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Trade Item Identification and Communications Guidelines for Electronic Data Interchange

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Document Revision History

Version	Date	Changed By	Revision Description
1	2001		
2	2012	Steven Rosenberg	Section 10.3 changed to Section 11; Section 12 added; enhancements supporting image file and image file transfer information. Terminology has been updated to reflect changes from UCC/EAN to GS1.
3	2014	Steve Rosenberg	Section 13 GS1 Apparel Extended Attributes is added
4	2015	Steve Rosenberg	No changes

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Preface

GS1 US provides these voluntary guidelines for communication of the Global Trade Item Number (GTIN) and the associated product identification as a service to industry. These guidelines are intended to facilitate the use of the GTIN in product identification and electronic commerce systems in all industries.

All companies utilizing this guideline are invited to submit change requests to GS1 US, Inc. Also, special circumstances, which make guideline adoption difficult or burdensome, should be referred to the GS1 US Inc. where the problem can be reviewed, a solution obtained, and that solution specified in future revisions of the manual.

The purpose of the Product Identification Data Communications Committee is to develop guidelines for the communication of data required to identify a product and its EAN/UPC Symbology. The chosen vehicle for communicating GTIN data is the Voluntary Interindustry Commerce Standards (VICS) Association Price/Sales Catalog (832) Transaction Set. The reader should use these guidelines in conjunction with the *VICS EDI Retail Industry Conventions and Implementation Guidelines for EDI*. This document contains the retail industry subset of the ANSI X12 Electronic Data Interchange (EDI) standards and the technical requirements for transmitting specific business documents, including the 832 Transaction Set.

This document was prepared by the VICS EDI Trade Item Identification and Communication Standing Task Group. It supersedes all prior dated versions of this publication bearing the same title as this document. These guidelines have been updated to reflect the functionality of Version 007020 of the VICS EDI Retail Industry Conventions and Implementation Guidelines for Electronic Data Interchange. The usage of some data elements referenced in this document is version-dependent; e.g., some data elements are not available for use in the 832 Transaction Set prior to Version 007020 of the VICS EDI guidelines.

1. Introduction

The VICS EDI Trade Item Identification and Communication Standing Task Group prepared this document. The charter of this task group is *"To develop and maintain Electronic Commerce implementation guidelines for trade item identification and the communication of related product information supporting item setup and maintenance*."

For the purpose of this document, a Global Trade Item Number, or GTIN, is the 14-digit reference field used to uniquely identify products or services for reference among all global participants of the supply chain. More simply put, a GTIN can be used for the unique identification of products and services worldwide.

Trade items are defined in the GS1*General Specifications* Glossary as "Any item (product or service) upon which there is a need to retrieve pre-defined information and that may be priced, ordered, or invoiced at any point in any supply chain." All identification numbers that identify products or services belong to a classification of GS1 System ID Numbers generically called Global Trade Item Numbers or GTINs.

There are four numbering structures for GTINs: GTIN-8, GTIN-12, GTIN-13, and GTIN-14.
While any of these ID numbers identifying a product or service is a GTIN, it is important to refer to them individually in certain contexts. In the sections that follow, the term GTIN will be used whenever specificity is not required, and the individual numbering structures will be referred to when it is necessary to refer to a specific numbering structure. See Appendix A for details about GTINs. Implementation of the GS1 System was brought about by the buyer's need to control inventory and communicate information to sellers at the lowest unit of measure. For apparel, this is style/color/size. Vendor marking with an EAN/UPC Symbol is recognized as the most practical and economical method of providing this unique SKU level coding.

The purpose of this document is to facilitate the implementation and use of GTINs in seller and buyer systems. It enumerates key considerations and provides an implementation strategy that is a composite of several successful implementations from a variety of environments. The intent is to provide a starting point for new users and to give sellers and buyers a perspective of how their implementations affect their trading partners. The various business processes supported by the U.P.C. Price/Sales Catalog are described in this guideline. Among these processes are item setup/item maintenance, complex shipping units, and imaging, as well as other topics. Section 10 has been added to provide U.P.C. Catalog Business Examples for both the seller and buyer.

Sellers manage hundreds of thousands of GTINs and buyers process millions of GTINs. The sheer volume of data necessitates that the integration of GTINs be accomplished with a high level of automation to ensure accuracy and timeliness.

Buyers and sellers may elect to utilize a third party U.P.C. Catalog service to provide some of the automation needed. In addition to communications and software services, certain third party service providers offer a U.P.C. Catalog, which is a central repository for information. This allows sellers to provide their U.P.C. Catalogs through a single source, allowing any number of buyers access to product information as needed. The seller controls access to this information.

The Electronic Data Interchange "Price/Sales Catalog" (VICS 832 Transaction Set) described in this document is the tool that enables sellers to effectively communicate GTINs and retailer/vendor product information to trading partners, either directly or via a third party U.P.C. Catalog. The major functions of the Price/Sales Catalog involve U.P.C. Catalog Operation, traditional seller's Catalog, item setup and maintenance, retail price communication, and imaging.

Using GTINs as the standard for product identification involves certain requirements. In order to provide customers with the right product at the right time, the GTIN should be fully integrated into internal systems and utilized by seller and buyer as follows:

- GTINs are correctly assigned by the seller.
- Bar code symbols on product packages and tickets are accurately printed.
- GTINs are accurately communicated by sellers to buyers electronically.
- GTINs are integrated into all systems throughout the seller's and buyer's total supply chain. Such systems include ordering, shipping, invoicing, planning, forecasting, Point-of-Sale, and price lookup.

2. Benefits

These guidelines should be used in conjunction with other key documents to get a complete understanding of implementation requirements. See Appendix D for a list of available reference materials.

The GTIN represents the common product identifier throughout the entire supply chain (sellers, buyers, and third parties). The use of the GTIN as part of the global identification numbering system provides a single, unique global number to represent the most detailed product identification (e.g., style/color/size for apparel items). When this standard identification is fully integrated into buyer and seller systems, the benefits are significant and far reaching throughout the entire global supply chain.

Consumer benefits include:

- Improved availability of the right merchandise in the right colors and sizes
- Faster check out transactions
- Detailed and accurate receipts
- Improved customer service
- Facilitated returns processing

Buyer benefits include:

- Improved sales associate productivity
- Faster, more accurate Point-of-Sale data capture
- Increased sales
- Correct pricing/price integrity
- Facilitated returns processing
- Facilitated floor-ready processes
- Fewer stock counts
- Better identification of markdown candidates
- Accurate item level inventories
- Accurate input to automated replenishment systems
- Faster receiving/turnaround in distribution center
- More efficient global sourcing
- No need to re-mark globally-sourced product

Seller benefits include:

- Accurate, timely capture of sales and inventory data for processing into replenishment, forecasting, planning, and sell-through applications
- Consistent coding and marking methodology for globally-sourced goods, which eliminates special ticketing for each buyer
- Accurate, timely reorders from retailers
- Improved availability of retail sell-through data at the trade item/color/size level
- Accurate input into automated replenishment systems
- No need of special ticketing for each retailer
- Increased sales
- Increased inventory turns

- Improved information on markdown items
- Improved finished goods inventory and outgoing shipment accuracy
- Reduced expense offsets
- Facilitated returns processing
- Reduced data entry costs

3. Implementation Guidelines and Considerations - Sellers

To ensure the effective and efficient communication of GTIN data, it is essential that the following issues be considered prior to implementation. A successful implementation depends on understanding these considerations as well as the information needs of trading partners.

The following topics are covered in this section:

A. Implementation steps

B. Color and size

C. GTIN retention rules

D. Timely setup of GTINs

E. Communication of GTIN and vendor product data

F. Error correction

3.1. Implementation Steps

3.1.1. Acquire a GS1 Company Prefix

Perform a thorough analysis of the quantity of ID numbers needed to fulfill requirements explained in this document.

In the United States, request a GS1 Company Prefix from GS1 US, and, based on your analysis, discuss the quantity of ID numbers needed.

In Canada, request a GS1 Company Prefix from the GS1 Canada.

Typically, the GS1 US assigns one GS1 Company Prefix per member company. Multiple GS1 Company

Prefixes may be issued when necessary.

Payment for membership in the GS1 US is based on the annual sales volume of the company.

