The Global Language of Business

Global Standards Management Process

GS1 Circularity - Digital Product Passport
Mission-Specific Working Group
Call to Action

What business challenges are being solved?

GS1 members expect GS1 standards to support their industry's circular economy needs. Many of these needs are cross-sectorial and global in nature, and the Digital Product Passport (DPP) regulatory requirements in Europe are a pressing example.

The circular economy model includes new thinking related to the management of product data and resources, which increasingly need to be retained through re-designing, re-manufacturing, re-use and recycling. Additionally, larger communities of stakeholders will need to contribute to product data development and to the sharing of information across the value chain.

This evolving model raises questions about how to ensure globally-interoperable, persistent product and component identification; how to track and trace needed information across the entire circular product lifecycle from upstream raw materials through consumption and beyond; how to avoid a proliferation of single-purpose barcodes and tags; etc.
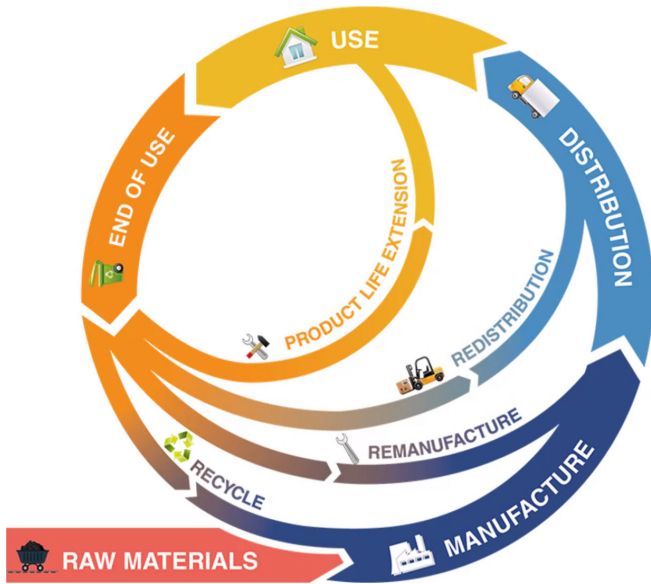
This group will focus on understanding and addressing these requirements in the near term and invites participation to gather requirements related to the broader scope of circularity from all sectors and regions.

Benefits for industry

The overall aim of the working group is to set the foundation for the GS1 system to support industry's identification and data sharing needs related to Circularity. Because of the timeline of the new EU DPP regulations, early-stage work of the group will focus on adapting the GS1 system so that industry can more effectively use it to address known regulatory drivers. When successful, industry will be able to leverage digital product passports to ensure that the right information is available to the right people at the right time, while improving traceability of products along the value chain.

Into the future, the working group will also work to unlock standards that enable industry to more consistently and more easily generate value from the investments they make in Circularity initiatives. By adapting our identification system and our existing data sharing languages as needed, the GS1 system will help industry to reduce the lifecycle environmental impacts of products through efficient digitalisation.

The GSMP is a community-based forum for businesses facing similar problems to work together and develop global standards-based solutions to address them. Active GSMP participants represent industries ranging from retail and consumer goods to fresh foods, healthcare, transport and logistics, government and more—a healthy mix of business and technical people from nearly 60 countries.

Why is this work needed?

Adaptation of the GS1 system to more effectively address the business challenges of foundational Circularity use cases is needed to help the industries that GS1 serves to adapt and thrive as supply chains are made increasingly circular, as driven by consumer demand and by a growing body of regulatory requirements.

As the first global driver of this evolution, the Digital Product Passport (DPP) will be required, by law, for almost all categories of physical goods placed on the EU market or put into service (food, animal feed and medicines are exempt for now). It is estimated that the European Commission will introduce several new delegated acts between 2024-2030 to enable the potential of the DPP regulation across multiple sectors.

Working group objectives

The working group objectives will be to develop an AIDC Application Standard with defined identifiers for all entities and/or rules for persistent identification at a more granular level for trade items. Additionally, GS1's data sharing standards, specifically master data and visibility (EPCIS) data standards, will be enhanced to fill gaps where there is expressed industry commitment and regulatory need.

Specific to the EU DPP regulations, it is expected that the group will also develop global guidelines, by prioritised product category, for circularity that explains how the GS1 system works together and addresses specific implementation topics.

Initially, priority will be given to the development of an overarching AIDC Application Standard. While this will meet the high-level identification needs of the DPP, it will additionally allow for sector-specific development of data standards and implementation guidelines. This will also provide a common structure and guidance as new sectors or categories of trade items are included in the scope.

Who should join this working group?

Meeting the global nature of this effort requires global participation from and not limited to manufacturers, retailers, solution providers, regulatory authorities and GS1 Member Organisations (MOs). Global and regional entities reflecting on the circular business model are also welcome to participate.

This work effort will require knowledge in the areas of Identification - AIDC standards (i.e., GS1 General Specifications), data sharing standards (e.g., Product Master Data, EPCIS) and circularity.

The initial focus will be on identification and then on master data and visibility data. Work will be done in specific workstreams, with the goal of ensuring that we make the best use of the time that you choose to invest in this essential work.

How will the working group operate?

This working group will follow the GS1 Global Standards Management Process:

- **Define business requirements**—collect input from the industry and MOs

- **Refine and develop rules**—experts draft relevant standards and present them to industry and MOs for approval

- **Develop and approve**—standards are approved by the standards development community, ratified by GS1 governance bodies and published

For more information and to join the group, visit: https://www.gs1.org/standards/development-work-groups#DPP

Join the working group in time for the kick-off call on 25 April 2023. Register here for GS1 Standards Week

Help or questions? Contact: Francesca Poggiali, Francesca.Poggiali@gs1.org