TRAINING FOR GLOBAL DATA SYNCHRONIZATION NETWORK (GDSN) DATA POOL AND SUPPLIER DATA COLLECTION TOOLS

Deliverable 5.0

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ACRONYMS

API ............................................................................................................................. application programming interface
ARTMIS .......................................................... Automated Requisition Tracking Management Information System
CIC ................................................................................................................................. Catalog Item Confirmation
GDSN .......................................................... Global Data Synchronization Network
GHSC .......................................................................................................................... Global Health Supply Chain
GLN ............................................................................................................................. Global Location Number
GTIN ........................................................................................................................... Global Trade Item Number
IM ................................................................................................................................. Item Management
PSM ............................................................................................................................. Procurement and Supply Management
XML ............................................................................................................................ Extensible Markup Language
USAID ....................................................................................................................... U.S. Agency for International Development
INTRODUCTION

Chemonics is acting on behalf of the U.S. Agency for International Development (USAID) in connection with the Global Health Supply Chain (GHSC) Program – Project and Supply Management (PSM) project.

The purpose of the Project is to:

1. To serve as the primary vehicle through which USAID will procure and provide health commodities for all USAID health programs, including but not limited to, HIV/AIDS, Malaria, Reproductive Health, and Maternal & Child Health; and
2. To provide systems strengthening technical assistance to improve supply chain management and commodity security in partner countries.

Through the Project, life-saving health commodities will be delivered to many of the world’s most vulnerable populations.

USAID has been investigating the use of GS1 standards to improve the management of health commodity procurements for a number of years and has instructed the GHSC-PSM project to design its management information system (MIS) to support GS1 standards. The GHSC-PSM MIS team is designing and developing the Automated Requisition Tracking Management Information System (ARTMIS) for its operation and management of USAID’s global health supply chain.

As part of this effort, the Project is leveraging 1WorldSync as the Global Data Synchronization Network (GDSN)-certified data pool to source item attribute information to form the basis of the Project’s product catalog. To improve coordination with other donors, counterparts, and stockholders, GHSC-PSM will mandate that health commodity suppliers register their trade items with GS1 in order for all commodities supplied by the project to have a Global Trade Item Number (GTIN) and to exchange this information via the GDSN. Increasing the use of GTINs by GHSC-PSM suppliers and collecting attribute data will improve the Project’s ability to coordinate with other stakeholders engaged in the delivery of health commodities to developing countries and to improve the ability to perform analytics on commodity procurement.

Deliverable 5 is a training strategy and plan for training to GHSC-PSM on the use of the GDSN data pool and supplier data collection tools, including the 1WorldSync non-GDSN XML and Content1™ solutions. GHSC-PSM will also receive training on the GDSN process and messaging, the use of the online 1WorldSync Item Management (IM) system, the 1WorldSync XML message sets for automated receipt of item data from their suppliers.
STRATEGY FOR TRAINING

STRATEGY FOR TRAINING ON THE 1WORLDSYNC GDSN DATA POOL SOLUTION

1WorldSync will provide GHSC-PSM with the necessary skills to use the 1WorldSync data pool Item Management (IM) system to:

- Review item information received from suppliers;
- Manually set up GDSN subscriptions to suppliers’ GLNs to receive GTIN and other attribute information;
- Manually create and send GDSN Catalog Item Confirmation (CIC) responses to suppliers for the items suppliers publish through the GDSN;
- Review the status of the items that their suppliers published in an IM report.

Trainings will also include an overview of the 1WorldSync XML message sets for automated machine-to-machine messaging. GHSC-PSM can automate the entire GDSN process to receive their donors’ published item information and integrate it into their ARTMIS system.

The XML training will include information regarding how to automate the ingestion of item information from GDSN and how to automate sending response CIC messages back to suppliers while applying XML implementation best practices.

STRATEGY FOR 1WORLDSYNC TRAINING ON THE NON-GDSN SOLUTION

1WorldSync will provide GHSC-PSM with the necessary skills to use 1WorldSync IM solution to:

- Receive item information from non-GDSN suppliers;
- Review the information provided for quality and completeness;
- Respond with CIC messages to non-GDSN suppliers to highlight any discrepancies or confirm successful receipt of the product content.

Trainings will also include an overview of the 1WorldSync non-GDSN XML message set. Note that as the GDSN and non-GDSN XML message sets are very similar, the non-GDSN XML training will primarily highlight any differences between the GDSN and the non-GDSN 1WorldSync XML. For a more thorough XML message set training review, please refer to the GDSN 1WorldSync XML training modules outlined below.

