The Global Language of Business

# Foodservice Manufacturer Implementation Checklist

*Prepared by the Foodservice GS1 US Standards Initiative User Workgroup*

This document was prepared by the Foodservice GS1 US Standards Initiative User Workgroup in order to support foodservice manufacturers in implementing GS1 Standards. It provides an action-oriented checklist of implementation steps to guide manufacturers through the implementation process. *(Note that many steps in the checklist can be completed concurrently.)* The checklist includes a description of each step, as well as links to any additional resources.

**Note:** As with all GS1 Standards and solutions, the recommendations contained in this document are voluntary, not mandatory. It should be noted that use of the words "must" and "require" throughout this document relate exclusively to technical recommendations for the proper application of the standards to support the integrity of your implementation.

## Getting Started

| Step | Activity | Resources Available |
|---|---|---|
| A1 | ▪ Do you have a GS1 Company Prefix?<br>  ▪ YES - Go To B1.<br>  ▪ NO - Continue to next row. | ▪ Getting Started Guide |
| A2 | ▪ Determine how many GTINs (product barcode IDs) you will need.<br>  ▪ Use the barcode estimator available under Step 1 of the "Getting Started Guide" link.<br>  ▪ Consider future product growth in planning your needs. | ▪ Getting Started Guide |
| A3 | ▪ Determine if GLNs will be assigned to parties/locations.<br>▪ If GLNs will be used, determine how many GLNs you will need. | ▪ GLN Resources for Foodservice<br>▪ GS1 Standards |
| A4 | ▪ Determine both the initial cost and annual cost of the GS1 Company Prefix based on the total GTINs and GLNs you will require. (Use the table under Step 2 of the "Getting Started Guide" link.) | ▪ Getting Started Guide |
| A6.1 | ▪ Who is the responsible person for GTINs?<br>▪ What is procedure for assigning GTINs?<br>▪ What is the electronic and workforce infrastructure needed to cross-reference and maintain barcodes with existing/new product codes?<br>▪ Best practice is to form a cross-functional team educated in the GS1 System (Identify, Capture, Share). | ▪ GTIN Management Standard<br>▪ GS1 US Data Hub \| Product<br>▪ GS1 US University |
| A6.2 | ▪ Will GTINs be added to labels, pre-printed cases/cartons, etc.?<br>▪ Consider the operational impact label application can have (e.g., line speed; inline printing; print and apply; space considerations; maintenance schedule; etc.). | |

| Step | Activity | Resources Available |
|---|---|---|
| A6.2 *(continued)* | ▪ Determine which GS1 barcode(s) to use (e.g., UPC-A, ITF-14, GS1-128, GS1 DataBar, EAN-13, etc.)<br>  ▪ NOTE: Full traceability leverages GS1-128 barcodes. See the links to the right for more information on GS1-128 barcodes and traceability.<br>▪ Determine if there will be a need for attribute data.<br>  ▪ How will data be created, managed and stored in internal systems?<br>▪ Who will coordinate communications with customers?<br>▪ Who will coordinate the revision of graphics and ordering new packaging?<br>▪ Will there be a hard conversion (i.e., pick a day to cut off and change) or a soft conversion (i.e., running change)? | ▪ Foodservice Implementation Guideline for Case-Level Traceability using GS1 Standards<br>▪ Voluntary GS1-128 Barcode Guideline for Case/Cartons in Foodservice<br>▪ GS1 Attribute Explorer<br>▪ Foodservice GS1 US GDSN Attribute Guide |
| A6.3 | ▪ Who is the responsible person for GLNs?<br>▪ What is the procedure for assigning GLNs?<br>▪ Where will GLNs be used (e.g., Order Forms, Invoicing Forms, Internal Mail System, External communications, etc.)?<br>▪ What is the electronic and workforce infrastructure needed to create, maintain and support usage? | ▪ GS1 US Data Hub \| Location<br>▪ Foodservice GS1 US GDSN Attribute Guide |
| A6.4 | ▪ Will product data be shared via GDSN? If so -<br>  ▪ Who will be the Master Data Manager?<br>  ▪ Who will coordinate the data synchronization policy?<br>  ▪ Determine the GDSN process (i.e., translation of raw data into GDSN data).<br>  ▪ Who will be the data stewards?<br>  ▪ Consider non-US market requirements (e.g. Canada and Australia). | ▪ Getting Started with GDSN<br>▪ How to Select a GDSN-certified Data Pool |
| A6.5 | ▪ What is the electronic and workforce infrastructure needed to create, maintain and support usage?<br>▪ Will transactional data be received and sent electronically (EDI)?<br>  ▪ If so - who will coordinate EDI communication? | ▪ Solution Partner Finder |
| A7 | ▪ List your intangible benefits for executive buy in, as well as your risks for not using the GS1 System. Include customer expectations and requirements.<br>▪ Apply for GS1 Company Prefix. | ▪ Get a GS1 Company Prefix<br>▪ Getting Started with GDSN |