In March 2000, the GS1 US announced that companies would begin to see GTIN-12 (U.P.C.) numbers beginning with the leading prefixes of 1,8 or 9 to accommodate the GS1 US's continued growth in membership. If you have internal applications that use 1,8 or 9, it is imperative that this practice be stopped. Companies that do not comply will find that uniqueness of both internal numbers and legitimate GS1 system numbers will be compromised. In addition, GS1 US began issuing eight digit company prefixes to companies that needed to identify fewer products. For example, a company that only needs to identify 1000 items would receive a company prefix that is eight digits long. Companies that need to identify larger numbers of products will continue to receive the traditional six digit company prefix. The six digit prefix allows the numbering of 100,000 trade items. The introduction of variable length prefixes does not impact current members who already have GS1 US Company Prefixes. The numbers and symbols they have created, or will create using their currently assigned GS1 US Company Prefix, will continue to be unique everywhere in the world. Printing of bar codes will also be unaffected.

By January 1, 2005, systems must be able to process a minimum of 13 digits at the POS. It is strongly recommended to expand all internal databases to accept the full 14-digit GTIN Format for ordering, shipping, and receiving.

The GTIN-12 (U.P.C.) Identification Number is a 12-digit number carried by a UPC-A Bar Code Symbol. It includes a UCC Company Prefix, an Item Reference that the seller assigns to each unique trade item/color ID/size ID combination, and a Check Digit.

The GTIN-13 Identification Number is a 13-digit number carried by the EAN-13 Bar Code Symbol. It includes an GS1 Company Prefix, an Item Reference the seller assigns to each unique trade item/color ID/size ID combination, and a Check Digit.

3.1.2. Third Party Electronic U.P.C. Catalog

Determine if you want your GTIN information stored in one or more of the Third Party Catalogs.

Section 6 explains the benefits of using a Third Party Catalog as well as the catalog

maintenance considerations.

3.1.3. GTIN Assignment

Assign in accordance with the appropriate GS1 US Guidelines .

Accuracy and consistency are essential.

Assign a GTIN to the most detailed level required to identify an individual trade item, e.g., a unique combination of trade item, color code, and size code.

Establish your trade items. The trade item (typically a style or model number) is the seller's primary identification of a product and the meaningful link to the GTIN for both seller and buyer.

"Made to stock" products should be established and GTINs assigned before the product is offered for sale (see *Item Setup/Item Maintenance* in Section 5.1).

The Item Reference must be represented consistently across all media, including tickets, U.P.C. Catalogs, glossy catalogs, and line/price listing to assist buyers in locating GTINs in their systems.

A product may have two types of descriptions associated with it.

- The primary 20-character description is mandatory and should be used at all times.
- An extended description of 40 characters may also be assigned. The extended description is optional and may be used to provide a longer, standalone, description.

The preferred trade item is void of any color and size implications, e.g., the trade item should be assigned at the style level, which includes all sizes and colors for the style. This enables a buyer to select a trade item and obtain all color and size information for that trade item.

Maintain a one-to-one relationship between GTIN and trade item/color ID/size ID, from the assignment date through the retention period.

3.1.4. Produce Tickets with GTIN and Vendor Product Data

Produce tickets in accordance with the *Apparel Guidelines: Format and Symbol Placement* available from the GS1 US.

The minimum required information specified by the guidelines for the seller's GTIN ticket is:

- Trade item
- Size description
- EAN/UPC Symbol and the human readable number
- Space for buyer's price ticket

Tickets may be produced in-house, by an outside service bureau, or by a combination of the two. The goal is to have 100 percent of the product marked at the time the product is shipped to the retail trading partner.

Regardless of how tickets are produced, the scannability of the tickets must be verified prior to placing them on merchandise.

3.1.5. Integration of GTINs into Internal Systems

Integrate the creation and maintenance of GTIN information into all appropriate internal management information systems.

Integration will help ensure integrity of GTIN data as well as enable the seller to exploit future opportunities for internal systems using GTINs.

- Implement systems and procedures to provide and maintain at least the minimum data required by trading partners.
- Provide access to product data using trade item/color ID/size ID for internal use as well as using the GTIN as an alternate key for inquiries on purchase orders or shipments from buyers.

3.2. Color and Size

1. Acquire a copy of the NRF (National Retail Federation) *Standard Color and Size Code Handbook*. This handbook is arranged in table format for all colors and sizes within the apparel, linen, domestics, and related household textile industries (see Appendix D).
2. Define colors and sizes using these standardized color and size codes.
3. Buyers utilize these codes to assist in the automated integration of the seller's GTINs into their systems.
4. If the automated analysis of selling trends by codes is communicated to the buyer, it must be represented consistently.
5. Primary size and color descriptions are limited to 10 characters. These descriptions are mandatory when defining color and/or size. In addition, an optional extended description of 25 characters may be used to provide a longer, standalone description.

3.3. GTIN Retention Rules

a. The GTIN and related trade item/color ID/size ID (seller SKU) information must be available to the buyer during the entire retail product life cycle. This life cycle includes buying and shipping from the seller, stocking and selling by the buyer, and post sales reporting. Therefore, the retention of this information in a seller's U.P.C. Catalog must be long enough to ensure the buyer has the correct information to scan and report.
b. A seller is permitted to delete a GTIN under specific circumstances. The two primary reasons for deletion are GTINs assigned to products never manufactured and GTINs for which the retention period has expired.
c. The one-to-one relationship between the GTIN and seller SKU must continue through the retention period.
d. The minimum retention period is 30 months for apparel items and 48 months for all other trade items. These are minimum periods that provide a reasonable amount of time for the SKU to pass through the retail product cycle.The seller must consider each SKU and its retail product cycle when deciding on the retention period. If the retail product life cycle for a particular SKU is longer than the minimum retention period, the seller is obligated to establish a retention period that accommodates that life. If an ID number has been assigned to a SKU that was never manufactured, the ID number may be deleted from the catalog immediately without first being marked as discontinued. The ID number may be reassigned to another SKU no earlier than **12 months** after deletion from the seller's catalog.

To properly maintain and manage ID numbers, several functions are available to the seller. The functions, described in detail in Appendix B, include:

Add a GTIN
Cancel a GTIN
Change a GTIN
Discontinue a GTIN
Delete a GTIN
Replace a GTIN
Reassign a GTIN
Reinstate a GTIN

3.4. Timely Setup of GTINs

1. Expediting GTIN information to buyers reduces order exception handling and reduces the lead-time in getting goods to the selling floor.
2. Identify all of the following in your product line (see Appendix A for the definitions and proper assignment of GTINs):
    a. Prepacks
    b. Multipacks
    c. Setpacks
    d. Purchase with Purchase (PWP)
    e. Gift with Purchase (GWP)
    f. Collateral items
3. Set up GTINs and product information and transmit them to trading partners as early in the selling cycle as possible.
4. "Make to stock" GTINs should be established before the product is offered for sale.
5. "Make to order" products may not be finalized until an order is received and will not always have a GTIN assigned at the time of the first sale. For additional guidance, see *Item Setup/Item Maintenance* in Section 5.1.

3.5. Communication of GTIN and Product Data

1. Distribute product information internally.
2. The seller's marketing, advertising, production, and customer service groups should have the GTIN and product information available as required.
    - Steps should be taken to ensure that product information is consistently communicated across all media.
    - GTIN data should be made available to buyers as soon as is practical in order for them to integrate
        - GTINs into their internal systems.

    A third party electronic U.P.C. Catalog service can facilitate providing maintenance data and subsets of a seller's catalog. The catalog services are set up to handle these important maintenance functions in a routine manner. See Section 6.2 for more detailed information about third party electronic catalogs.

    GTIN data should be communicated using the VICS EDI 832 Transaction Set. The use of EDI either directly or through a third party is strongly recommended as the medium for transmission.

    Timely and consistent transmission of maintenance data to all trading partners is critical to the continued success of any GTIN program.
3. Prepare and maintain catalog information.

    The GTIN is matched with the trade item/color ID/size ID information to create the catalog record. The minimum catalog data required is documented in Appendix B.

The seller should establish a logical product hierarchy. This starts with the catalog and is followed by the selection code, trade item, and ultimately, the GTIN.

Assign each GTIN a three-digit selection code based on the logical groupings as defined by the seller.

Establish systems and procedures for maintaining catalog information when products are replaced or discontinued.

4. Selection codes

   The selection code is a three-digit number assigned by the seller to facilitate access to a portion of the seller's catalog, thereby:

   - Enabling the seller to control access to product information
   - Reducing the volume of data transmitted to trading partners
   - Allowing buyers to manage only the catalog data they need
   - Utilize the selection code to subdivide a product line into logical groups of products.
   - Each GTIN has only one selection code.
   - Each of the three digits in the selection code can be individually addressed so that structuring the code can provide additional flexibility.

   For example, the first digit might designate brand and the second and third digits product category and subcategory. This would permit access to all products of a brand by selecting the first digit, while allowing access to product categories and subcategories by an appropriate combination of the second and third digits. Further segmentation by brand and product category can be achieved by selecting various combinations of the three digits.

   Products that could reasonably be substitutes for one another, based on agreement among trading partners, should have the same selection code.

