---|---|---|---|
| | | Annex B | Table B3: Row Reliance of domain name | ed | Regarding title: Editorial: for clarity | "Reliance of domain name **for the unique identifier**" | |
| | | Annex B | Table B3: Row Reliance of domain name | ed | Regarding column 5: <br><br> Editorial: Adjustment proposed as it holds true only for IEC 61406-2 but not IEC 61406-1. | "Yes, uses domain name as root **in case of usage in conjunction with IEC 61406-2 (not in case of usage in conjunction with IEC 61406-1)**, though alternative methods possible." | |
| | | Annex B | Table B4: Row 4.3 Syntax Character set | ed | Regarding column 2 | "Numerical **on Model level (GTIN) and Alphanumerical on Batch and Item (serial) level**." | |
| | | Annex B | Table B4: Row 4.4 Semantics - Granularity | ge | Regarding column 2 | "Model, batch, item via qualifier **without graphical frame for retail consumer products**." | |
| | | Annex B | Table B4: Row 4.6 Openess - Smartphones | ge | Does smartphones mean URLs read in browsers on smartphones too? <br><br> If so, this should be added across all columns as URLs meet that criteria. <br><br> Also, should QR here be revised to 2D as Data Matrix, while not as pervasively supported by smartphones as QR, it is supported in many and trending up. | For columns 2-5 add <br><br> "… **and readable in browsers**". <br> For column 5 add <br><br> "… smartphone compatible **with an installed app and readable in browsers**" | |

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| | | Annex B | Table B.7 | ed | Editorial: Revised to include batch as dates are not applicable to ESPR but batch and serial are. Also clarified that uniqueness in the GS1 system requires the combination of GTIN with batch and serial.<br><br>Also, should Expiry Date be used, it is AI (17) not (11). | Adjust text to:<br><br>"GTIN (01)　　　　　Global Trade Item Number　　　09524000059109<br><br>**Consumer product variant (22)　　　Used to distinguish one variant of a retail consumer trade item from another if the change does not require the allocation of a different GTIN.　　2A**<br><br>**Batch Number (10)　Unique batch-level identifier when combined with GTIN　　~~9876~~ABC123**<br><br>Serial Number (21)　Unique item-level identifier **when combined with GTIN**　12345**XYZ**<br><br>~~Date of Expiry (11)　YYMMDD format　　250101~~<br><br>Scheme & Domain　https://example.com<br><br>Full Example　　　https://example.com/01/09524000059109/**22/2A/10/ABC123/21/12345XYZ**　~~21/1234?17=250101~~"<br><br>Adjust the QR code symbol accordingly. | |
| | | Annex B | Table B.8 | ed | Editorial: It would be helpful to cite IEC 61406-2 here as distinct from -1. | "IAC + CIN + Product Number **(IEC 61406-2 approach)**" | |
| | | Annex B | Table B.8 | ed | Editorial: Example given in "Scheme & Domain" and "Full Example" should consider use of the example domains reserved for documentation purposes (RFC 6761). "domain-abc.com" is not reserved for use in documentation and https://abc.com/ is also the domain of the American Broadcasting Company.<br><br>Whatever domain is used, it should be applied consistently throughout the examples. | Adjust "HTTPS://..." examples. | |
| | | Annex B | Table B.9 | ed | Editorial: It would be helpful to cite IEC 61406-1 here as distinct from -2. | "Unstructured ID string **(IEC 61406-1 approach)**" | |

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| Date: | Document: | Project: |
|---|---|---|

| | | Annex B | Table B.10 | ed | Editorial: It would be helpful to cite IEC 61406-2 here as distinct from -1. | "Protocol and domain **(IEC 61406-2 approach)**" | |
|---|---|---|---|---|---|---|---|
| | | Annex B | Table B.12 | ed | Editorial: abc.com" is the American Broadcasting Company's domain. Please use the example domains defined in Ref 6761 (https://www.rfc-editor.org/rfc/rfc6761) | Change example<br>"did:web:abc.com:mo del4TR"<br><br>and of<br><br>"https://resolver.io/did:web:abc.com:model4TR/?service=item-dpp". | |
| | | Annex B | Table B.13 | ge | Regarding table title:<br><br>What is the ISO Registration Authority for this identifier?<br><br>When highlighting RAIN RFID with RAIN Identifiers, the identifier SHALL begin with RAIN's ISO/IEC 15459 compliant, 15459-2 Registered Issuing Agency Code 'XRA' as required in Section 5.4.2.1.<br><br>While other tables include the IACs, it might be useful to add a row for encoded and decoded identifiers to all examples so that AIDC solution providers can begin to establish the pattern recognition required to ensure unique processing and storage of the various schemes in the EU Registry. | | |
| | | Annex B | Table B.13 | ge | The example using NDC seems problematic for three reasons.<br><br>1) This is a US-FDA Issued Identifier.<br><br>2) The NDC, when encoded in AIDC data carriers, uses a GS1 Issuing Agency Code before the Labeler Code.<br><br>3) Drugs are not in scope for ESPR. | Delete row "Product Code (NDC)"<br>Add a row at the end of the table about<br>"Decoded identifier as stored in the EU Registry" | |
| | | Annex B | Table B.13 | ed | | "See Table B.14 for an example of identification based on **EPC RFID** SGTIN-96 (Pure Identity URI)." | |

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| | | Annex B | Table B.14 | ed | Editorial: Tables B14 and B15 titles have been revised to match B13 in terms of the content reflecting Issuing Agency Registration.<br><br>Tables B14 and B15 have been edited by GS1 EPC RFID experts (GS1 EPC RFID encoding GS1 identifiers as opposed to RAIN RFID encoding RAIN identifiers). | Exchange table B14 with the following table:<br><br>"Table B.14 — Identification based on ISO/IEC 15459-2 Registered Issuing Agency Code per EPC RFID encoding SGTIN-96 EPC (Pure Identity URI) | |
|---|---|---|---|---|---|---|---|

Table within the "Value" column:

| Component | Meaning | Value |
|---|---|---|
| GTIN | Global Trade Item Number | 09506000134352 |
| Serial Number | Unique serial number for the item | 123456789 |
| GS1 element string | A syntax for expressing GS1 identifier keys and attributes in a format using GS1 Application Identifiers and GS1 Application Identifier data fields. | (01) 09506000134352 (21) 123456789 |
| GS1 Digital Link URI | A Web URI syntax for expressing GS1 identifier keys and attributes in a format using GS1 Application Identifiers and GS1 Application Identifier data fields as specified in | https://example.com/01/09506000134352/21/123456789 |