## GTINs and Barcodes

| Step | Activity | Resources Available |
|---|---|---|
| B1 | ▪ Understand your current ERP (or other system) and how it stores information. | |
| B1a | ▪ Research the system's ability to store and/or assign GTINs. | |
| B1b | ▪ GTIN should be assigned to all levels of "hierarchy" of the product.<br>▪ Hierarchy for a product denotes the presence of a saleable entity and the bundling of these entities. For example, a single baked cookie may be wrapped in a cellophane wrapper and be available for sale to a consumer at a register. A quantity of the individually wrapped cookies may be packed into a corrugated carton and the carton may also be an item offered for sale.<br>▪ A GTIN should be assigned to the individual cookie and a GTIN should be assigned to the carton. Both of these GTINs should be stored in the ERP system as well as the relationship between the cookie GTIN and the carton GTIN. In this scenario, the cookie represents an "each" and the carton represents a "case." | ▪ An Introduction to the Global Trade Item Number (GTIN)<br>▪ GS1 GTIN Management Standard<br>▪ I Need a Barcode Info |

| Step | Activity | Resources Available |
|---|---|---|
| B1c | ▪ Consider using GS1 US Data Hub \| Product to generate your GTINs. You can also use Data Hub to manage your GTINs and the SKU to which they cross reference in your ERP. | ▪ Create Accurate U.P.C. Barcodes with GS1 US Data Hub |
| B1d | ▪ Utilize the appropriate GS1 Company Prefix obtained in section A in your GTIN assignment.<br>▪ Assign ownership to a resource in your organization for the management of your Company Prefix(es) and the rules to be used for applying them to your products if you have more than one prefix. | |
| B1e | ▪ Refer to the guidelines for GTIN construction to the right and apply these rules in your business processes for creating and maintaining products. | ▪ Foodservice Product and Location Implementation Guide<br>▪ GS1 GTIN Management Standard |
| B1f | ▪ Provide GTIN training (creation and allocation rules) to all resources involved in the business processes for creating and maintaining products. | |
| B2 | ▪ Add GS1 barcodes to cases, groupings, and/or items. | |
| B2a | ▪ Refer to the guideline to the right for GTIN construction guidance. | ▪ Foodservice Product and Location Implementation Guide |
| B2b | ▪ Consider your current systems, product development and manufacturing processes, customer requirements for barcodes, and physical plant environment (e.g., space on the lines for potential printing equipment as well as any downstream areas such as automated palletizers).<br>▪ NOTE: Full traceability leverages GS1-128 barcodes. More information on GS1-128 barcodes and traceability in foodservice can be found in the links to the right | ▪ Foodservice Implementation Guideline for Case-Level Traceability using GS1 Standards<br>▪ Voluntary GS1-128 Barcode Guideline for Case/Cartons in Foodservice |
| B2c | ▪ Understand if item packaging and shipper containers are pre-printed or if labels are applied to provide product information.<br>▪ Will product cost be impacted?<br>▪ If the items are pre-printed, determine if the source of these elements can add a barcode. | |
| B2d | ▪ Develop your company's strategy for barcode symbology for:<br>  ▪ Cases – using either the ITF-14 or GS1-128<br>  ▪ Pallets – using the GS1-128 (SSCC) | ▪ Barcode chart |
| B2e | ▪ Review/revise product development/maintenance processes to accommodate GTIN and barcode creation. | |
| B2f | ▪ Develop a roll-out sequence for barcodes based on the number of plants and lines. | |

