The impact of digital product passport on green custom from a
standardisation perspective; main regional trends.

WCO Green Customs Global Conference

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GS1
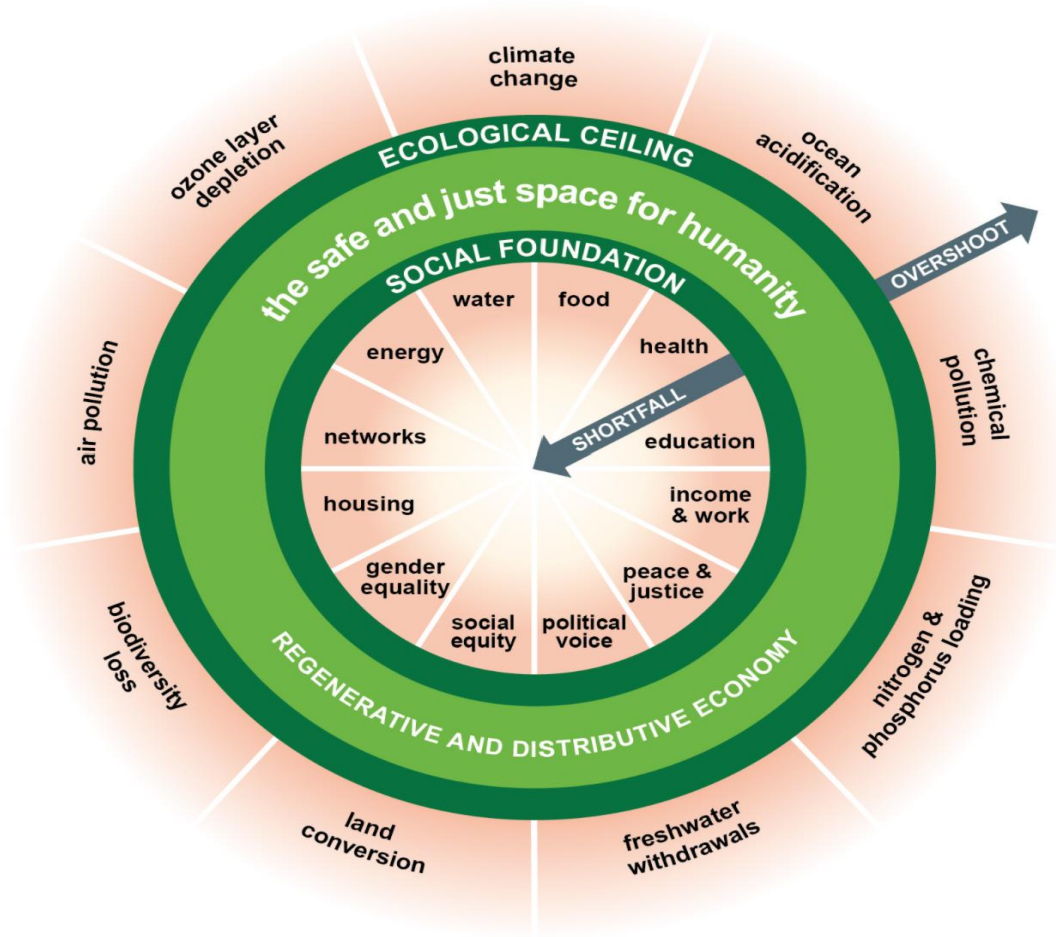
June, 2022

Europe

Foundation of the circular economy

Doughnut economics

A visual framework for sustainable development combining the concept of planetary boundaries with the new concept of social boundaries.

The framework was proposed to regard the performance of an economy by the extent to which the needs of people are met without overshooting Earth's ecological ceiling.

The diagram was developed by University of Oxford economist Kate Raworth.