   A trade item may reside in multiple selection codes; however, each GTIN can have only one selection code. For example, one trade item may have GTINs with sizes in the selection code for "boys'" as well as sizes in the selection code for "men's." However, a single GTIN cannot reside in both "boys'" and "men's" selection codes.

   Selection codes provide additional information to assist in managing a U.P.C. Catalog, but they do not make one trade item different from another. Therefore, two different trade items cannot have the same trade item number in a single U.P.C. Catalog even if they reside in different selection codes. For example, both a blender and a toaster may not be given trade item "1234," even if they are assigned different selection codes.

5. Transmit GTIN and product data to trading partners

   Extreme care should be taken to ensure that the seller's internal catalog is in synch with your trading partners' data (both buyers and third parties). Over time, however, the seller's internal item catalog can become substantially out of synch with partner catalogs due to errors, renumbering, or constant online updates. If this occurs, a re-send of the seller's entire catalog (called a "refresh") may be necessary. Procedures for accomplishing this should be worked out between partners, as there can be significant business issues for the receivers of catalog information when a refresh occurs.

   "Make to stock" goods - For third party catalogs, data can be sent on a regular schedule (daily, weekly, monthly, etc.) so long as any changes are available to the buyer before orders are generated. For transmitting directly to trading partners, seller and buyer should discuss which update procedures meet the needs of both partners (see *Item Setup/Item Maintenance* in Section 5.1).

   "Made to order" goods (special makeups and private label)- Sellers should discuss update procedures with all trading partners, including third party catalogs if applicable, and determine how to make the data available in time for it to be used in receiving and Point-of-Sale operations, as well as for reorders, if applicable (see *Item Setup/Item Maintenance* in Section 5.1).

   Third party catalog record updates should be captured and then communicated effectively and efficiently to all trading partners. Sellers should know which GTINs have been added, changed, or deleted since the last date the catalog information was communicated to a buyer or third party catalog.

3.6. Error Correction

Maintaining the integrity of GTIN information and communicating it correctly are essential to the success of

implementation. If errors do occur, they should be corrected internally and wherever these errors may have been transmitted (e.g., any third party catalog service and all buyers with whom you share GTINs). New GTIN

tickets must be printed if any product marking data is incorrect. Assuming that product marking is correct, GTIN data may be changed using action codes (see Appendix B). Change (04) and replace (05) codes are used to modify all fields except the key fields (GTIN, trade item, color ID, and size ID).

In the event one or more key fields is in error, e.g., the GTIN does not represent the trade item/color ID/size ID, you should reissue (code 18) the complete GTIN record, identifying the original trade item/color ID/size ID and the revised trade item/color ID/size ID. Correction of errors is critical, especially if your trading partners have received shipments and recorded sales using the original trade item/color ID/size ID. It is imperative that the original key fields are replaced so that a one-to-one relationship between GTIN and trade item/color ID/size ID is maintained in the GTIN database. All retail data associated with the original key fields should be linked to the revised trade item/color ID/size ID.

4. Implementation Guidelines and Considerations - Buyers

The following topics are covered in this section:

A. Implementation considerations

B. Integration of GTIN data into internal systems

C. GTIN cross-reference file

4.1. Implementation Considerations

1. Three of the most significant issues affecting a buyer's GTIN implementation are:

   The potential volume of GTINs that the buyer's automated system and buying staff must periodically process. The volume of GTINs processed will grow during the life of implementation. Adding a single large seller's catalog can greatly increase processing.
   The effective integration of GTINs with the buyer's internal identification of merchandise. This integration must be comprehensive, from product ordering, through receipt and distribution, to analysis of product sales.
   Keeping GTIN data up-to-date. This is essential for maintaining the integrity of merchandising data.
2. Ensure that the procedures for requesting and retrieving GTIN and vendor product data, as well as the format in which it is displayed, satisfy buyers' needs for obtaining product information.
3. Build quality control into the process. This is essential to the success of the buyer's GTIN integration. Exception reporting or notification should be made for certain conditions, such as when trade items are ordered with no associated GTIN.
4. Give special attention to training the buying and selling staffs. Proper use of the GTIN and standardized color and size numbers by the staff will improve the successful integration of this data into other trade item management systems.
5. Decide in which systems you would like to store primary or extended descriptions. Primary descriptions may continue to work well where field length is an issue; however, the extended descriptions may ease the task of product identification in certain applications.
6. NRF color and size codes
   Define colors and sizes using the National Retail Federation's (NRF) *Standard Color and Size Code Handbook* (see Appendix D for details on the NRF).
   Utilize these codes to assist in the automated integration of the seller's GTINs into internal systems and in the automated analysis of selling trends by color and size.
7. Decide whether it will be more effective to obtain data directly or through a third party catalog service. In addition, you may request an entire catalog or a subset of the catalog through the use of selection codes, trade items, etc., depending on your business needs (see Section 6.2).

4.2. Integration of GTIN Data into Internal Systems

1. Integrate receipt and maintenance of GTIN and vendor product data into internal management information systems, including Point-of-Sale, purchase orders, price look-up, accounts payable, receiving, etc.
2. Full integration will speed processing and improve accuracy for all transactions.
3. GTINs provide a precise method of product identification for electronic ordering. This eliminates any manual editing by the seller's personnel to make your product identifiers conform to the seller's system.
4. Use GTINs for fashion as well as basic merchandise in order to achieve full benefits of GTIN integration at Point-of-Sale.
5. Decide how product descriptions, and, if needed, color and size descriptions, will be utilized in your internal systems. A primary description should be assigned to each product, color and size. An optional extended description may be assigned to a product, color, or size to provide additional information. To address field length limitations in many applications, mandatory product descriptions are limited to a maximum of 20 characters. Mandatory color and size descriptions are limited to a maximum of 10

characters. Extended product, color, and size descriptions are limited to 40, 25, and 25 characters respectively.

6. Prior to generating an order, request and receive GTIN and product data using the VICS EDI 832 Transaction Set, either directly from sellers or through a third party catalog.

4.3. GTIN Cross-Reference File

The integration of the GTIN with the buyer's internal product identification is usually accomplished by means of a cross-reference capability. The effectiveness of cross-referencing depends on the ability to utilize the seller's GTIN during matching with the buyer's internal identifier(s). Three methods of accomplishing this are:

The manual review and matching of trade items at the level appropriate for ordering and sales tracking.

A manual match at the trade item level by the buyer, with automatic matching done at the color/size level using approved (standardized) color and size codes, or a series of maintained translation tables.

The complete automation of matching down to the trade item/color/size level using approved (standardized) color and size codes, or a series of maintained translation tables. This requires use of the seller's exact trade item.

The method chosen by the buyer will be affected by such factors as available automation resources, overall volume of GTINs processed, and the uniqueness of the buyer's internal product identification scheme.

Provide system flexibility to accommodate multiple GTINs for a single retail product, due to seasonal line creations and/or minor product modifications. The seller may change product identity and GTINs for reasons that are not significant enough to the buyer to separate the product from prior season's merchandise, and your systems should allow you to associate the selling history of the prior season's product with the new season's product.

Proper ongoing maintenance of the GTIN cross-reference file is essential to protect the integrity of the file.

- The system needs to handle all updates sent by the trading partner or third party catalog.
- The system should have the ability to distinguish between "active" and "inactive" GTINs. Inactive GTINs need to be available at the Point-of-Sale for some period of time, but should not be reordered.
- The system must correctly apply all date changes sent by trading partners or the third party catalog. These dates include catalog change dates as well as those associated with product availability and discontinuation.
- Sellers are permitted to delete GTINs for specific purposes. Caution must be exercised when processing these "delete" transactions to ensure the proper action is taken on the GTIN cross-reference file.

5. Business Processes

5.1. Item Setup/Item Maintenance

General Information

5.1.1. Global Compatibility of the Global Trade Item Number (GTIN)

GS1 manages the GS1 System, a system of specifications, guidelines, and standards. GS1 System GTINs are unique to each organization. The GS1 System is international and is used by multi-industry members.

5.1.2. Supplier Implementation Guidelines (Item Setup)

Implementation of the GTIN should be undertaken with the knowledge of how the data will be used after it leaves the supplier's confines. Consideration of the supplier's and buyers' needs will ensure mutual success.

5.1.3. Business Processes for Item Setup and Item Maintenance

Product development can be the result of a joint collaboration between the seller and buyer or the direct result of the seller's initiatives. One major factor in the process is the initial setup of product characteristics. Realistically, an item setup within a seller's system can take considerable time until a bill of material is fully developed. Therefore, essential pieces of information may be sent originally, then, as additional information becomes available in the seller's system, this information is sent to complete the full product setup.