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| | | | | | Comments | Proposed change | |
|---|---|---|---|---|---|---|---|
| | | | | | | the GS1 Digital Link standard. | |

Inner table (top):

| | | |
|---|---|---|
| EPC Pure Identity URI | Carrier-neutral URN representation for legacy data sharing | urn:epc:id:sgtin:9506000134 3.05.1234567 89 |
| EPC Tag URI | RFID tag-specific URN representation | urn:epc:tag:sgtin-96:3.9506000 1343.05.1234 56789 |
| EPC Hex | Binary encoding on RFID tag, beginning with address 20h of MB01 | 3066C440904 7E140075BC D15 |

Note: The SGTIN-96 and other EPC encodings specified in TDS 1.13 and earlier explicitly indicate the length of the GS1 Company Prefix (GCP), used as a basis to allocate GTINs and other GS1 identification keys.

In this example, GTIN 09506000134352 has an 11-digit company prefix of 95060001343.

| | | Annex B | Table B15 | ed | Editorial: Tables B14 and B15 titles have been revised to match B13 in terms of the content reflecting Issuing Agency Registration.<br><br>Tables B14 and B15 have been edited by GS1 EPC RFID experts (GS1 EPC RFID encoding GS1 identifiers as opposed to RAIN RFID encoding RAIN identifiers). | Exchange table B15 with the following table:<br><br>"Table B.15 — Identification based on ISO/IEC 15459-2 Registered Issuing Agency Code per EPC RFID encoding SGTIN-96 (Tag URI) | |

Inner table (bottom):

| Component | Meaning | Value |
|---|---|---|
| GTIN | Global Trade Item Number | 09506000134 352 |
| Serial Number | Unique serial number for the item | 123456789 |

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| | | | | | | GS1 element string | A syntax for expressing GS1 identifier keys and attributes in a format using GS1 Application Identifiers and GS1 Application Identifier data fields. | (01) 09506000134 352 (21) 123456789 | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | GS1 Digital Link URI | A Web URI syntax for expressing GS1 identifier keys and attributes in a format using GS1 Application Identifiers and GS1 Application Identifier data fields as specified in the GS1 Digital Link standard. | https://example.com/01/0950600013435 2/21/1234567 89 | |
| | | | | | | EPC Hex | Binary encoding on RFID tag, beginning with address 20h of MB01 | F7009506000 134352091D6 F3454 | |

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| | | Annex B | Table B16 | ge | It is not permissible to use GS1 identifiers in an example of ISO/IEC 15434 encoding as GS1 does not utilise this method within any Application Standard and introduction of this syntax would require GS1 General Assembly approval.<br><br>When this example is revised it needs to specify which Format Header is being used, presumably the Format Header 6 for ANS MH10 Data Identifiers. | Change example by using another Issuing Agency's use case than GS1. | |
|---|---|---|---|---|---|---|---|
| | | Annex B | Table B17 | ge | | Change title of table B.17 to<br><br>"Table B.17 — Identification with DOI ~~and prefaced by~~ ISO/IEC 15459 ~~structure~~ Registered Issuing Agency Code (DOI+IAC)" | |
| | | Annex B | Table B17 | ge | Regarding "XID":<br><br>The use of XID is required when introducing an identification scheme into a domain it was not designed for nor is it implemented within (encoded AIDC data carriers for use in the open, product value chain). It is not that it cannot be introduced, but it begins with '10' which conflicts with GS1's ISO/IEC 15459-2 Registered Issuing Agency Code '1'. This, in turn, means the DOI is no longer conformant to DOI specifications as a DOI. It is in fact a hybrid identifier and must be referred to as a DOI with a ISO/IEC 15459-2 Registered Issuing Agency Code (IAC) prefix. In this way, AIDC service providers know they are not processing the DOI, but the DOI+IAC.<br><br>It should also be clarified that this identifier, or any identifier, that claims compliance with ISO/IEC 15459 must comply with parts 2 and 3, not simply 2. Another approach to pattern recognition for this identifier is made for consideration with GS1's communication to the Commission and GS1's standards WG on interoperability and implementation. | Change text to:<br><br>"Identifier prefix signalling ISO/IEC 15459-2 compliant structure **(not 15459 compliant as 15459-3 Common Rules must also be followed)**." | |

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| | | Annex B | Table B17 | ge | Regarding "Handled via doi.org": <br><br> "Handled via doi.org" is mentioned. However, there are multiple resolvers for DOIs, not just one. For example, dx.crossref.org, so it is wrong to only cite doi.org. <br><br> Therefore, add further examples and not doi.org alone. | Add further examples. | |
|---|---|---|---|---|---|---|---|
| | | Annex B | Table B17 | ge | Regarding "full example": <br><br> Preliminary testing of 'XID' with a known DOI failed so perhaps it is best to remove Table B17 until an example that works is provided. | Consider deleting table B.17. | |
| | | Annex C | Table C.1 and following tables | ed | Editorial: Typo | Column 6.3: Change from "Digital Object Identifiers (DOI)" to "Decentralised Identifiers". | |
| | | Annex C | Table C.1 | ge | Regarding 6.1: <br><br><br><br><br><br> As previous wording is true for AIDC media, but not for 6523-1 identifiers that are not intended for use with AIDC. <br><br><br><br> Regarding 6.3, row "Interoperability with other ID schemes": <br><br> It is unclear how DIDs can be made interoperable with ISO/IEC 15459 given they start with NATO's Registered Issuing Agency Code. Please clarify. | Adjust in row "Identifier standard" <br><br> "**ISO/IEC 15459 conformant identifier subset of ISO/IEC 6523-1** ~~ISO/IEC 6523~~" <br><br> Add in row "Unique facility identifier" <br><br> "Yes **(if ISO/IEC 15459 applies)**" <br><br> Add in row "Interoperability with other ID schemes" <br><br> "**In case of AIDC media,** interoperability with all identifiers issued according to ISO/IEC 15459 by an issuing agency, as it follows the same structure and logic." <br><br> Clarify interoperability issue | |