EU Climate neutral

Race to Zero, Net Zero Emissions by 2050

Paris Agreement

2030 Agenda for Sustainable Development

Going CLIMATE-NEUTRAL by 2050

A STRATEGIC LONG-TERM VISION FOR A PROSPEROUS, MODERN, COMPETITIVE AND CLIMATE-NEUTRAL EU ECONOMY

European Commission

EU sustainable products package

Complementary sectoral rules
on construction and other product categories
(e.g. batteries, chemicals, packaging)

Ecodesign Working Plan 2022-2024
→ Higher energy efficiency and circularity for energy-related products
→ New rules for consumer electronics (smartphones, tablets, solar panels)

Strategy for Sustainable and Circular Textiles
→ Binding eco-design requirements, incl. durability, reparability, and recycled fibre content
→ Stop microplastics pollution
→ Tackle fast fashion, textile waste, and the destruction of unsold products
→ Accurate green claims
→ Sustainable global value chains

Ecodesign for Sustainable Products Regulation
→ Performance and information requirements for greener products
→ Tackle the destruction of unsold goods
→ Waste prevention and reduction
→ Mandatory criteria for green public procurement
→ Digital Product Passport and new labelling rules
→ Stronger market surveillance

Support for circular business models
→ European circular business hub
→ Guidance to businesses

New rules to empower consumers for the green transition
→ Protection against greenwashing and the deliberate planning or design of products with limited lifespans
→ Information on product durability and reparability

Global action
→ Corporate sustainability due diligence

EU Regulation: Ecodesign for Sustainable Products

The framework will allow for the setting of a wide range of requirements, including on

❑ product durability, reusability, upgradability and reparability

❑ presence of substances that inhibit circularity

❑ energy and resource efficiency

❑ recycled content

❑ remanufacturing and recycling

❑ carbon and environmental footprints

❑ information requirements, including a Digital Product Passport

EU Regulation proposal - ESPR

https://ec.europa.eu/environment/publications/proposal-ecodesign-sustainable-products-regulation_en

Key features of ESPR

Article 9 – General Requirements for the DPP

A product passport shall meet the following conditions:

(a) it shall be connected through a data carrier to a unique product identifier;

(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;

(c) the data carrier and the unique product identifier shall comply with standard ('ISO/IEC') 15459:2015;

(d) all information included in the product passport shall be based on open, standards, developed with an inter-operable format and shall be machine-readable, structured, and searchable, in accordance with the essential requirements set out in Article 10;

(e) the information included in the product passport shall refer to the product model, batch, or item as specified in the delegated act adopted pursuant to Article 4;

Unique identifiers and data carriers based on global standards

No proprietary solutions

Granularity
The information included in the product passport shall refer to the product model (e.g. iPhone 13), batch (e.g. iPhone 13, produced in factory XYZ), or item (e.g. iPhone 13, serial number 123456789)

Key features of ESPR

(32) To ensure that the product passport is flexible, agile and market-driven and evolving in line with business models, markets and innovation, it should be based on a decentralised data system, set up and maintained by economic operators. However, for enforcement and monitoring purposes, it may be necessary that competent national authorities and the Commission have direct access to a record of all data carriers and unique identifiers linked to products placed on the market or put in service.

Article 12 – Product Passport registry

1. The Commission shall set up and maintain a registry storing information included in the product passports required by delegated acts adopted pursuant to Article 4.

   The registry referred to in the first subparagraph shall at least include a list of the data carriers and unique product identifiers referred to in Article 9(1).

   The Commission shall ensure that the information stored in the registry referred to in the first subparagraph is processed securely and in compliance with Union law, including applicable rules on the protection of personal data.

2. The Commission shall, in the delegated acts adopted pursuant to Article 4, specify the information which, in addition to being included in the product passport, shall be stored in the registry referred to in paragraph 1, taking into account at least the following criteria:

   (a) the need to allow for the verification of the authenticity of the product passport;

   (b) the relevance of information for improving the efficiency and effectiveness of market surveillance checks and customs controls in relation to products covered by delegated acts adopted pursuant to Article 4;

   (c) the need to avoid disproportionate administrative burden for economic operators.

3. In relation to its responsibility to establish and manage the registry referred to in paragraph 1 and the processing of any personal data that might result from that activity, the Commission shall be regarded as controller as defined in Article 3, point (8), of Regulation (EU) 2018/1725.

4. The economic operator placing the product on the market or putting it into service shall upload, in the registry referred to in paragraph 1, the information referred to in paragraph 2.

5. The Commission, competent national authorities and customs authorities shall have access to the registry referred to in this Article for carrying out their duties pursuant to Union legislation.

Decentralised system...