STRATEGY FOR EDUCATING AND TRAINING SUPPLIERS ON GDSN AND NON-GDSN SOLUTIONS

Training will be held for GDSN and non-GDSN suppliers as part of the 1WorldSync GHSC-PSM on-boarding activities for suppliers to ensure that they are ready to start sending product content per GHSC-PSM requirements. Documentation, such as an Implementation Guide to support the GHSC-PSM GDSN roll-out, will, additionally, be made available on a customized GHSC-PSM landing page, hosted on the 1WorldSync website, for easy supplier access. Please
refer to Deliverable 2.0 *GDSN Data Pool and Supplier Registration Strategy* for more information regarding the strategy for educating suppliers on GDSN and non GDSN solutions.
TRAINING FOR THE 1WORLDSYNC SOLUTIONS

1WorldSync will train GHSC-PSM staff using online webinars. Phase 1 training will cover the 1WorldSync GDSN Data Pool, and will be conducted in three two-hour sessions at the beginning of the project. The modules include:

Session 1 Modules
1. Introduction to Data Synchronization
2. Supplier/Donor Product Packaging Levels and How They Relate to GDSN Item hierarchies
3. Things to Consider for Ingesting the Data Into the ARTMIS System
4. GDSN Core Attributes Review
5. GDSN Message Choreography/process

Session 2 Modules
1. Data Recipient Implementation Phases
2. GDSN Messages, Data Recipient Specific Messages
3. Data Recipient 1WorldSync XML / AS2 Overview

Session 3 Modules
1. GS1 Standards for GTIN Assignment
2. Business Process Review and Design
3. 1WorldSync Solution Center (where documentation is located)
4. Online IM system for subscription set up, CIC response creation and review, and Sync Status Report
5. Project Plan Review

Phase 2 training will cover the 1WorldSync non-GDSN Solution, and will be conducted in one one-hour session following the GDSN training outlined above.

GHSC-PSM has the choice to receive product content from non-GDSN suppliers either via Item Management using 1WorldSync XML or via Content1 APIs. Leverging the 1WorldSync XML means that 1WorldSync will push data to GHSC-PSM at a pre-determined set schedule based on GHSC-PSM master subscription. The Content1 APIs enable recipients to pull data as needed by using the Content1 Search and Fetch model schemas. GHSC-PSM has chosen to receive non-GDSN product content via 1WorldSync XML. The training outlined below will hereby provide an understanding of the 1WorldSync non-GDSN XML schemas to enable GHSC-PSM to implement an automated method to receive their non-GDSN suppliers’ published item information for integration into the ARTMIS system.

Session 1 Modules
1. Message Choreography and Process Flow
2. Supplier User Experience – Item Setup and Maintenance
3. Introduction to the non-GDSN 1WorldSync XML
4. Implementation Best Practices
5. Project Plan Review
Should GHSC-PSM choose to start pulling non GDSN product content via the Content1 APIs, additional training will be provided as outlined below. This training will provide information regarding the IWorldSync Content1 Search and Fetch API Model schemas to retrieve the latest updates on items in real-time and best practices regarding performing efficient and fast search operations on items.

Session 1 Modules
1. Introduction to Content1
2. Message Choreography/Process Flow
3. Product Search and Fetch API Model Schemas
4. Step-by-Step Instructions for Recipient Item Retrieval via API
5. Content1 Data Recipient Implementation Phases

Session 2 Modules
1. The IWorldSync Developer Site: Online Interactive API Toolkit and Documentation
   Content1 Attribute Mapping
2. Accessing and Using IWorldSync Webservices
3. Using the Product Search and Fetch API’s
4. Implementation Best Practices
ONGOING OPPORTUNITIES FOR TRAINING AND EDUCATION

There are several ongoing, on-demand training opportunities available to the GHSC-PSM and their suppliers as outlined below.

PUBLIC TRAINING OPPORTUNITIES

GHSC-PSM’s Landing Page will be publically available via the 1WorldSync data pool website to all GHSC-PSM suppliers and contains the information needed to start publishing data to GHSC-PSM. This includes but is not limited to the following documents:

- GHSC-PSM Data Synchronization Implementation Guide
- GHSC-PSM Data Attribute Guide
- GHSC-PSM Supplier FAQs

The GS1 Global Office also has a series of trainings regarding the use of GS1 standards in healthcare on their website: www.gs1.org/healthcare. This page also contains case studies and white papers along with registration information to conferences and events and regulatory information.

TRAINING OPPORTUNITIES FOR 1WORLDSYNC CUSTOMERS

The 1WorldSync Solution Center (https://solutioncenter.1worldsync.com) is a document repository containing training and implementation documents that can be leveraged by 1WorldSync customers. Find examples of training material available on the Solution Center listed below:

- The Education Calendar (See: Education and Training Tab)
  - The 1WorldSync Education consists of free and for fee training events and webinars that customers can register for regarding GDSN and the 1WorldSync Item Management tool etc.
- Essential Topics (See: Education and Training Tab, Essential Topics Folder)
  - On-demand training videos and documents regarding common GDSN concepts (e.g. GLN and GTIN Overview, Item Attributes, Message Choreography etc.)
  - Item Management Graphical User Interface incudes training modules on how to use the 1WorldSync Item Management tool to send data to GDSN recipients.
- Item Management Participant Dictionary (See: Implementation Tab, Attributes, Validation and Code List Folder)
  - Document outlining all GDSN and 1WorldSync attributes including information regarding attribute definition, common business use cases, data type etc. per attribute.
- Healthcare Webinars (See: Solution Center, Community Tab)
  - 1WorldSync hosts quarterly Healthcare Community webinars that suppliers can register for via the 1WorldSync Community Calendar.