5.1.4. Assignment Process

Because of the two distinct marketing processes, private label and open stock, a seller must have processes in place to accommodate both scenarios.

In both scenarios the trade item (typically a style number/style name identifier) is the seller's primary identification of a product and is the meaningful link to the GTIN for both seller and buyer. The trade item must be represented consistently across all media, including GTIN ticket/label, glossy catalog, electronic U.P.C. Catalog, line/price listing, etc., to assist the buyer in locating the GTIN and related trade item information.

Assignment of the GTIN and the transmission of data to a trading partner should come early in the selling process.

5.1.5. Made to Stock

In a "made to stock" scenario, the seller/marketer has more control and should be able to provide key and non-key fields based on the bill of materials. Therefore "made to stock" products should be established before the product is offered for sale.

5.1.6. GTIN Maintenance within the Seller's System

There are several broad maintenance processes in dealing with a product in the general retail industry. These maintenance issues normally deal with dates within the product life cycle.

- Add - Adding a New Product (GTIN)

There is a 02 qualifier in the BCT segment (BCT10 element) for this action. Available date is defined as first available ship date. This implies nothing about current availability. The availability date would be noted by the BCT10 02, followed by a DTM01 with a 018 qualifier.

- Change - There is a 04 qualifier in the BCT segment (BCT10) for this action.
- It allows for non-key fields to be changed along with date information associated with the product life cycle. Only the changed data elements need to be sent.
- Expiration/Discontinued Date - This is noted in the DTM01 with a 036 qualifier I n the BCT10

The purpose is to alert the buyer that the product will no longer be sold.

- Replace – there is a 05 qualifier in the BCT 10

It allows for non-key fields to be changed along with date information associated with the product life cycle. The **entire** GTIN record must be sent. This is the only method of blanking out a previously populated data element.

- Reissue – there is an 18 qualifier in the BCT 10.

It permits a seller to correct errors in the key fields. It cannot be used to create a new product for an exisiting GTIN. All four key fields must be sent (GTIN, product ID, Color ID, Size ID)

- Delete - Use to remove a GTIN from the catalog due to end of the product life cycle. This is noted in the BCT10 03 qualifier

This action can only be taken one year after the expiration/discontinued date. Deleting the GTIN from the catalog does not alter the minimum retention period required before reassignment of the GTIN as defined in these guidelines.

- Cancel - Use to remove a GTIN from the catalog when the trade item was NEVER manufactured. This is stipulated in the BCT10 01 qualifier.

This is a notification to the buyer that the trade item was never made or shipped. Therefore, the GTIN can be removed immediately from the catalog, but the GTIN cannot be reused for a period of one year.

5.1.7. Business Examples

A vendor would like to add new GTINs to their catalog.

This example adds six GTINs. The added GTINs are three variations using the ADD function:

A GTIN is added to the catalog, which is a standard prepack of three other GTINs in specified quantities (assortment). In order to define a prepack GTIN, each individual component GTIN must be defined completely via an LIN segment loop within the vendor catalog prior to assignment to the prepack GTIN. The three component GTINs are also added at this time in the example. Note for setpack use, the same format would be used except SP (setpack indicator) would be sent on the PID segment instead of PU (prepack indicator).

This example maintains a separate transaction set for each form of the add.

Relevant data:

1. GTIN: 012345000690

   Selection code/Desc: 103 Women's Blouses

   Trade item/Desc: 53467 Lace Camisole

   NRF color code/Desc: 101 Ivory

   NRF size code/Desc: 90001 Asst. 1

   Date of change: 95/01/14

This GTIN is a standard prepack of three other GTINs that can only be ordered in a prepack.

1. GTIN: 012345000645

   Trade item/Desc: 53467 Lace Camisole

   NRF color/Desc: 101 Ivory

   NRF size/Desc: 30902 Small

   Qty in prepack: 2

2. GTIN: 012345000652

   Trade item/Desc: 53467 Lace Camisole

   NRF color/Desc: 101 Ivory

   NRF size/Desc: 30903 Medium

Qty in prepack: 6

3. GTINs: 012345000669

   Trade item/Desc: 53467 Lace Camisole

NRF color/Desc: 101 Ivory

NRF size/Desc: 30904 Large

Qty in prepack: 4

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0003	***832*** is the Transaction Set Identifier for the Price/Sales Catalog Transaction Set. ***003*** is the transaction set control number
BCT*RC*6000010000*103*****02**	***RC*** is the Catalog Purpose Code indicating that this is traditional vendor data for U.P.C. Catalog. ***6000010000*** is the vendor ID, which identifies the vendor whose data is contained in the transaction. ***103*** is the selection code. ***02*** is the action code which means to add the data in the transaction set.
DTM*043*19950214	**0*43*** is the date/time qualifier, which indicates that the date that follows is a date of change. ***19950214*** is the date of change.
LIN*1*UP*012345000645*VA*53467*SM*30902*CM*101	***1*** is the assigned identification number for this line item. ***UP*** is the trade item qualifier, which indicates the number that follows is a 12-digit GTIN. ***012345000645***. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***53467*** is the trade item. ***SM*** is the trade item qualifier, which indicates the trade item that follows is a National Retail Federation (NRF) size code. ***30902*** is the NRF size code. ***CM*** is the trade item qualifier, which indicates the trade item that follows is a National Retail Federation (NRF) color code. ***101*** is the NRF color code.
PID*F*08*LACE CAMISOLE**	***F*** is the item description type, which indicates that the information following will be free-form text that will be found in PID05. ***08*** is the product/process characteristic code, which identifies the text in PID05 as a product description. ***LACE CAMISOLE*** is the product description.
PID*SVI*PP**	***S*** is the item description type, which indicates that the information following will be structured (From industry code list) that will be found in PID03 & PID04. ***VI*** is the agency qualifier code, which indicates that the code following is a VICS assigned code. ***PP*** is the product description code, which indicates that the GTIN on the preceding LIN is an item that is only sold as part of a prepack (assortment).
PID*F*73*IVORY**	***F*** is the item description type, which indicates that the information following will be free-form text that will be found in PID05. ***73*** is the product/process characteristic code, which identifies the text in PID05 as a color description. ***IVORY*** is the color description.

EDI TRANSMISSION DATA	EXPLANATION
PID*F*74*SMALL**	***F*** is the item description type, which indicates that the information following will be free-form text that will be found in PID05. ***74*** is the product/process characteristic code, which identifies the text in PID05 as a size description. ***SMALL*** is the size description.
LIN*1*UP*012345000652*VA*53467*SM*30903*CM*101	***1*** is the assigned identification number for this line item. ***UP*** is the trade item qualifier, which indicates the The number that follows is a GTIN, ***012345000652***. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***53467*** is the trade item. ***SM*** is the trade item qualifier, which indicates that the trade item that follows is a National Retail Federation (NRF) size code. ***30903*** is the NRF size code. ***CM*** is the trade item qualifier, which indicates that the trade item that follows is a National Retail Federation (NRF) color code. ***101*** is the NRF color code.
PID*F*08*LACE CAMISOLE**	***F*** is the item description type, which indicates that the information following will be free-form text that will be found in PID05. ***08*** is the product/process characteristic code, which identifies the text in PID05 as a product description. ***LACE CAMISOLE*** is the product description.
PID*SVI*PP**	***S*** is the item description type, which indicates that the information following will be structured (From industry code list) that will be found in PID03 & PID04. ***VI*** is the agency qualifier code, which indicates that the code following is a VICS assigned code. ***PP*** is the product description code, which indicates that the GTIN on the preceding LIN is an item that is only sold as part of a prepack (assortment).
PID*F*73*IVORY**	***F*** is the item description type, which indicates that the information following will be free-form text that will be found in PID05. ***73*** is the product/process characteristic code which identifies the text in PID05 as a color description. ***IVORY*** is the color description.
PID*F*74*MEDIUM**	***F*** is the item description type, which indicates that the information following will be free-form text that will be found in PID05. ***74*** is the product/process characteristic code, which identifies the text in PID05 as a size description. ***MEDIUM*** is the size description.