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | Annex C | Table C.2 | ge | Regarding row "Type of issuing" | Adjust as follows:<br><br>6.1:<br>**"ISO/IEC 15459-2 Registered Issuing Agencies then self-issuing by product manufacturer** ~~Issuing agency~~**"**<br><br>6.2:<br>"**Centralised registration of Local Operating Units (LOUs) as governed by GLEIF** ~~Issuing agency~~"<br><br>6.3:<br>"**ICANN prefix then self-issuing by product manufacturer** ~~Self-issuing system~~"<br><br>6.4:<br>"**ICANN prefix plus DOI Registration Agencies then self-issuing by product manufacturer** ~~Issuing agency~~" | |
| | | Annex C | Table C.2 | ge | Regarding row "Translation mechanism":<br><br>What has translation to do with issuing and ownership? Clarify or delete the row. | Consider deleting the row. | |
| | | Annex C | Table C.3 | ge | Regarding row "Web enabled":<br><br>This row mixes two concepts, web-enabled and scannable by smartphones with or without the use of additional software or apps loaded on the device. The edits are intended to create a uniform treatment of the subject across columns.<br><br>LEI itself is not web-enabled for direct access so this has been corrected and a note added regarding the uniqueness consideration.<br><br>Additional wording added to DOI as well given most DOIs are expressed as URLs. | Change title of the row for 6.1 to<br><br>"**ISO/IEC 18975** Structured path identification for organizations"<br><br>Change title of row "Reliance of domain name" to "Reliance of domain name **for identifier**".<br><br>Change title of row "Web-enabled" to "Web-enabled/**access by smartphones with or without app**"<br><br>Change in row "Web-enabled" for<br><br>6.1:<br>"Yes, can be included in a URL; scannable by smartphones for direct access to **web-based** product info **without the need for additional software or an app**"<br><br>6.2:<br>"Yes, can be included in a URL; **not** scannable by | |

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | smartphones for direct access to **web-based product info without the need for additional software or an app and will conflict with ISO/IEC 15459 compliant identifiers**"<br><br>6.3:<br>"W3C standard; inherently web- enabled via resolvers and service endpoints **but is not scannable by smartphones for direct access to product info without the need for additional software or an app**."<br><br>6.4:<br>"**If encoded as a URL, a** resolver ensures every DOI returns information about the referent. **If not, the DOI is not scannable by smartphones for direct access to product info without the need for additional software or an app**." | |
| | | Annex C | Table C.5 | ed | Editorial: Consistent with the next column | Change in row "Combine with ISO/IEC 20248" for 6.1 to<br><br>"~~Possible, not standard practice~~ **Not typical**" | |
| | | Annex C | Table C.5 | ed | Be more specific regarding "other mechanisms" or delete. | Change in row "Use of public/private key pair" for 6.1 to<br><br>"No (unless paired with 20248 **such as XML Digital Signatures, JSON Web Signatures, Verifiable Credentials)** ~~or other mechanisms~~" | |
| | | Annex C | Table C.6 | ge | Regarding row "Prerequisite for web enabled access to DPP":<br><br>Do any of these resolvers of 6.2 to 6.4 create a vendor lock-in requirement? | | |
| | | Annex C | Table C.6 | ge | Regarding row "Reference to an online register …" with respect to 6.1:<br><br>Is this limited to ISO/IEC 6523? If so, does this mean facility IDs used in AIDC per ISO/IEC 15459-2 Registered Issuing Codes (IACs) must be included in ISO/IEC 6523 to be compliant? | | |

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| | | Annex ZA | Table ZA.1 | ge | Regarding "Ensures the identifier is unique, persistent, and encoded in a data carrier.": <br><br>Without specifications and rules for the exact encoding in data carriers you cannot determine if uniqueness will be achieved. | Refer to or define rules for the exact encoding in data carriers. | |
|---|---|---|---|---|---|---|---|
| | | Bibliography | | ed | Editorial: Entry 12 and Entry 13 added per its 'informative' references | Add to the list:<br><br>"[12]  GS1 General Specifications, ESPR DPP AIDC Application Standard<br><br>[13] GS1 EPC Tag Data Standard (TDS), https://ref.gs1.org/standards/tds /" | |

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# GS1 Comments on prEN 18220 on Data Carriers

| MB/ NC[1] | Line number (e.g. 17) | Clause/ Subclause (e.g. 3.1) | Paragraph/ Figure/ Table/ (e.g. Table 1) | Type of comment[2] | Comments | Proposed change | Observations of the secretariat |
|---|---|---|---|---|---|---|---|
| | | Chapter 2 | | ge | While others should confirm if there are additional gaps in the Normative References section, the section as it exists omits almost all references except for RFID, vocabulary, and direct part marking standards. The list misses important standards like DataMatrix, QR Code, NFC, 61406-1 and -2, barcode print quality standards, GS1 Digital Link URI and EPC Taga Data Standard. Here is a (possibly incomplete) list of missing normative references. The standards may be referenced multiple times but for the purpose of this comment, we list the first occurrence. The additions were listed alphabetically not by their chronological use in the standard as we do not know the correct convention. The summary below starts with the Section # then uses shorthand titles for the standard to ease review. 5.2.2: 15459-2, 18975, 61406-1, 61406-2, 15424, 15418, GS1 Digital Link Standard: URI Syntax 5.6.2: 15415, 29158 5.6.3: 15426 6.2.2: 16022 (Data Matrix) 6.2.3: 18004 (QR Code) 6.2.4.1 15459-3, -4, -6 6.2.4.2: 8859 6.3.3.2: 18092, 21481 (NFC) 6.3.4.3 EPC Tag Data Standard, V2.2 | Add: "**Identification related** **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 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 —** | |

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| | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| | | | | | | **Automatic identification and data capture techniques — Encoding and resolving identifiers over HTTP** |
| | | | | | | **GS1 Digital Link Standard: URI Syntax, V1.6.0** |
| | | | | | | **2D Barcode Symbols related** |
| | | | | | | **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 |
| | | | | | | **RFID related** |
| | | | | | | **GS1 EPC Tag Data Standard, V2.2** |
| | | | | | | ISO/IEC 15961-1:2021, Information technology — Data protocol for radio frequency identification |

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| | | | | | | (RFID) for item management — Part 1: Application interface | |
| | | | | | | ISO/IEC 15961-2:2019, Information technology — Data protocol for radio frequency identification (RFID) for item management — Part 2: Registration of RFID data constructs | |
| | | | | | | ISO/IEC 15961-3:2019, Information technology — Data protocol for radio frequency identification (RFID) for item management — Part 3: RFID data constructs | |
| | | | | | | ISO/IEC 18046-1:2011, Information technology — Radio frequency identification device performance test methods — Part 1: Test methods for system performance | |
| | | | | | | ISO/IEC 18046-2:2020, Information technology — Radio frequency identification device performance test methods — Part 2: Test methods for interrogator performance | |
| | | | | | | ISO/IEC 18046-3:2020, Information technology — Radio frequency identification device performance test methods — Part 3: Test methods for tag performance | |
| | | | | | | **NFC related** | |
| | | | | | | **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)** | |
| | | | | | | **Vocabulary related** | |
| | | | | | | ISO/IEC 19762:2025, Information technology — Automatic identification and data capture (AIDC) | |