| Step | Activity | Resources Available |
|---|---|---|
| B2g | ▪ Develop a timeline for implementing the barcode strategy.<br>▪ If printing yourself, include the selection and purchase of software to design and print barcodes, barcode printers, barcode scanners, and label application equipment (as needed). Vendors may be able to aide in review, selection, and/or implementation.<br>▪ To maintain high-quality, scannable barcodes, verify that you have a process in place to perform maintenance on barcoding equipment according to the equipment manufacturer's specifications.<br>▪ Determine changes to your product development process related to assigning GTINS and product graphics design or packaging design.<br>▪ Review the production lines where printing or labels will be applied to understand any impacts that will affect procedures or line speed.<br>▪ Understand the impact of barcodes to other plant procedures (e.g., palletizing) and downstream supply chain partners (e.g., warehouses, distributors, etc.).<br>▪ Create the budget for capital and resources. | |
| B3 | ▪ Manage conversion/communication with customers. | |
| B3a | ▪ Consider a pilot scenario if possible to validate assumptions, implications and costs. The smaller the scope (in terms of the number of products, lines, and customers) the better. | |
| B3b | ▪ Develop a project plan based on the timeline developed in B2 and assign roles and responsibilities. | |
| B3c | ▪ Develop contingency plans/risk analysis. This may include redundant printing equipment for production lines, how to manage through line stoppages, etc. | |
| B3d | ▪ Understand the project's governance requirements (including reporting) based on your organization. | |
| B3e | ▪ Develop key metrics that reflect the implementation and ongoing usage of these standards. Consider tracking number of SKUs converted, costs, savings, process metrics, customer feedback, etc. | |
| B3f | ▪ Develop a communication plan identifying audiences, key messages, dates for sharing messages, how the message will be shared, and who will communicate. | |
| B3g | ▪ Assure ongoing education of GS1 Standards for new hires and include responsibility for GS1 standards management within job descriptions and key accountabilities. | |

## GLNs

| Step | Activity | Resources Available |
|---|---|---|
| C1 | ▪ Understand use of global location identification. | ▪ An Introduction to the Global Location Number (GLN) |
| C2 | ▪ Identify which locations would need a GLN. | ▪ GLN Assignment Guidance for Foodservice |
| C3 | ▪ Assign GLNs to parties and locations to support traceability. | ▪ Foodservice Product and Location Implementation Guide |
| C4 | ▪ Construct a GLN hierarchy for your business. | ▪ GS1 US Data Hub \| Location |
| C5 | ▪ Consider using GS1 US Data Hub \| Location to house GLN information. | ▪ GS1 US Data Hub \| Location |
| C7 | ▪ Identify business transactions that would need a GLN, including sharing of GLN information electronically with trading partners, a key component of traceability. | ▪ Foodservice Implementation Guideline for Case-Level Traceability using GS1 Standards |
| C8 | ▪ Begin transacting GLNs with trading partners. | |
| C9 | ▪ Establish a process to keep GLN data current. | |

