

# Reusable Packaging System Design Standard



## Part 3: Digital

### Summary of Requirements

The [Reusable Packaging System Design Standard](#) provides a foundation to align reuse systems globally so they can share infrastructure and become interoperable. This systemic approach is necessary for reuse to become affordable, efficient, and convenient, and scale across sectors and global regions in a way that provides a solution to both the climate and plastic crises.

This document summarizes the component of the standard that focuses on *digital* requirements. This component is a key foundation for enabling a system where diverse brands and companies can utilize shared container collection points, washing facilities and distribution channels.

For detailed requirements and guidance, see the document: [Part 3: Digital](#).

### Required data fields on collection points

- Collection points must incorporate a digital tag that embeds certain data fields, including: the Collection Point ID, Company ID, Company ID Type, and a Consumer URL.
- The digital tag must also be associated with additional data that can be embedded into the digital tag or accessible through an online database. These data fields include: Collection Point Location and Collection Point Type.
- The digital tag may also include additional optional data fields according to each company's preferences.

### Required data fields on containers

- Containers must incorporate a digital tag that embeds certain data fields, including: Packaging ID type, Company ID, Company ID Type, and Consumer URL.
- The digital tag must also be associated with additional data that can be embedded into the digital tag or accessible through an online database. These data fields include: certain cleaning instructions, approved cleaning facilities, incentive types and values, a URI for connection to inventory management tools, and info on secondary packaging requirements.
- The digital tag may also include additional optional data fields according to each company's preferences.
- Individual containers are not required to have their own unique IDs, though that is an option that container owners/operators can pursue.
- The digital tag (whether barcode, QR code, or RFID) must be located adjacent to the reuse symbol according to [Part 2: Containers](#) and [Part 5: Labeling & education](#). Because other QR codes and barcodes might also be on an asset, the proximity to the reuse symbol is important for indicating its association with the reuse system.

## **Required data fields for companies that operate in the reuse ecosystem**

- Companies and facilities that operate in the reuse ecosystem must have their identities recorded by a data administrator using certain data fields, including: Company ID, name, contact, location, and role.

## **Recommendations for digital language**

The data fields identified above must be applied through a common language so that stakeholders throughout the reuse ecosystem can access and edit data associated with each container and collection point.

- **Early adopters** are encouraged to use the Reverse Logistics Association's (RLA's) [12N Labeling standard](#) as the digital language for incorporating the data fields listed above. 12N describes a free, universal language that can be used with QR codes, RFID tags and other labels. It establishes standardized Field Identifiers and a structure for assigning data to products and packaging. It also establishes designations for various stakeholders in the reuse ecosystem that enable symmetric and asymmetric data encryption. RLA is currently creating new [Field Identifiers](#) that correspond to the data fields listed in this standard.
- **Long-term alignment** is encouraged through [GS1's Digital Link](#) standard for container labeling, especially for consumer goods companies that already utilize GS1 standards in their product labeling. Though not designed specifically for reuse, Digital Link is being developed by GS1 to link product codes to a broad set of data on the web. The standard is applicable to barcodes, QR codes, RFID and other labeling technologies.

## **Recommendations for data Administration**

In regions where reuse ecosystems are being established an administering body should oversee a central database of participants and contact info and should monitor the system for data compliance. Initially, local administrators, like Reuse Seattle, may coordinate data access. Ultimately, though, it will be necessary for national and international administrator(s) to align data platforms between cities and regions and administer data access and between companies and where containers move between jurisdictions.

Additional details related to these requirements are provided in the full [Part 3: Digital](#).