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| | | | | | techniques — Vocabulary" | |
|---|---|---|---|---|---|---|
| | | Chapter 3 | 3.6 definition of the DPP | ed | Editorial: This definition could apply to any digital record not the digital record associated with the regulatory requirements of ESPR. | Adjust definition to:<br><br>"DPP<br>digital record of product characteristics throughout its life cycle **as they pertain to the ESPR**." |
| | | Chapter 3 | 3.15 definition of RAIN | ed | Editorial: Change wording to: "UHF passive radio-frequency identification as per ISO/IEC 18000-63 (3.14)" | Adjust definition to:<br><br>"UHF passive radio-frequency identification **as per ISO/IEC 18000-63** (3.14)" |
| | | Chapter 4 | 4.3.1 New and non-new products | ed | Editorial: These edits are needed to clarify that if a new product identifier is needed, it does not make those products previously placed on the market invalid. | Adjust text to:<br><br>"In other cases, if a new digital product passport is needed, then a new identifier and the associated data carrier will be required **on products introduced into the market from that point in time forward.** The fact that a data carrier has to remain usable after several used-reused-repair cycles **for some product types** has an impact on the durability of the support of the data carrier associated to the product." |
| | | Chapter 5 | 5.1 General | ge | In line with the ESPR text (Recital 37), standards should clarify that delegated act impact assessments consider the nature, size, or use of the product concerned when discussing where the data carrier will be placed.<br><br>The selection of the location of the data carrier should be specified in the applicable delegated act, and not through a generic document. See Article 10 (1) b of the ESPR: "*(b)the data carrier shall be physically present on the product, its packaging or on documentation accompanying the product, as specified in the applicable delegated act adopted pursuant to Article 4.*" | Adjust text to:<br><br>"**A**~~In~~ line with the ESPR text (Recital 37), Delegated Acts should assess factors such as the nature, size, or use of the product concerned as the** product ~~item~~ shall have at least one data carrier either on the product itself, on the packaging or on documentation **accompanying the product according to** ~~the~~ **applicable delegated** ~~acts~~ **this document**." |

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| | | Chapter 5 | 5.2.2 Data syntax | ge | Regarding second paragraph:<br><br>ISO/IEC 15459-3 serves as the basis for interoperability for all syntax that fully comply with ISO/IEC 15459. The minimum requirement for 15459 compliance is to conform to Part 2 (Unique Identification) and Part 3 (Common Rules for Issuing Agencies) | Adjust text to:<br><br>"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 GS1 Digital Link Standard: URI Syntax, V1.6.0**.<br><br>~~syntaxes as specified in Module 1 in [5] or [6] or [7] or [8] or [9]~~" | |
| | | Chapter 5 | 5.3.1 Reading process for barcodes | ed | Editorial: For a bit more precision. | Adjust text to:<br><br>"The process of reading the DPP data carrier is usually performed by a human operator, handling one product at a time. **Where individual products are scanned in hand, typical scan distances would be 2 to 15 centimetres. Where automated, distances will vary based on many factors which may impact the size specification for the barcode and typically impact either large products (i.e., home appliance, furniture, machine) or product groupings like master cartons or pallets. In such cases, the reading distance will typically be up to 30 centimetres.** ~~The reading distance of the DPP data carrier will typically be between 2 and 30 centimetres. For~~ **In general, for** barcodes, this distance can vary depending on several factors, such as barcode quality, lighting conditions, barcode size."** | |

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| | | Chapter 5 | 5.4.1 General | ge | These preferences appear to be for durable products rather than retail consumer products and therefore should be removed here.<br><br>The proposed wording is in line with the ESPR text (Recital 37), according to which standards should clarify that delegated acts can provide for data carriers to be provided on the packaging or in the documentation, based on an impact assessment considering the nature, size, or use of the product concerned. | Adjust text to:<br><br>"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 will depend on the product type as detailed in this document. Based on impact assessment considering the nature, size, or use of the product concerned, the applicable delegated acts can set that the data carrier should be provided on the packaging or in the documentation.**" | |
|---|---|---|---|---|---|---|---|
| | | Chapter 5 | 5.4.1 Marking on product item | ed | Regarding first sentence:<br><br>Editorial: ESPR deals with products, some of which may be parts, but all of which are products | Adjust text to:<br><br>"This method refers to the process of permanently marking or engraving information directly onto a ~~part or~~ product." | |
| | | Chapter 5 | 5.4.2 Marking on product item | ge | Regarding second paragraph:<br><br>It is important to highlight that direct product marking may not be appropriate for small products or for products used under specific conditions. In the case of products used in constant contact with water, soap or formulations (e.g. toothpaste), this frequent exposure can impair the visibility of the product labeling. In particular, very small and detailed elements, such as QR codes, may become unreadable due to moisture or residue, making scanning and accessing the information more difficult. Any choice on the location of the data carrier should be left to the Delegated Acts setting EcoDesign requirements, based on an impact assessment. | Adjust the paragraph to:<br><br>"The advantage of **durable** product marking is that the identifier stays in principle with the product throughout its complete lifetime. **The disadvantage is that product marking is not appropriate for small products or may be challenging due to the use conditions of a product**." | |