## GDSN

| Step | Activity | Resources Available |
|---|---|---|
| D1 | ▪ Prepare to share product information with customers and/or vendors. | ▪ GS1 Standards in Use in Foodservice |
| D1a | ▪ Review list of foodservice attributes, as well as any other data required for trading partners. | ▪ GDSN Attribute Interactive Spreadsheet Tool<br>▪ Foodservice Attribute Guide |
| D1b | ▪ Inform data owners of specific information to be shared with trading partners. | |
| D2 | ▪ Subscribe to a GDSN-certified data pool. | ▪ How to Select a GDSN-certified Data Pool |
| D2a | ▪ Evaluate available GDSN-certified data pool providers. | |
| D2b | ▪ Determine which data pool has systems that best facilitate your initial publication and ongoing maintenance of publications, based in part on whether data will be published via manual or automatic upload. | |
| D2c | ▪ Ask data pool about the requirements for trading partners requesting data both inside and outside the US. | |
| D3 | ▪ Review the GS1 US National Data Quality Program to establish "best in class" data quality and governance according to GS1 Standards. | ▪ GS1 US National Data Quality Program<br>▪ Foodservice Data Quality Guide |
| D3a | ▪ Identify internal repositories for "one source of truth" data needed. | |
| D3b | ▪ Establish process to keep data current in "one source of truth" system used to populate data to GDSN to assure product changes are captured and communicated to trading partners. | |
| D3c | ▪ Cleanse internal product data and establish a process to maintain data quality. | |
| D3d | ▪ Using either internal or external resources, create an audit program to check representative sample of physical products within supply chain to verify that data being published to GDSN is correct and complete. | |
| D4 | ▪ Publish foodservice attributes to data pool for publication to GDSN (including new attribute "Data Carrier Type" which details the type of barcode on the product). | |
| D4a | ▪ Confirm process to gather required data from internal repositories, convert data into required format based on attribute standards and data pool requirements. | |
| D5 | ▪ Begin publication of foodservice attributes in GDSN to specific trading partners approved to receive specific product data. | |
| D5a | ▪ Collect the GDSN GLN which trading partners will use to receive GDSN messages. | |
| D5b | ▪ Check for and resolve any data pool provider error messages and/or sync status messages from recipients. | ▪ Foodservice Data Quality Scorecard |
| D6 | ▪ Maintain product attributes over time. | |
| D6a | ▪ Be aware of changes to data standard within GDSN and/or data pool, and update systems or data accordingly to assure current information can continue to be published to GDSN. | |
| D7 | ▪ Establish program to proactively review product changes for applicability of GTIN Management Standard. | |
| D7a | ▪ As needed, assign and publish new GTINs and associated product attributes to trading partners via GDSN. | |
| D7b | ▪ If needed, update product attributes published to trading partners via GDSN. | |

## Business Transactions

| Step | Activity | Resources Available |
|---|---|---|
| E1 | ▪ Assess and identify business systems and transactions impacted by integration of GS1 Standards for item and location identification. | |
| E1a | ▪ Understand internal EDI order-to-cash process. | ▪ Order-to-Cash Process Flow |
| E1b | ▪ GS1 Standards should be leveraged in business transactions like purchase orders and traceability/visibility systems – (e.g., trading partner data feeds, reporting, traceability, etc.).<br>▪ | ▪ Foodservice Implementation Guideline for Case-Level Traceability using GS1 Standards |
| E2 | ▪ Develop a project plan for GS1 integration for each impacted business system. | |
| E2a | ▪ Assess impact to business partners and creation of a communication plan to set expectations with partners. | |
| E2b | ▪ Determine if GS1 attributes are additional attributes on the business transaction or replacing existing identifiers for product and location. | |
| E2c | ▪ Develop internal and external test and acceptance plans for GS1 attribute integration. | |
| E2d | ▪ Document whether communicated GS1 attribute is a scanned value or a data attribute. Different business action may be taken based on this understanding. | |
| E3 | ▪ For traceability programs, capture Key Data Elements (KDEs) at each Critical Tracking Event (CTE).<br>▪ To enhance traceability, Serial Shipping Container Codes (SSCCs) should be leveraged in conjunction with the Advance Ship Notice (ASN) per the Foodservice Traceability Guide. | ▪ Foodservice Implementation Guideline for Case-Level Traceability using GS1 Standards |

## Proprietary Statement

This document contains proprietary information of GS1 US. Such proprietary information may not be changed for use with any other parties for any other purpose without the expressed written permission of GS1 US.