EDI TRANSMISSION DATA	EXPLANATION
LIN*1*UP*012345000669*VA*53467*SM*30904*CM*101	***1*** is the assigned identification number for this line item. ***UP*** is the trade item qualifier, which is followed by the GTIN - ***012345000669.*** ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***53467*** is the trade item. ***SM*** is the trade item qualifier, which indicates that the trade item that follows is a National Retail Federation (NRF) size code. ***30904*** is the NRF size code. ***CM*** is the trade item qualifier, which indicates that the trade item that follows is a National Retail Federation (NRF) color code. ***101*** is the NRF color code.
PID*F*08*LACE CAMISOLE**	***F*** is the item description type, which indicates that the information following will be free-form text that will be found in PID05. ***08*** is the product/process characteristic code, which identifies the text in PID05 as a product description. ***LACE CAMISOLE*** is the product description.
PID*SVI*PP**	***S*** is the item description type, which indicates that the information following will be structured (from industry code list) that will be found in PID03 & PID04. ***VI*** is the agency qualifier code, which indicates that the code following is a VICS assigned code. ***PP*** is the product description code, which indicates that the GTIN on the preceding LIN is an item that is only sold as part of a prepack (assortment).
PID*F*73*IVORY**	***F*** is the item description type, which indicates that the information following will be free-form text that will be found in PID05. ***73*** is the product/process characteristic code, which identifies the text in PID05 as a color description. ***IVORY*** is the color description.
PID*F*74*LARGE**	***F*** is the item description type, which indicates that the information following will be free-form text that will be found in PID05. ***74*** is the product/process characteristic code, which identifies the text in PID05 as a size description. ***LARGE*** is the size description.
LIN*4*UP*012345000690*VA*53467*SM*90001*CM*101	***4*** is the assigned identification number for this line item ***UP*** is the trade item qualifier, which indicates the The number that follows is a GTIN ***012345000690***. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***53467*** is the trade item. ***SM*** is the trade item qualifier, which indicates that the trade item that follows is a National Retail Federation (NRF) size code. ***90001*** is the NRF size code. Size codes within the 90000 series indicates that the GTIN is prepack or setpack. ***CM*** is the trade item qualifier, which indicates that the trade item that follows is a National Retail Federation (NRF) color code. ***101*** is the NRF color code. This indicates that all of the items within the assortment are the same color.

EDI TRANSMISSION DATA	EXPLANATION
SLN*4.1I*2*EA****UP*012345000645**	***4.1*** is the assigned identification. The "4" associates the SLN with LIN 4 and the ".1" conveys that it is the first SLN related to this particular LIN. ***I*** is the relationship code which indicates that the GTIN is Included in the assortment. ***2*** is the quantity of item that is included in the assortment. ***EA*** is the unit of measure related to the quantity. ***UP*** is the trade item qualifier, which indicates that the trade item that follows is a 12-digit GTIN. ***012345000645*** is the GTIN of this component of the assortment.
SLN*4.2I*6*EA****UP*012345000652**	***4.2*** is the assigned identification. The "4" associates the SLN with LIN 4 and the ".2" conveys that it is the second SLN related to this particular LIN. ***I*** is the relationship code which indicates that the GTIN is Included in the assortment. ***6*** is the quantity of this item that is included in the assortment. ***EA*** is the unit of measure related to the quantity. ***UP*** is the trade item qualifier, which indicates the trade item that follows is a 12-digit GTIN. ***012345000652*** is the GTIN of this component of the assortment.
SLN*4.3I*4*EA****UP*012345000669**	***4.3*** is the assigned identification. The "4" associates the SLN with LIN 4 and the ".3" conveys that it is the third SLN related to this particular LIN. ***I*** is the relationship code which indicates that the GTIN is included in the assortment. ***4*** is the quantity of this item that is included in the assortment. ***EA*** is the unit of measure related to the quantity. ***UP*** is the trade item qualifier, which indicates the trade item that follows is a GTIN. ***012345000669*** is the GTIN of this component of the assortment.
PID*F*08*LACE CAMISOLE**	***F*** is the item description type, which indicates that the Information following will be free-form text that will be found in PID05. ***08*** is the product/process characteristic code, which identifies the text in PID05 as a product description. ***LACE CAMISOLE*** is the product description.
PID*SVI*PU**	***S*** is the item description type, which indicates that the Information following will be structured (from industry code list) that will be found in PID03 & PID04. ***VI*** is the agency qualifier code, which indicates that the code following is a VICS assigned code. ***PU*** is the product description code, which indicates that the GTIN on the preceding LIN is a prepack GTIN.
PID*F*73*IVORY**	***F*** is the item description type, which indicates that the information following will be free-form text that will be found in PID05. ***73*** is the product/process characteristic code, which identifies the text in PID05 as a color description. ***IVORY*** is the color description.

EDI TRANSMISSION DATA	EXPLANATION
PID*F*74*ASST. 1**	***F*** is the item description type, which indicates that the Information following will be free-form text that will be found in PID05. ***74*** is the product/process characteristic code which identifies the text in PID05 as a size description. ***ASST. 1*** is the size description, indicating it is an assortment.
CTT*4	***4*** is the number of line items (LIN segments) present in this transaction set.
SE*28*0003	***28*** is the number of included segments in this transaction set, including the ST and SE segments. ***0003*** is the transaction set control number.

***Note:* *** Indicates a data element separator

BUSINESS SCENARIO – REPLACE

A vendor would like to replace GTIN information on their catalog.

The replace transaction code is used by the vendor to completely REPLACE all information except the key fields GTIN, trade item, color code, and size code) with new information. This transaction is used instead of the change transaction type when all fields are to be overlaid. The REPLACE is also considered the appropriate method to handle changes either to prepack (and setpack), sub-line item information, or pricing. The REPLACE is NOT utilized to issue a new GTIN in place of an existing GTIN due to seasonal or other changes where the retailer may desire to retain old sales history data for the new GTIN. In that case, the ADD transaction type is used as shown in a previous example.

5.2. Advanced Business Challenges

5.2.1. Gift with Purchase/Purchase with Purchase/Collateral Item

A **Gift with Purchase** (GWP) is a trade item given to a consumer as part of a promotional event, contingent on the consumer making a purchase of another item or items. A Gift with Purchase is considered inventory and has no retail value.

A **Purchase with Purchase (**PWP) is a trade item sold to a consumer at a special price as part of a promotional event, contingent on the consumer purchasing another item or items. A Purchase with Purchase is considered inventory and has a retail value.

When assigning and tracking GTINs for Gift With Purchase and Purchase With Purchase trade items, the following needs to be considered:

GTINs should be assigned to all Gift With Purchase (GWP) and Purchase With Purchase (PWP) items.

GWP and PWP items should be marked with GTINs.

GWP and PWP items should be identified as such in a VICS EDI Price/Sales Catalog Transaction Set (832) using codes “GW” and “PW” respectively in PID04.

When a PWP item ***is*** offered across multiple merchandising categories/departments, consider how retailers will track sales and inventory.

PWP items should not be converted to GWP items, or vice versa, without creating a new trade item and assigning new GTINs.

5.2.1.1. Collateral Items

A collateral item is a trade item delivered from a manufacturer to the retail selling floor that is not considered

inventory and has no retail value

When assigning and tracking GTINs for collateral items, the following need to be considered:

GTINs should be assigned to all collateral items.

Collateral items should be identified as such in a VICS EDI Price/Sales Catalog Transaction Set (832) using code “CL” in PID04.

5.3. Prepack/Setpack/Multipack

For a prepack or standard assortment of trade items, each different item within the prepack will be assigned a GTIN maintaining the one-to-one relationship between trade item/color ID/size ID and GTIN. Each of the component GTINs is scannable at the Point-of-Sale and may or may not be orderable separately outside of the prepack. In addition, a separate, unique GTIN is assigned to each orderable prepack. This GTIN is not scanned by the retailer at the Point-of-Sale. The NRF size code for the orderable prepack GTIN will be assigned in the 90001-91999 range, reserved for prepacks and setpacks. A valid NRF color code will be assigned to the GTIN when all trade items are of the same color in the prepack; otherwise, the NRF color code
999- assorted is assigned. The 90001-91999 size code assignment denotes prepacks whether the prepack is assorted by size only, color only, or both size and color. Different prepacks of trade items are assigned different GTINs when either the component item or quantity contents of the prepacks are different.

A multipack is a group of trade items (the same or different) that are intended to be sold as a single consumer unit at the Point-of-Sale (e.g., a three-pack of men's white T-shirts or a 12-piece set of glassware). A multipack is not intended to be broken apart and sold as individual trade items. A multipack is assigned a GTIN that is different from the GTIN that may be assigned to the individual trade items. Generally components of a multipack are not marked with individual trade item GTINs. Each different multipack of the same trade items (e.g., three-pack socks versus six-pack socks) must have a different GTIN assigned. Each different multipack GTIN must also have its own trade item/color ID/size ID.

For a setpack, each different trade item within the setpack will be assigned a GTIN, maintaining the one-to-one relationship between trade item/color ID/size ID and the GTIN. The individual trade item GTIN must be scannable at the Point-of-Sale and may or may not be orderable separately outside the setpack(s). A separate and unique GTIN is assigned to each setpack. This GTIN is also scannable at Point-of-Sale. The NRF size code for the orderable setpack GTIN will be assigned in the 90001-91999 range, reserved for prepacks and setpacks. A valid NRF color code will be assigned to the setpack GTIN when all trade items are of the same color in the setpack, otherwise the NRF color code 999-assorted is assigned. Different setpacks are assigned different GTINs when either the trade item or quantity contents are different.