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| | | Chapter 5 | 5.4.3 Marking on packaging | ge | Further methods should be added. | Add to the list of techniques:<br>**"— Digital printing presses which the barcode can be incorporated into the design and index for batch or serialisation.**<br><br>**Conventional printing processes such as gravure, flexographic where the product model identifier is sufficient."** | |
|---|---|---|---|---|---|---|---|
| | | Chapter 5 | 5.4.3 Marking on packaging | ge | Regarding last paragraph:<br><br>This statement does not apply to products where marking on the packaging is completely viable as in most retail consumer products. If the product is re-sold, refurbished, etc, it would likely be marked on the product itself if that mark was not tampered with or removed. | Delete:<br><br>"If the product is re-sold, possibly refurbished and re-used, there is a high probability that the original packaging is damaged or no longer available. The data carrier encoding the link between the physical product and its identifier is then lost." | |
| | | Chapter 5 | 5.4.6 Embedded | ge | It is important to highlight that product marking may not be appropriate for small products or for products used under specific conditions. In the case of products used in constant contact with water, soap or formulations (e.g. toothpaste), this frequent exposure can impair the visibility of the product labeling. In particular, very small and detailed elements, such as QR codes, may become unreadable due to moisture or residue, making scanning and accessing the information more difficult. Any choice on the location of the data carrier should be left to the Delegated Acts setting EcoDesign requirements, based on an impact assessment. | Add the following sentence at the end of the chapter:<br><br>"The main limit is that this technique is not appropriate for small products or may be challenging due to use conditions of a product." | |
| | | Chapter 5 | 5.6.1 General | ge | If UHF/NFC tags could be rewritten the DPP link could get lost. Therefore, write protection needs to be a "shall" requirement. | Change text to:<br>"Data carriers (UHF, NFC, …) **shall**~~should~~ be write protected." | |

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| | | Chapter 5 | 5.6.2 Two-dimensional symbols | ge | This is critical to underscore as the quality minimum for a retail scanner is very different than for a smart device or perhaps a permanently etched 2D carrier where specialised scanners may be required. For this reason, the methodology must be common for all 2D barcodes, but the minimum quality must be established within industry application standards given the extremely broad range of products covered by ESPR. | Adjust text to:<br><br>"**Minimum print quality grades are established based upon the scanner operating environment (e.g., retail point-of-sale, transport and logistics, smart device) but these specifications, established within industry application standards follow a convention of** ~~The minimum quality grade is typically~~ 1,5 / 80%/ 660, where:" | |
|---|---|---|---|---|---|---|---|
| | | Chapter 5 | 5.6.3 Barcode verification | ed | Editorial: For consistency with Section 5.6.4 | Adjust text to:<br><br>"The principle is that it is important to verify the barcodes quality, using conformant verifiers. **In case the quality/performance is to be assessed, the quality/performance of 2D barcode symbols shall use the following standard**:~~References to~~" | |
| | | Chapter 5 | 5.7.1 Data carrier placement | ge | These edits are important for retail consumer products where symbol placement was responsible for a 5% efficiency increase at retail POS beginning in the 1980s and where scanner operators in retail avoid repetitive motion injuries based on their being able to intuit where the symbol is located on various packaging types.<br><br>Editorial: If another Issuing Agency could provide a reference example, this would be helpful. | Adjust text to:<br><br>"To facilitate the choice of more sustainable products, DPP data carriers should be displayed in a clearly visible and identifiable way such as **having** ~~the~~ only **one** visible data carrier. In the case it is not possible to have a visible data carrier **(e.g., RFID, NFC)**, a specific marking can inform the consumer of the presence of a data carrier. The **marking** ~~y~~ should be identifiable as ~~the labels, containers or tags~~ belonging to the product in question, without customers, including potential customers, having to read the brand name and model number on the labels**. For visible data carriers such as 2D, industry standards for their placement shall be followed to ensure scanning efficiency and safety (mitigation of repetitive motion injuries (e.g., GS1 General Specifications Section 6**)." | |

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | Chapter 5 | 5.7.2 HRI | ed | Regarding references in first sentence:<br><br>Editorial: This 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. Is this an error?<br><br>Editorial: This specification also exists within the GS1 General Specifications, V25.<br><br>Editorial: This is necessary to aid in the legislative process when assessing existing rules. If there are other pertinent examples, they could be added). | Clarify potential error<br><br><br><br><br><br>Adjust last sentence:<br><br>"Additional legislations may specify rules applicable to different product groups **and should defer to existing industry application standards wherever possible (e.g., GS1 General Specifications Section 4.14, ANS MH10 Data Identifier Standard Section 7.3).**" | |
| | | Chapter 5 | 5.7.3 Signage | ge | The graphical symbol marking is specified for use on equipment and it may be perfectly appropriate there. It is however wholly inappropriate for use on retail consumer products where it mimics the convention used for "peel-off coupons" or information leaflets, Any standardisation by retail of a mark that is used to influence consumer behavior would come only after a very significant research effort with consumer focus groups. | Adjust sentence to:<br><br>"When an optional graphical marking is used **for equipment**, it should comply with [15][16], symbol 6452 or 6452-1." | |
| | | Chapter 5 | 5.7.4 Accessibility | ed | Editorial: As this is a shall, are there a list of examples that must be considered? | Add examples | |
| | | Chapter 5 | 5.8.1 References to recognised standards | ed | Editorial: Delete as this sentence has nothing to do with references to recognised standards. | Delete sentence:<br><br>"The use of additional software to enhance accessibility may also be considered." | |
| | | Chapter 6 | 6.2.2 Data Matrix | ge | Conformance to the symbol specification shall be normative for both 2D barcode symbols. | "Data Matrix **shall be implemented** as specified in [17] …" | |
| | | Chapter 6 | 6.2.3 QR Code | ge | Conformance to the symbol specification shall be normative for both 2D barcode symbols. | "QR code (Quick Response Code) **shall be implemented** as specified in [18] …" | |

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| | | Chapter 6 | 6.2.4.1 Common Characteristics | ed | Regarding "b)": Editorial: This clause and the one below c are added to be consistent with a and d. | Add sentence: "All 2D barcodes referred to in this document have the capacity to encode ISO/IEC 15459-4:2014, ISO/IEC 15459-6:2014 conformant identifier". | |
|---|---|---|---|---|---|---|---|
| | | Chapter 6 | 6.2.4.1 Common Characteristics | ge | Regarding "c)": This has nothing to do with point c (granularity). Check digits, visual checks, and database matches are not specific to data carriers. These are specific to identification schemes and data alignment processes. For all these reasons, it seems appropriate to delete this. | Exchange current wording by: "All 2D barcodes referred to in this document shall have the capacity to encode ISO/IEC 15459 compliant (requires compliance with parts 2 and 3 at a minimum) and ISO/IEC 15418 qualifiers to parse model, batch, and item level data elements." | |
| | | Chapter 6 | 6.2.4.2 Specific Characteristics | ed | Editorial: Typo | Exchange "linear" by "2D": "Table 1 describes the following characteristics of each ~~linear~~ **2D** barcode under consideration: " | |
| | | Chapter 6 | 6.2.4.2 Specific Characteristics | ge | The additional of ISO/IEC 646:1991 is required to align with earlier sections and the GS1 General Specifications. | Add in row "Character set" for both, Data Matrix and QR Code, reference to [11]. | |
| | | Chapter 6 | 6.2.4.2 Specific Characteristics | ge | Regarding row "Native software smart devices"/Data Matrix: This must reach a high degree of implementation in smart devices by 2027. We believe the EC mentioned a figure of 75% at some point. GS1 requires 90%+within smart phones to consider implementation pervasive per its AIDC Data Carrier Adoption Policy found here. Regarding row "Native software smart devices"/QR Code: 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. | |