## Improvements

Improvements and changes are periodically made to publications by GS1 US. All material is subject to change without notice. Please refer to GS1 US website for the most current publication available.

## Disclaimer

Except as may be otherwise indicated in specific documents within this publication, you are authorized to view documents within this publication, subject to the following:

1. You agree to retain all copyright and other proprietary notices on every copy you make.
2. Some documents may contain other proprietary notices and copyright information relating to that document. You agree that GS1 US has not conferred by implication, estoppels, or otherwise any license or right under any patent, trademark, or copyright (except as expressly provided above) of GS1 US or of any third party.

This publication is provided "as is" without warranty of any kind, either express or implied, including, but not limited to, the implied warranties of merchantability, fitness for a particular purpose, or non-infringement. Any GS1 US publication may include technical inaccuracies or typographical errors. GS1 US assumes no responsibility for and disclaims all liability for any errors or omissions in this publication or in other documents which are referred to within or linked to this publication. Some jurisdictions do not allow the exclusion of implied warranties, so the above exclusion may not apply to you.

Several products and company names mentioned herein may be trademarks and/or registered trademarks of their respective companies. GS1 US does not, by promulgating this document on behalf of the parties involved in the creation of this document, represent that any methods, products, and/or systems discussed or recommended in the document do not violate the intellectual property rights of any third party. GS1 US has not performed a search to determine what intellectual property may be infringed by an implementation of any strategies or suggestions included in this document. GS1 US hereby disclaims any liability for any party's infringement of intellectual property rights that arise as a result of any implementation of strategies or suggestions included in this document.

This publication may be distributed internationally and may contain references to GS1 US products, programs, and services that have not been announced in your country. These references do not imply that GS1 US intends to announce such products, programs, or services in your country.

GS1 US shall not be liable for any consequential, special, indirect, incidental, liquidated, exemplary, or punitive damages of any kind or nature whatsoever, or any lost income or profits, under any theory of liability, arising out of the use of this publication or any content herein, even if advised of the possibility of such loss or damage or if such loss or damage could have been reasonably foreseen.

GS1 US HEREBY DISCLAIMS, AND YOU HEREBY EXPRESSLY RELEASE GS1 US FROM, ANY AND ALL LIABILITY RELATING TO YOUR COMPLIANCE WITH REGULATORY STANDARDS AND LAWS, INCLUDING ALL RULES AND REGULATIONS PROMULGATED THEREUNDER. GS1 US MAKES NO WARRANTIES OF ANY KIND RELATING TO THE SUITABILITY OF THE GS1 STANDARDS AND THE SPECIFIC DOCUMENTS WITHIN THIS PUBLICATION TO COMPLY WITH ANY REGULATORY STANDARDS, LAWS, RULES AND REGULATIONS. ALL INFORMATION AND SERVICES ARE PROVIDED "AS IS."

*GS1 US employees are not representatives or agents of the U.S. FDA, and the content of this publication has not been reviewed, approved, or authorized by the U.S. FDA. The following information contained herein is for informational purposes only as a convenience, and is not legal advice or a substitute for legal counsel. GS1 US Inc. assumes no liability for the use or interpretation of the information contained herein.

## No Liability for Consequential Damage

In no event shall GS1 US or anyone else involved in the creation, production, or delivery of the accompanying documentation be liable for any damages whatsoever (including, without limitation, damages for loss of business profits, business interruption, loss of business information, or other loss) arising out of the use of or the results of use of or inability to use such documentation, even if GS1 US has been advised of the possibility of such damages.

## IAPMO

In this publication, the letters "U.P.C." are used solely as an abbreviation for the "Universal Product Code" which is a product identification system. They do not refer to the UPC, which is a federally registered certification mark of the International Association of Plumbing and Mechanical Officials (IAPMO) to certify compliance with a Uniform Plumbing Code as authorized by IAPMO.

*If applicable



6 14141 02569 5