	PACK			INDIVIDUAL ITEMS OF THE PACK		
	Orderable by Retailer	**Sell to Consumer**	**GTIN Marked**	**Orderable by Retailer**	**Sell to Consumer**	**GTIN Marked**
Prepack	Yes	No	Yes	Maybe	Yes	Yes
Multipack	Yes	Yes	Yes	No	No	No
Setpack	Yes	Yes	Yes	Maybe	Yes	Yes
Notes:	**1**	GTINs on individual trade items in a multipack are optional.				
	2	GTINs in a **setpack** are required because the individual pieces are available for sale to the consumer.				
	3	Individual components of prepacks and setpacks may be ordered separately based on individual partnership agreement.				

5.4. Multiple Language Descriptions and Currency

The VICS Guidelines support the identification of multiple language descriptions and currencies. This

information can be communicated at the header and detail levels.

Currency:

The VICS Guidelines provide that unless specified, all monetary values are expressed in the currency of the transaction originator. Where it is necessary to specify currency, this is accomplished using the CUR segment. The presence of a CUR segment at the header level indicates that the specified currency applies to the entire transaction set. The CUR segment may also be used at the item level to override the header or 'default' currency. This is necessary when multiple cost or retail prices must be specified.

Language Descriptors:

The VICS Guidelines allow sellers to describe products in multiple languages. This is accomplished through the PID segment. When used at the item level, multiple iterations of the PID may be used for each language description required.

Unless otherwise specified, it is assumed that the language used requires a single byte per character (e.g., English, French, Spanish). Other character sets may be necessary to support specific language requirements (e.g., double-byte characters such as Japanese).

5.4.1. Business Examples

Business Example: Seller specifies unit cost price for product in US dollars and Canadian dollars. Default is US dollars.

Business Scenario:

The vendor is based in the United States and wants to add a trade item that is available to buyers in Canada and the United States. All currencies are in US dollars, and all product descriptions are in English unless specifically stated in the detail area of the transaction.

Relevant data:	GTIN	012345000621
	Color code	Red, Rouge
	Size code	Small, Petite
	Currency	US dollars, Canadian dollars
	Product description	Silk Blouse, Chemisier en soie

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001	***832*** is the Transaction Set Identifier for the Price/Sales Catalog Transaction Set. ***001*** is the transaction set control number.
BCT*RC*6000010000*103****WOMEN'S BLOUSES*02**	***RC*** is the catalog purpose code indicating that this is to set a U.P.C. Catalog profile. ***6000010000*** is the vendor ID, which identifies the vendor catalog. ***103*** is the selection code to be associated with the GTIN. ***02*** is the action code, which means add to the vendor's catalog information.
DTM*092*19991231	***092*** is the date qualifier indicating that the next field contains the date the item is available for ordering. ***19991231*** is the first order date.

EDI TRANSMISSION DATA	EXPLANATION
LIN*1*UP*012345000621*VA*55467*SM*30108*CM*100	***1*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***5546***7 is the trade item. ***012345000621*** is the GTIN. ***SM*** is the trade item qualifier, which indicates the trade item that follows is an NRF size code. ***30108*** is the NRF size code assigned to the GTIN. ***CM*** is the trade item qualifier, which indicates the trade item that follows is an NRF color code. ***100*** is the NRF color code assigned to the GTIN.
PID*F*08*SILK BLOUSE**	***F*** is the item description type which indicates that the information following will be free-form text that will be found in PID05. ***08*** is the product/process characteristic code, which identifies the text in PID05 as a product description. ***SILK BLOUSE*** is the product description.
PID*F*73*RED**	***F*** is the item description type, which indicates that the information following will be free form text that will be found in PID05. ***73*** is the vendor's color description. ***RED*** is the product color.
PID*F*74*SMALL**	***F*** is the item description type, which indicates that the information following will be free-form text that will be found in PID05. ***74*** is the vendor's size description. ***SMALL*** is the product size.
PID*F*08*CHEMISIER EN SOIE***FR**	***F*** **i**s the item description type, which indicates that the information following will be free form text that will be found in PID05. ***08*** is the product/process characteristic code, which identifies the text in PID05 as a French product description. ***CHEMISIER EN SOIE*** is the product description in French. FR is the ISO code, which specifies French.
PID*F*73*ROUGE***FR**	***F*** is the item description type, which indicates that the information following will be free form text that will be found in PID05. ***73*** is the vendor's color description. ***ROUGE*** is the product color in French. ***FR*** is the ISO code, which specifies French.
PID*F*74*PETITE***FR**	***F*** is the item description type, which indicates that the information following will be free-form text that will be found in PID05. ***74*** is the vendor's size description. ***PETITE*** is the product size in French. ***FR*** is the ISO Code 639, which that specifies French.
CTPUCP*55**	***UCP*** is the identifier code, which indicates that the price is the vendor's unit cost price. ***55*** is the unit cost price. The vendor is based in the United States so the currency is assumed to be in US dollars.

EDI TRANSMISSION DATA	EXPLANATION
CTPUCP*65**	***UCP*** is the identifier code, which indicates that the price is the vendor's unit cost price. ***65*** is the unit cost price in Canadian dollars.
CUR*SE*CAD	***SE*** is the identification code, which indicates selling party ***CAD*** is the ISO code, which specifies the stated price is in Canadian dollars.
CTT*1	***1*** is the number of line items (LIN segments) present in this transaction set.
SE5*0001**	***5*** is the number of included segments in this transaction set, including the ST and SE segments. ***0001*** is the transaction set control number.

5.5. Acquisitions and Mergers

In mergers and acquisitions the opportunity to reengineer your item setup and GTIN assignment process should be considered. You must evaluate your situation based on inventory, systems, customer base, and timeline.

Considerations should be given to legacy systems, standards, customer requirements, product identification, and third party UPC Catalogs. Within these guidelines you must be cognizant of the timeframe and resources given to you. Within the analysis of the system, such things as product master similarities, trade items, and other vital information associated with the set up and maintenance of GTINs should be considered. The first step should be to analyze the existing assignment process across all companies involved. Attention should be given to inventory positions, quantity of inventory, the various package types, whether the product will be continued, and the impact of a re-labeling effort. A key principle should be not to disrupt the flow of business.

Communication with your customers is essential. Discussion of the different options and how they will affect your customers is important. Be prepared to make accommodations, as you will not be able to please everyone.

After evaluating your position you will need to decide whether or not to retain the existing GTINs and transfer them to your system or change the GTINs and re-label the product. If you retain the GTINs you will need to convert them and the associated product information into your product master. Review the trade items. Will they work in the new system, or will you need to change them? If the trade items need to be changed, a PID cross-reference list must be developed and made available to your customers.

If new GTINs need to be assigned, the inventory will need to be re-labeled as well. Internal processes must be implemented to include adjusting finished goods, work in process, and sourcing contracts. If you choose this alternative, a GTIN cross-reference list must be provided to your customers. Be prepared to give special assistance where necessary.

Conditions may require that the FOB (freight on board) point be changed to a new destination.

Overall, special attention needs to be given to your customer/buyer with a merger or acquisition.

5.6. Packaging Hierarchies

5.6.1. What are Packaging Hierarchies?

The term "packaging hierarchies" is used to represent the various physical packaging levels related to one or more products. Each higher packaging level can be comprised of one or more components from any lower packaging level. Any packaging level may or may not be an orderable unit by itself. This is indicated by the supplier for each packaging level. A product of a particular packaging level is orderable by a retailer when the supplier provides the "unit cost" for that packaging level of product. A trade item is deemed a consumer unit when the supplier provides the "manufacturer's suggested retail price" for that packaging level of product.

The most common packaging levels are described in the table below. The lower the "Packaging Level" number, the larger the packaging container. In usual business practice, one type of packaging container may

be a component of any other packaging container having an equal or higher “Packaging Level” number. For

example, a “Case” (level 3) may be a component of either a Module (level 2) or a Pallet (level 1); however, a “Case” (level 3) may not be a component of a Consumer Unit Item (level 6).