... with a central registry

Liability
The economic operator placing the product on the market is responsible for making available the DPP and for the information included therein

Access rights ('need-to-know')
The access to information included in the passport shall be regulated in accordance with the essential requirements included in Article 9. The specific access rights at product group level will be identified in the applicable delegated act.

Key features of ESPR

ANNEX III – Digital Product Passport

The requirements related to the product passport laid down in the delegated acts adopted pursuant to Article 4 shall specify what information shall or may be included in the product passport from among the following elements:

(a)   information required under Articles 7(2) and 8(2) or by other Union law applicable to the relevant product group;

(b)   the unique product identifier at the level indicated in the applicable delegated act adopted pursuant to Article 4;

(c)   the Global Trade Identification Number as provided for in standard ISO/IEC 15459-6 or equivalent of products or their parts;

(d)   relevant commodity codes, such as a TARIC code as defined in Council Regulation (EEC) No 2658/87[1];

(e)   compliance documentation and information required under this Regulation or other Union law applicable to the product, such as the declaration of conformity, technical documentation or conformity certificates;

(f)   user manuals, instructions, warnings or safety information, as required by other Union legislation applicable to the product;

(g)   information related to the manufacturer, such as its unique operator identifier and the information referred to in Article 21(7);

(h)   unique operator identifiers other than that of the manufacturer;

(i)   unique facility identifiers;

(j)   information related to the importer, including the information referred to in Article 23(3) and its EORI number;

(k)   the name, contact details and unique operator identifier code of the economic operator established in the Union responsible for carrying out the tasks set out in Article 4 of Regulation (EU) 2019/1020, or Article 15 of Regulation (EU) […/…] on general product safety, or similar tasks pursuant to other EU legislation applicable to the product.

The delegated acts adopted pursuant to Article 4 shall identify information relevant to ecodesign requirements that manufacturers may include in the product passport in addition to the information required pursuant to Article 8(2), point (a), including information on specific voluntary labels applicable to the product. That shall include whether an EU Ecolabel has been awarded to the product in line with Regulation (EC) No 66/2010.

Track & tracing
Unique operator identifiers and unique facility identifiers may be requested. These are key information component to allow the track & tracing of information along the supply chain

Deloitte report: GS1 standards for circularity in EU

Deloitte report on "Impact of international, open standards for circularity in Europe" has been released on the 20th April.

It focuses on the difference made by global, open standards if used to enable circularity in Europe. The report explores how the creation of barriers to trade, duplication of data and burden on businesses can be avoided or minimised through the usage of global standards.