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| | | Chapter 6 | 6.2.4.2 Specific Characteristics | ed | Regarding row "Reading/scanning range": Editorial: For consistency with Section 5.3.1 | Adjust numbers to: "10 to 30 cm" for both, Data Matrix and QR Code. | |
|---|---|---|---|---|---|---|---|
| | | Chapter 6 | 6.2.4.2 Specific Characteristics | ed | Regarding "Bulk reading": Editorial: Barcodes are scanned in bulk depending on what you consider bulk (high speed production or sortation lines, retail point of sale) | Exchange the term "bulk reading" by "Simultaneous scans" | |
| | | Chapter 6 | 6.2.4.2 Specific Characteristics | ed | Regarding row "Power supply" | Exchange the word "No" by "Not applicable" for both, Data Matrix and QR Code. | |
| | | Chapter 6 | 6.2.4.2 Specific Characteristics | ed | Regarding row "Security" | Exchange current wording with "Nothing inherent as any optical symbology can be copied" for both, Data Matrix and QR Code. | |
| | | Chapter 6 | 6.3.1 General | ge | Regarding "High Frequency (HF) passive RFID": Who will be using this? If no one, delete it. | Consider deleting it. | |
| | | Chapter 6 | 6.3.2.1 General | ge | Conformity with these specifications is normative. | Adjust text to: "The different HF (High Frequency) RFID technologies **shall be implemented as** ~~are~~ specified in: [22], [23], [24], [25], [26], [27], [28] and [29]. | |
| | | Chapter 6 | 6.3.2.3 Data encoding | ge | Conformity with these specifications is normative. | Adjust text to: "Data encoding of HF RFID tag **shall be as** ~~are~~ defined in [30], [31], [32] and [33]." | |
| | | Chapter 6 | 6.3.3.2 Air interface protocols | ge | Conformity with these specifications is normative. | Adjust text to: "NFC air interface protocols **shall be as** ~~are~~ 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)." | |

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| | | Chapter 6 | 6.3.3.3 Data Encoding | ge | Conformity with these specifications is normative. | Adjust text to:<br><br>"Data Encoding of UHF RFID **shall be as** ~~is~~ described in [30], [31], [32] and [33]. To be natively read by smart devices, NFC Forum Technical Specifications provides ways encode data in NFC tags [39]." | |
|---|---|---|---|---|---|---|---|
| | | Chapter 6 | 6.3.4.2 Air interface protocols | ge | Conformity with these specifications is normative. | Adjust text to:<br><br>"The air interface protocol for UHF RFID **shall be as** ~~is~~ defined in [40] and. It is also defined in [41]." | |
| | | Chapter 6 | 6.3.4.3 Data encoding | ge | Conformity with these specifications is normative. | Adjust text to:<br><br>"… as a GS1 EPC global application and the data encoding **shall be as** ~~is~~ described in GS1 Tag Data Standard [42]." | |
| | | Chapter 6 | 6.3.4.3 Data encoding | ge | While this standard is moving through the GS1 Standards process (GSMP), this note may provide greater insight into GS1's ongoing support of the RFID stakeholder initiative to enable one RFID tag to support its current open, product value chain applications and smart devices after that initiative has progressed. This standards work by GS1 cannot be added to this version of the CEN/CENELEC standard as of the date of this comment, but it should be in Public Review (open to anyone to see) and should be added as an additional AIDC data carrier to GS1's Application Standard for "extended packaging" (related to use of GS1 Digital Link URI by smart devices) before the conclusion of the Public Enquiry stage. It will also be positioned by GS1 for use as an alternative to 2D barcode where the necessary support for its implementation is conformant with GS1's Policy of Data Carrier Adoption which can be found here. | Add a second paragraph:<br><br>"Note: Publication of EPC Tag Data Standard (TDS) 2.3 by GS1 is planned for late 2025.  TDS 2.3 will accommodate encoding of domain name information along with an EPC on the RFID tag, enabling seamless encoding/decoding to/from a resolvable Web URI. This is required in order for EPC tags to support current value chain applications as well as smart device connectivity." | |

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| | | Chapter 6 | 6.3.4.4 Test methods for UHF RFID air interface compliance | ed | Editorial: Is there content missing here? | "…for item management with the specifications given in . | |
|---|---|---|---|---|---|---|---|
| | | Chapter 6 | 6.3.4.5 Radio Frequency Privacy | ed | Regarding the term "PIA": Editorial: Can this be defined in Chapter 3? | | |
| | | Chapter 6 | Table 2 | ge | Regarding row "Market adoption": Editorial: To differentiate between industrial and smart device adoption. Regarding row "Native software smart devices": While this is being pursued, partial is not yet realised. Regarding row "Bulk reading": Editorial: Simultaneous reads as per the rationale above for 2D and the word different just for clarity regarding RFID's unique capability as compared to 2D and NFC. Regarding row "Cost": Editorial: While these are subjective, one would assume they are related to the Low cost of 2D. | Change title of row to "Market adaption **in industrial applications**" Change row title to "Smart devices native (OS level) readings" For UHF RFID change "Partial" to "No". Change row title from "Bulk reading" to "Simultaneous reads" Change the text for UHF RFID to "**Up to 1000 different tags per** second" Change static data from "Low" to "Medium" for both, UHF RFID and for NFC. Change dynamic data for UHF RFID from "Medium" to "High" and for NFC from "Low" to "Medium". | |