Packaging Level **(the lower the number, the higher the packaging level)**	**Packaging Container**	**Definition**
1	Pallet	The largest orderable unit, usually containing multiple components. Contains one or more components comprised of lower packaging levels—most often modules and/or cases representing one or more types of product.
2	Module	Contains one or more components comprised of lower packaging levels—most often cases representing one or more types of product.
3	Case	Contains one or more components comprised of lower packaging levels—most often inner packs and consumer unit items.
4	Inner Pack	May or may not be an orderable unit by itself. Most often contains fixed quantities of consumer unit items. May or may not be marked with a GTIN.
5	Prepack/Assortment	Contains multiple components, each of which represents a unique consumer unit item by color and size. Includes “prepacks” and “setpacks.”
6	Consumer Unit Item	Unique items purchased at Point-of-Sale by the consumer. Includes “multipacks” purchased by consumers, as multipack components are not sold to consumers individually.

5.6.2. Identifiers Representing Packaging Levels

The types of GTIN identifiers used to represent hierarchical packaging levels include those shown below: X12 qualifier codes UA and UE have been removed from use effective with X12 version 5030.

GTIN Qualifier	***GTIN Type/Description***	***Used to Represent***
EN	**GTIN-13**	**Consumer unit** **Inner pack** **Case: when the case may be sold to consumers**
EO	**GTIN-8**	**Consumer unit** **Inner pack** **Case: when the case may be sold to consumers**
UA	Logistic Unit Identifier – **NO LONGER USED**	**Case**
UE	UCC-12 (U.P.C.) ID Number-**NO LONGER USED**	**Module**
UK	**GTIN-14** (A GTIN-14 may represent any level of product. Code UK previously represented an SSCC value only.)	**Case** **Module** **Pallet**

GTIN Qualifier	*GTIN Type/Description*	*Used to Represent*
UP	**GTIN-12 (U.P.C.) ID Number**	**Consumer unit** **Inner pack** **Case: when the case may be sold to consumers**

5.6.2.1. Basic Principles

There are three basic principles that are fundamental when defining packaging hierarchies. These include the following:

Principle 1: Inner Components Must Already Exist

Components of an outer container must already have been defined as stand-alone GTINs before they can be defined as components of the outer container. The requirement is that various related packaging levels must be communicated from lowest level to highest level, implying that a consumer unit and related attributes must be transmitted to trading partners before the case that contains the consumer unit may be transmitted.

Attributes for each packaging level in a hierarchy are transmitted in the 832 LIN loop. The logical links between packaging levels are transmitted in 832 SLN segments for the current LIN loop representing one packaging level of product.

For example, a pallet (identified by UPC1) contains two cases of one product (identified by UPC2) and four cases of another product (identified by UPC3). Case UPC2 contains 12 consumer unit items each marked with UPC4. Case UPC3 contains 24 consumer unit items each marked with UPC5.

The supplier must transmit the GTINs and related attributes for each packaging level in the following order:

Line item 1: LIN segment: consumer unit UPC4

Line item 2: LIN segment: consumer unit UPC5

Line item 3: LIN segment: case UPC2

SLN segment: contains 12 quantity of UPC4

Line item 4: LIN segment: case UPC3

SLN segment: contains 24 quantity of UPC5

Line item 5: LIN segment: pallet UPC1

SLN segment: contains two cases of UPC2

SLN segment: contains four cases of UPC3

This principle holds true regardless of whether the catalog information is transmitted via 832 or entered online.

Principle 2: No Duplication of GTIN Attributes

Descriptive product attributes for a GTIN, regardless of packaging level, are transmitted in the 832 Detail Area LIN loop. Only those attributes that specifically apply to the packaging level identified by the GTIN in the LIN segment should be transmitted within the current LIN loop.

For example, “manufacturer’s suggested retail price” is an attribute relevant to a consumer unit item, but not relevant to the case that contains that consumer unit item. Likewise, the dimensions of the consumer unit are relevant only to the GTIN identifying the consumer unit, and the dimensions of the associated case are relevant only to the GTIN identifying the case. Order quantities may apply to any packaging level that the retailer can order from the supplier, and most often apply to levels higher than “consumer unit.”

As described in the previous section, the fact that logical links are established between related packaging levels means that only those attributes relevant to a particular packaging level need to be transmitted with that GTIN. By navigating the logical links representing the packaging hierarchy (e.g., pallet to case to item) the pertinent information at each packaging level is readily available without duplication at other levels. Following this principle also eliminates the possibility of receiving conflicting attribute values for the same GTIN.

Only the GTIN, configuration code, quantity, and unit of measure are required when defining the inner components of an outer packaging level, whether online or via the 832 SLN segment. The only exception to this rule is “multipack components", which are not identified by GTINs.

In the case of true “multipacks", where the inner components do not have GTINs associated with them, but most likely do have style, color, size, or other individual attributes, then the related component definitions may contain one or more of these additional product attributes in associated SLN segments.

Principle 3: Either a G55 or a G39 May Be Transmitted for One Packaging Level, but not Both

When defining a GTIN and related attributes within an LIN loop that represents a particular packaging level, either a G55 segment or a G39 segment, but not both, an 832 transmission may be used to transmit dimensions, inner pack information, weight, volume, and other related attributes.

A G39 segment may be provided when the GTIN in the LIN defines a packaging level other than base “consumer unit". This implies that the packaging level being described is, in the majority of instances, not sold to the consumer.

* EO, EN, and UP will only appear in a G39 segment when it represents a case (e.g., a case of soft drinks) that can be sold to the consumer, and the case is also the supplier selling unit to the retailer. In this instance, the case is marked with a different GTIN than are the individual cans of soda.

A G55 segment may be provided when the GTIN in the LIN defines a “consumer unit” (e.g., an item that actually crosses the Point-of-Sale). Valid GTIN types for G55 segments include the following:

EO: EAN-8 ID Number*

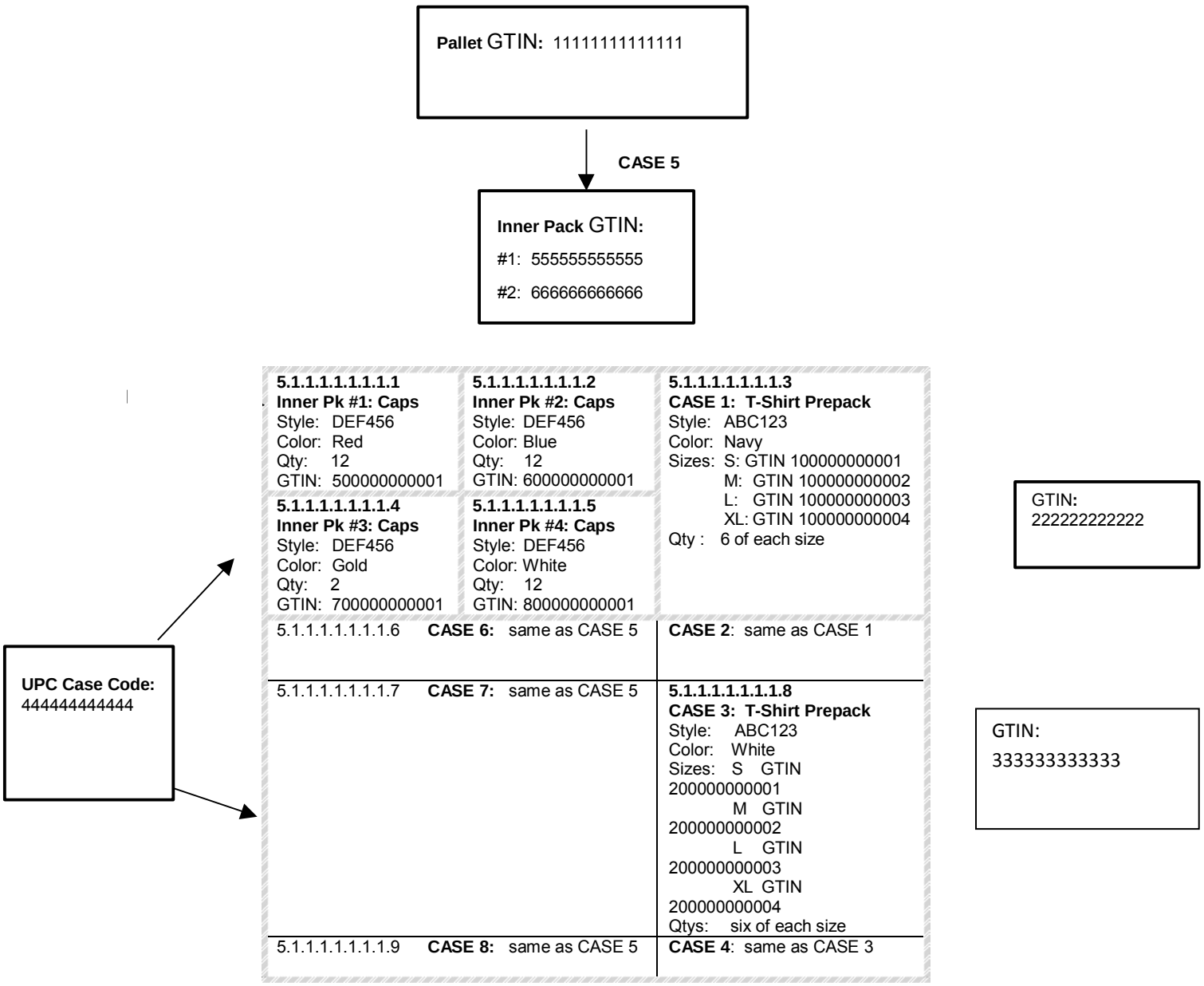
EN: EAN-13 ID Number*

UP: GTIN-12 (U.P.C.) ID Number *

5.6.2.2. Business Example

Diagram

To understand how related packaging hierarchies are transmitted in the 832 Transaction Set, consider the following diagram that illustrates a pallet that contains multiple quantities of different types of cases as well as cases containing both consumer units and marked inner packs. The supplier pallet contains a variety of merchandise (caps and T-shirts) related to the Olympic Games. The pallet is the only packaging level that a retailer can order from the supplier.