It concludes that costs to enable the DPP (Digital Product Passport) in Europe could reach up to 0.1% of the EU GDP (like the economy of Malta) if open standards were not used to implement the EU circularity goals.
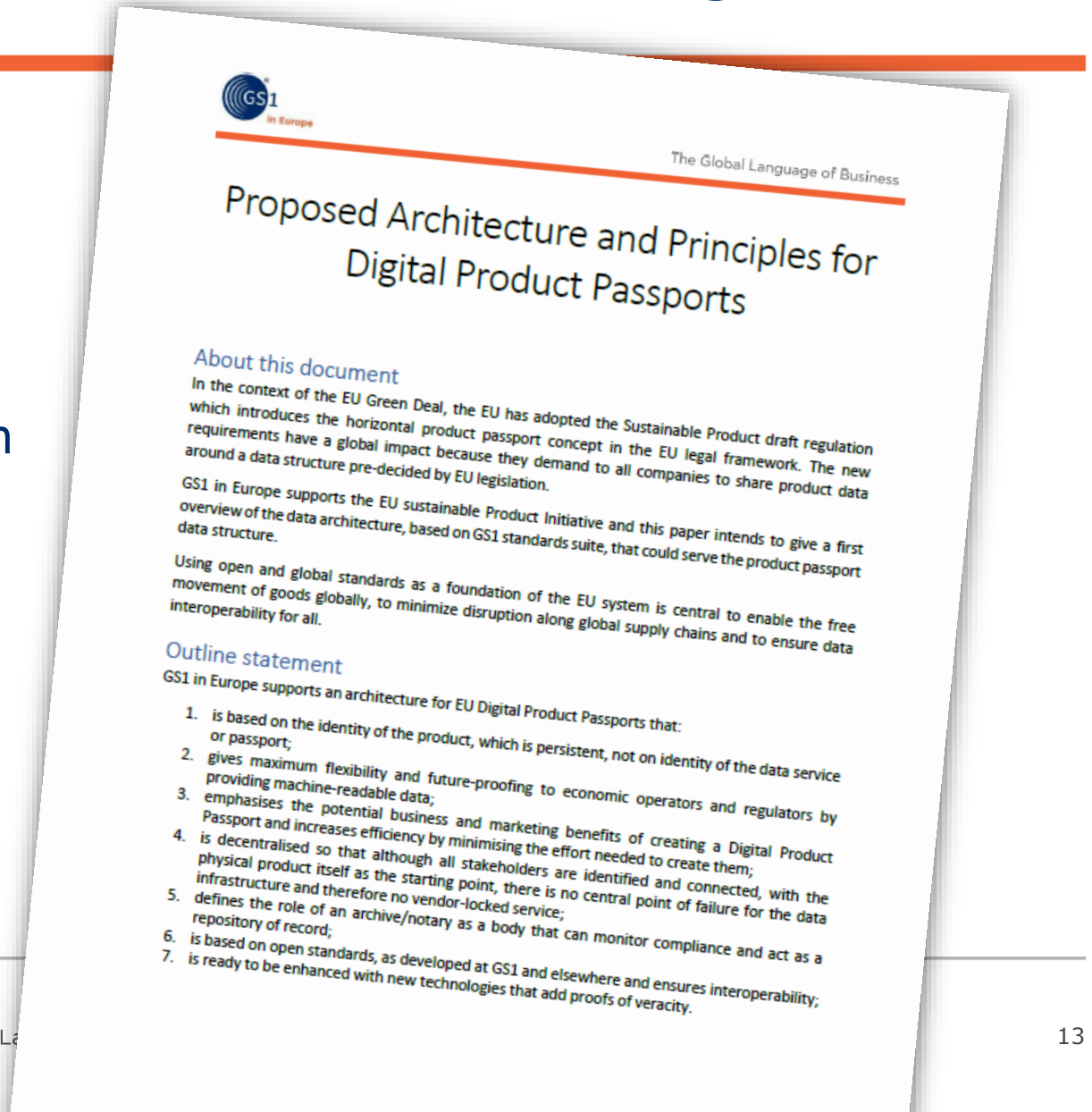
Full report is available here:
https://www2.deloitte.com/pl/pl/pages/zarzadzania-procesami-i-strategiczne/articles/Impact-of-GS1-standards-on-circularity-in-Europe.html?nc=42

DPP Architecture Proposal Shared with Regulators
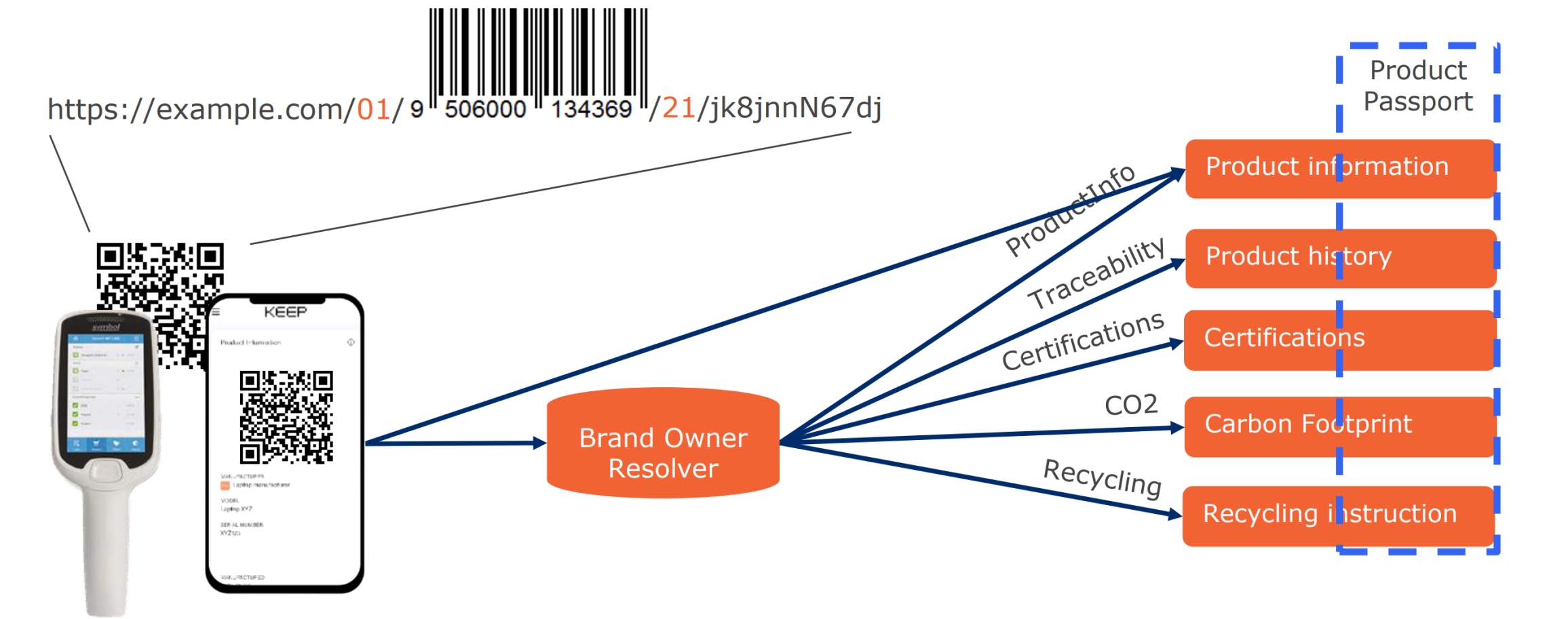
Highligts in the document