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| | | Annex A | Table A.1 | ge | Regarding "Improve Traceability: …": | Adjust text to: | |
|---|---|---|---|---|---|---|---|
| | | | | | The notion of "tracing of individual items" should be removed since: | "Improve Traceability: Enables the ~~tracing traceability~~ of ~~individual items~~ **products** along the value chain (and entire supply chain)" | |
| | | | | | • It is in contradiction with Article 9 (3) (c) of ESPR – i.e. the reference for this requirement. Article 9 (3) c does not refer to tracing of individual item, but to the need for DPP to "improve the traceability of products along the value chain". | | |
| | | | | | • Article 9 (2) (d) of the ESPR clearly defers any decision on the level of granularity to the future delegated acts setting ecodesign requirements. Tracing of individual items is, therefore, not a requirement for DPP, but only a possibility in case future delegated acts set DPP at item level. | | |
| | | | | | That is why we suggest aligning wording with the legal text of the ESPR. | | |
| | | Annex C | C.1 | ed | Regarding "C1", "Encoded data": | Adjust to: | |
| | | | | | Editorial: Delete as dates have no relevance to ESPR. Also revise the QR Code example accordingly. | "Encoded data: https://example.com/01/09524810000339/10/YA12AB~~?17=271231~~ | |
| | | | | | | Adjust title of figure C1 to: | |
| | | | | | | "Figure C.1 — Example of QR code encoding a GS1 identifier in an ISO/IEC 18975 compliant: GS1 Digital Link URI" | |
| | | Annex C | C.5 | ed | Editorial: For precision | C.5          Examples of syntax with MH-10.**2 Data Identifiers** | |
| | | Annex C | C.6 | ed | Editorial: Delete as this is redundant with C.1 | Delete C.6 | |
| | | Annex D | Table D.1 | ed | Editorial: Date of Expiry (17) has no relevance to ESPR. Therefore, delete "Date of Expiry (17) and also delete corresponding information in the GS1 Digital Link (https://example.com/01/09524810000339/10/YA12AB~~?17=271231~~) | | |

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| | | Annex D | Table D.2 | ed | | Adjust values:  and symbol samples accordingly. | |
|---|---|---|---|---|---|---|---|
| | | Annex D | D.2.3 | ed | | Change encoded data to: "https://example.com/01/09524810000339/10/YA12AB" | |
| | | Annex D | D.2.4 | ed | | Change values in Table D.3 to:  | |
| | | Annex D | D.2.5 | ed | | Change encoded data to: "https://example.com/01/09524810000339/10/YA12AB" | |
| | | Annex D | D.9 ID schema 5.4.1.2 | ge | As was stated in the Identification Standard, ISO/IEC 15434 is not approved for use by GS1 in any application standards, never has been, and therefore it is not in conformity with GS1 standards to use GS1 identifiers in Table D.15. | Please use a different example, including the symbol and note below it associated with the QR Code. | |
| | | Annex D | D.10 ID scheme 5.5 | ge | ISO/IEC 15459 compliance is based upon part 2 (Issuing Agency Codes) but also part 3 (Issuing Agency Common Rules). This identifier is in no way conformant with 15459-3 as it does not include a qualifier in front of the identifier (what part of the string is the identifier and what level of granularity does it define)? It is also not conformant with the DOI standard. It should be renamed as mentioned in the ID standard as a hybrid DOI prefaced by an ISO/IEC 15459-2 IAC. | | |

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2   **Type of comment:**   **ge** = general        **te** = technical        **ed** = editorial

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| | | Annex D | Table D.18 | ed | Editorial: This code is assigned by a DOI Issuing Agency. It has nothing to do with ISO/IEC 15459.<br><br>For implementation it would be helpful to refer to the underlying specification. | Proposal for adjustments:<br> | |
|---|---|---|---|---|---|---|---|
| | | Annex E | E.1 | ed | Editorial: for precision | Adjust title of E.1 to:<br><br>"E.1 Example of Data carrier multiple use with implicit recognition **(no need for recognition)**" | |
| | | Annex E | E.1 | ed | Editorial: Date of expiry, which is Application Identifier (17), has no relevance to ESPR. That is why it is proposed to adjust the example by leaving out this date of expiry information. | Adjust Encoded data example:<br><br>"Encoded data: https://example.com/01/09524810000339/10/YA12AB~~?17=271231~~" | |
| | | Bibliography | | ed | | Add to the list:<br><br>"[54] GS1 General Specifications, V25" | |

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# GS1 Comments on prEN 18223 on System Interoperability

| MB/NC[1] | Line number (e.g. 17) | Clause/Subclause (e.g. 3.1) | Paragraph/Figure/Table/ (e.g. Table 1) | Type of comment[2] | Comments | Proposed change | Observations of the secretariat |
|---|---|---|---|---|---|---|---|
| | | Chapter 4 | Table 1 | ge | First row: The name "DigitalProductPassportID" name and definition may generate confusion with the identifiers in scope to the regulation. | - Change the name: DigitalProductPassportRecordIdentifier<br><br>- Change the definition into "Unique identifier to a record of DPP data stored into a registry or into a DPP platform, primary or backup" | |
| | | Chapter 4 | Table 1 | ge | Economic Operator ID and Facility ID are not mandatory features of DPP:<br><br>-　　　　Recital 36 states that "In addition, where appropriate, the digital product passport should be linked to a unique operator identifier and a unique facility identifier which would allow the actors and manufacturing facilities related to that product to be traced"<br><br>ID schemes for economic operators and facilities are not mentioned in the essential requirements for Digital Product Passports (Art. 10 (1) | Add the note "the unique identifiers for economic operators and facilities is not mandatory according to the ESPR, but should only be set where appropriate and required by delegated acts setting ecodesign requirements."<br><br>Change the cardinality of EconomicOperatorID from (1) to (0..1) | |
| | | Chapter 4 | Section 4.3 | ed | First sentence. Change "maybe" to "may be". | "To enable cross-sector semantic interoperability semantic interoperability for digital product passport, while avoiding constraints on how DPP information may be  defined ...". | |
| | | Chapter 4 | Section 4.3 | ed | Last sentence "space" missing between "given" and "data".. | This attribute links a **given data** element to its corresponding definition in the repository. | |
| | | Annex ZA | Table ZA.1 | ed | Spelling mistake in "component" | "data element collection may include also references to former or comp**o**nent dpp" | |