- Outline statement – principles
- Persistence of identity
- The GS1 Identification System
- Using GS1 identification standards in the whole supply chain and product life cycle
- Connecting the product identifier to the DPP with GS1 Digital Link

Proposed Architecture and Principles for Digital Product Passports

About this document

In the context of the EU Green Deal, the EU has adopted the Sustainable Product draft regulation which introduces the horizontal product passport concept in the EU legal framework. The new requirements have a global impact because they demand to all companies to share product data around a data structure pre-decided by EU legislation.

GS1 in Europe supports the EU sustainable Product Initiative and this paper intends to give a first overview of the data architecture, based on GS1 standards suite, that could serve the product passport data structure.

Using open and global standards as a foundation of the EU system is central to enable the free movement of goods globally, to minimize disruption along global supply chains and to ensure data interoperability for all.

Outline statement

GS1 in Europe supports an architecture for EU Digital Product Passports that:

1. is based on the identity of the product, which is persistent, not on identity of the data service or passport;
2. gives maximum flexibility and future-proofing to economic operators and regulators by providing machine-readable data;
3. emphasises the potential business and marketing benefits of creating a Digital Product Passport and increases efficiency by minimising the effort needed to create them;
4. is decentralised so that although all stakeholders are identified and connected, with the physical product itself as the starting point, there is no central point of failure for the data infrastructure and therefore no vendor-locked service;
5. defines the role of an archive/notary as a body that can monitor compliance and act as a repository of record;
6. is based on open standards, as developed at GS1 and elsewhere and ensures interoperability;
7. is ready to be enhanced with new technologies that add proofs of veracity.

GS1 data architecture
Connecting the product identifier to the DPP with GS1 Digital Link

China

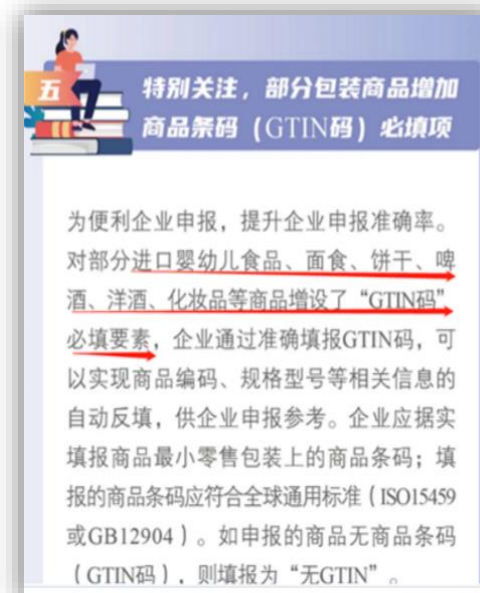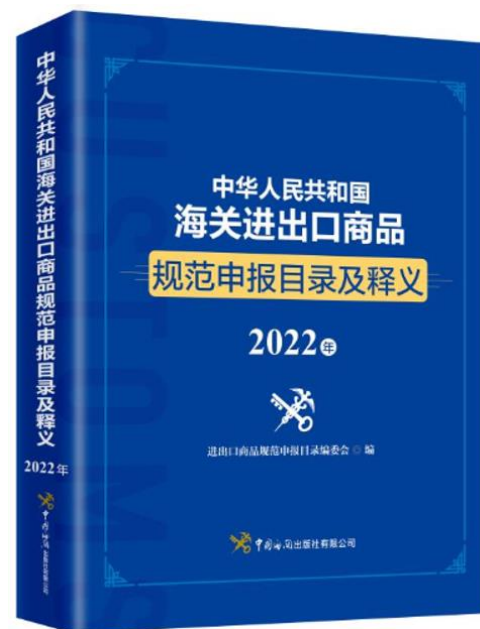# China customs GTIN reporting function

On August 1st. 2019, General Administration of customs China officially rolled out the GTIN reporting function on its "Single Window" declaration system and promoted it nationwide.

Realizing an intelligent auto-fill feature using GTIN.
- ✓ Speed up declaration filing
- ✓ Improve accuracy

Latest Progress – GTIN adoption on General Trade

- Product identifier (i.e. GTIN) to be moved onto the highest level on "Single Window"

- **From Jan. 1st. 2022, GTIN required to be declared as a for certain imported product categories including**

  - ✓ Infant food, wheaten food, biscuit, beer, imported wines and liquors, cosmetics etc.

  - ✓ Involving 3 Chapters & 23 level-8 HS codes

中华人民共和国
海关进出口商品
规范申报目录及释义

2022年

进出口商品规范申报目录编委会 编

中国海关出版社有限公司

五 特别关注，部分包装商品增加
商品条码（GTIN码）必填项

为便利企业申报，提升企业申报准确率。
对部分进口婴幼儿食品、面食、饼干、啤
酒、洋酒、化妆品等商品增设了"GTIN码"
必填要素，企业通过准确填报GTIN码，可
以实现商品编码、规格型号等相关信息的
自动反填，供企业申报参考。企业应据实
填报商品最小零售包装上的商品条码；填
报的商品条码应符合全球通用标准（ISO15459
或GB12904）。如申报的商品无商品条码
（GTIN码），则填报为"无GTIN"。

**Strengthen the legal status of GTIN
On 2022 HS Catalog Revision for General Trade**

GS1

GTIN application in Cross-Border e-commerce

At the end of 2021, GAC officially roll out the "GTIN" declaration Pilot for Cross-border e-Commerce imported goods in Chongqing Customs District

GAC's WeChat official Account

5 为什么我国海关要在跨境电商开展"商品条码"应用试点?

跨境电商零售进口商品具有的零售属性,与"商品条码"更为契合,根据数据统计,"商品条码"对跨境电商零售进口商品覆盖度约90%,各跨境电商企业已通过"条码"填报项申报的货值比例达到近70%,在跨境电商领域开展"商品条码"应用具有良好的基础。

"商品条码"在国际消费品流通领域应用广泛,识别简单,稳定性较高,自动化识别商品的发展前景较好,将成为解决海关当前在跨境电商零售进口商品识别、精细化管理和减负提质等困难的办法之一。

6 跨境电商企业应用"商品条码"有什么好处?

"商品条码"集编码、印刷、识别、数据采集和处理等功能于一身,应用"商品条码"可以在交易和运输环节提升效率,增加消费者的信赖度。目前,众多国内知名跨境电商平台都在运用"商品条码"进行产品管理与物流配送,甚至"商品条码"成为入驻部分跨境电商平台的必要条件。

随着海关"商品条码"应用的开展,合规申报"商品条码"将有助提高企业的通关效率。

Good Foundation

- ✓ **90%** - High coverage of GTIN in CBEC imported goods
- ✓ CBEC imported goods with GTIN declared takes up nearly **70%** CBEC imports value

Benefits

- ✓ Accurate goods identification
- ✓ Fine management
- ✓ Improve supervision quality
- ✓ Significantly enhance customs clearance efficiency

Thanks to All