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# GS1 Comments on prEN 18216 on Data Exchange Protocols

| MB/NC[1] | Line number (e.g. 17) | Clause/ Subclause (e.g. 3.1) | Paragraph/ Figure/ Table/ (e.g. Table 1) | Type of comment[2] | Comments | Proposed change | Observations of the secretariat |
|---|---|---|---|---|---|---|---|
| | | 9. Secure Communication | 9.2.2 RESTful APIs, enumeration c) | ge | | Regarding rate limiting per client: Add an informative reference to https://datatracker.ietf.org/doc/html/draft-ietf-httpapi-ratelimit-headers as a relevant method for providing machine-readable info about rate limiting. | |
| | | 9. Secure Communication | 9.2.2 RESTful APIs, enumeration d) | ge | DDoS is not only a problem for REST APIs. It's the classic attack to websites. Therefore, same requirement should be included in the HTTPS section of 9.2.1. | Add the same requirement for DDoS protection in section 9.2.1 on HTTPS | |
| | | Annex A | | ge | Annex A appears out of context, mixing and matching different concepts: AS/4 is a message exchange protocol based on SOAP API EDI is not a technology but, essentially, is a process defining standards for data formats and leveraging, for the exchange, technologies like AS/4 and, then, it makes no sense to have the two technologies mentioned as alternative solutions. AAS is, essentially, a master data infrastructure for assets, conceptually similar to a GDSN platform. Verifiable Credentials concept is not mentioned at all. From a practical implementation point of view Annex A does not contain valuable information. In order to keep the price for the standard document low, the document should be kept short. In consequence, avoidable overhead should be deleted. | Delete Annex A. | |

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| Date: | Document: | Project: |
|---|---|---|

# GS1 Comments on prEN 182221 on Data Storage

| MB/NC[1] | Line number (e.g. 17) | Clause/ Subclause (e.g. 3.1) | Paragraph/ Figure/ Table/ (e.g. Table 1) | Type of comment[2] | Comments | Proposed change | Observations of the secretariat |
|---|---|---|---|---|---|---|---|
| | | 4.1 | Para 3 | ge | "The manufacturer shall make the digital product passport available" - should be the economic operator? | Change to "The economic operator shall make the Digital Product Passport available" | r |
| | | 4.1 | Para 5 | ed | "digital product passport data shall be stored in a way that human readable or machine readable presentations can be generated from the stored data" - reword to improve? | "Digital product passport data shall be stored so that human-readable or machine-readable presentations can be generated from it" | |
| | | 4.3 Data persistence and rules for data persistence | | ge | Some responsibilities described by the standard, as described in the examples, do NOT have a direct legal basis in ESPR. References to ESPR articles are not enough because the standards assumptions will need to be confirmed by the delegated acts or other prescriptions in ESPR itself.

For instance, in relation to clause 4.3 and the responsibilities in charge to DPP Backup solution providers, the clause seems to go beyond the prescriptions of the art. 10.4 referenced in ZA Annex.

Clarity is needed for Economic Operators to know exactly what to ask and expect from the Backup Service providers | Check the ZA Annex and adjust prescriptions and responsibilities to the requirements in the regulation and remove the ones that aren't yet supported by the actual regulation | |
| | | 4.3 Data persistence and rules for data persistence | | ge | The use case of acquisition of a brand by another company is not covered/detailed.

Also, the use case of the backup operator ceasing activity is not covered/detailed. | Add guidance on the two use cases | |
| | | 4.4 | | ge | The normative reference provided in the ZA Annex for this clause is not consistent | Provide the proper normative references | |
| | | 4.3 | Para 5 | | The economic operator going out of business need not necessarily mean the DPP service provider goes out of business – so the back-up may not need to become the primary/main DPP. | Replace "no longer active on the market, then the back-up" with "no longer active on the market and the main digital product passport service provider is | |

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | no longer active, then the back-up" | |
| | | 4.4.1 | Para 1 and 2 | | References to "manufacturer" should be to "Economic Operator" | Replace "manufacturer" with "Economic Operator" | |
| | | 4.4.1 | Para 2 | | To be consistent "digital instructions" should be "digital documentation" | Replace "digital instructions" with "digital documentation" | |
| | | 4.5 | Para 1 | ge | Changes are to the DPP back-up , not to the service provider. | Replace "to its back-up digital product passport service provider" with "to its back-up digital product passport" | |
| | | Table ZA.1 | | ge | This normative mapping is very inconsistent. | To be verified and refined | |

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# GS1 Comments on prEN 182222 on API

| MB/ NC[1] | Line number (e.g. 17) | Clause/ Subclause (e.g. 3.1) | Paragraph/ Figure/ Table/ (e.g. Table 1) | Type of comment[2] | Comments | Proposed change | Observations of the secretariat |
|---|---|---|---|---|---|---|---|
| | | Section 4.1 | | | The methods referenced in this section do not correspond a 100% to the methods explained in the further chapters (some methods are missing) | Please add the following methods explained further down in the document:<br><br>- **PostNewDPPToRegistry**<br>- **ReadDataElementCollection**<br>- **ReadDataElement**<br>- **UpdateDataElementCollection**<br>- **UpdateDataElement** | |
| | | Section 6.2 and 6.3. | | | The following two methods can be merged into one<br><br>- **ReadDataElementCollection**<br>- **ReadDataElement** | Please just specify one method, as the end it is the same method, whether applied to a collection or single data element.<br><br>ReadDataElement<br><br>The Input parameters would then be:<br><br>- Dpp ID<br>- ElementID<br><br>In the explanatory text of the elementID the following text would eliminate ambiguity:<br><br>*Data ElementID of collection within the DPP or ElementID path to the specific data element.* | |
| | | Section 6.4 and 6.5. | | | The following two methods can be merged into one<br><br>- **UpdateDataElementCollection**<br>- **UpdateDataElement** | Please just specify one method, as the end it is the same method, whether applied to a collection or single data element.<br><br>UpdateDataElement<br><br>The Input parameters would then be:<br><br>- Dpp ID<br>- ElementID | |

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | In the explanatory text of the elementID the following text would eliminate ambiguity: *Data ElementID of collection within the DPP or ElementID path to the specific data element.* | |
| | | Section 6.4 | | | The input parameter *dataElementCollection* has a confusing name. It is much clearer in the output parameters. However, it would still be good to unify these. | The input parameter should be called *payload* and have the description *Content of data that needs to be updated.* The same goes for the output parameter, which sould be called *payload* and have the description *Content of data that has been updated.* | |
| | | Section 8.4 | | | The listed methods should be reduced to just two.<br>- ReadDataElement<br>- UpdateDataElement | The listed methods should be reduced to just two.<br>- ReadDataElement<br>- UpdateDataElement | |
| | | Section 8.4 | | | When the methods are merged, and taking into account, that a collection is just a specific type of data element, the REST paths should be adapted accordingly. | The paths should be: For ReadDataElement: */dpps/{dppId}/element/{elementId}* For UpdateDataElement: */dpps/{dppId}/element/{elementId}* | |