Pallet GTIN: 11111111111111
CASE 5
Inner Pack GTIN:
#1: 555555555555
#2: 666666666666
5.1.1.1.1.1.1.1.1
Inner Pk #1: Caps
Style: DEF456
Color: Red
Qty: 12
GTIN: 500000000001
5.1.1.1.1.1.1.1.2
Inner Pk #2: Caps
Style: DEF456
Color: Blue
Qty: 12
GTIN: 600000000001
5.1.1.1.1.1.1.1.3
CASE 1: T-Shirt Prepack
Style: ABC123
Color: Navy
Sizes: S: GTIN 100000000001
M: GTIN 100000000002
L: GTIN 100000000003
XL: GTIN 100000000004
Qty : 6 of each size
GTIN:
222222222222
5.1.1.1.1.1.1.1.4
Inner Pk #3: Caps
Style: DEF456
Color: Gold
Qty: 2
GTIN: 700000000001
5.1.1.1.1.1.1.1.5
Inner Pk #4: Caps
Style: DEF456
Color: White
Qty: 12
GTIN: 800000000001
UPC Case Code:
444444444444
5.1.1.1.1.1.1.1.6 CASE 6: same as CASE 5
CASE 2: same as CASE 1
5.1.1.1.1.1.1.1.7 CASE 7: same as CASE 5
5.1.1.1.1.1.1.1.8
CASE 3: T-Shirt Prepack
Style: ABC123
Color: White
Sizes: S GTIN
200000000001
M GTIN
200000000002
L GTIN
200000000003
XL GTIN
200000000004
Qtys: six of each size
GTIN:
333333333333
5.1.1.1.1.1.1.1.9 CASE 8: same as CASE 5
CASE 4: same as CASE 3

5.6.3. Text Description

Here is the text description of the packaging hierarchies illustrated in the diagram above:

PALLET: The pallet is marked with the 14-digit GTIN "11111111111111."

It contains:

- two cases of navy T-shirt prepacks (cases 1 and 2)
- two cases of white T-shirt prepacks (cases 3 and 4)
- four cases of caps (cases 5, 6, 7, and 8)

The dimensions of the pallet are 6'Lx6'Wx6'H; it weighs 72 pounds. Its list cost is $1000.

CASES 1 and 2: These cases are identical and are marked with the same 12-digit Logistic Unit Identifier "222222222222." They represent prepacks of navy T-shirts in various sizes. Each case contains six quantity each of the following navy T-shirts (consumer unit items)—a total of 24 navy T-shirts whose manufacturer's suggested retail price is $25.00 each:

GTIN 100000000001 (size S)

GTIN 100000000002 (size M)

GTIN 100000000003 (size L)

GTIN 100000000004 (size XL)

The case container is a cardboard box. Its dimensions are 3'Lx2'Wx2'H; it weighs 10 pounds.

The consumer units are each wrapped in plastic.

CASES 3 and 4: These cases are identical and are marked with the same 12-digit Logistic Unit Identifier "333333333333." They represent prepacks of white T-shirts in various sizes. Each case contains six quantity each of the following white T-shirts (consumer unit items)—a total of 24 white T-shirts whose manufacturer's suggested retail price is $25.00 each:

GTIN 200000000001 (size S)

GTIN 200000000002 (size M)

GTIN 200000000003 (size L)

GTIN 200000000004 (size XL)

The case container is a cardboard box. Its dimensions are 3'Lx2'Wx2'H; it weighs 10 pounds.

The consumer units are each wrapped in plastic.

CASES 5, 6, 7, and 8: These cases are identical and are marked with the same 12-digit Logistic Unit Identifier "444444444444." Each case contains four marked inner packs.

The case container is a cardboard box. Its dimensions are 4'Lx4'Wx4'H; it weighs 8 pounds.

INNER PACK 1: This inner pack is marked with the 12-digit GTIN "500000000001." It contains 12 quantity of red caps. The caps are one-size-fits-all.

The inner pack container is a cardboard box. Its dimensions are 1'Lx1'Wx1'H; it weighs two pounds.

The consumer units are each wrapped in plastic.

INNER PACK 2: This inner pack is marked with the 12-digit GTIN "600000000001." It contains 12 quantity of blue caps. The caps are one-size-fits-all. The manufacturer's suggested retail price per cap is $12.50.

The inner pack container is a cardboard box. Its dimensions are 1'Lx1'Wx1'H; it weighs two pounds.

The consumer units are each wrapped in plastic.

INNER PACK 3: This inner pack is marked with the 12-digit GTIN "700000000001." It contains 12 quantity of gold caps. The caps are one-size-fits-all. The manufacturer's suggested retail price per cap is $12.50.

The inner pack container is a cardboard box. Its dimensions are 1'Lx1'Wx1'H; it weighs two pounds.

The consumer units are each wrapped in plastic.

INNER PACK 4: This inner pack is marked with the 12-digit GTIN "800000000001." It contains 12 quantity of white caps. The caps are one-size-fits-all. The manufacturer's suggested retail price per cap is $12.50.

The inner pack container is a cardboard box. Its dimensions are 1'Lx1'Wx1'H; it weighs two pounds.

The consumer units are each wrapped in plastic.

5.6.4. Business Example

In the following 832 representation of packaging hierarchies, the order of LIN segments and the various packaging levels they represent is relatively significant. Lower packaging levels must be positioned in the 832 Transaction Set ***before*** the higher levels in which they are being defined as components.

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001	***832*** is the Transaction Set Identifier for the Price/Sales Catalog Transaction Set. ***0001*** is the transaction set control number.
BCT*RC*6000010000*505**** SYDNEY 2000 GEAR*02**	***RC*** is the catalog purpose code indicating that this is a supplier catalog update. ***6000010000*** is the supplier ID, which identifies the supplier catalog. ***505*** is the selection code. ***Sydney 2000 Gear*** is the selection code description ***02*** is the action code, which means to add all line items in this 832 to the supplier's catalog.
DTM*043*19991215	***043*** is the code representing change date. ***19991215*** is the change date in the format CCYYMMDD.
Setup Consumer Unit Items for Cases 1 & 2	***Navy T-Shirts in S, M, L, XL***
LIN*1*VA*ABC123*UP*100000000001*CM*410*SM*10965	***1*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier ***ABC123*** is the trade item. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***100000000001*** is the GTIN. ***CM*** is the qualifier indicating that the following value is an NRF color code. ***410*** is the NRF color code for "navy." ***SM*** is the qualifier indicating that the following value is an NRF size code. ***10965*** is the NRF size code for "small."
PID*F*08*CREW-NECK T****EN**	***F*** indicates that the description is free-form. ***08*** indicates that this is a style description. ***Crew-Neck T*** is the short free-form style description. ***EN*** is the language code for "English."
PID*F*73*NAVY****EN**	***F*** indicates that the description is free-form. ***73*** indicates that this is a color description. ***Navy*** is the short free-form color description. ***EN*** is the language code for "English."

PID*F*73*S****EN**	***F*** indicates that the description is free-form. ***74*** indicates that this is a size description. ***S*** is the short free-form size description (“small”). ***EN*** is the language code for “English.”

EDI TRANSMISSION DATA	EXPLANATION
G55*UP*100000000001********1*** NAVY CREW-NECK T SM**********WRP79**	***UP*** is the qualifier indicating that the following value is a GTIN. ***100000000001*** is the GTIN for the current trade item. ***1*** is the number of consumer units. ***Navy Crew-Neck T Sm*** is the cash register description. ***WRP79*** indicates that the consumer unit is wrapped in plastic.
CTP*WH*MSR*25*1*EA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***MSR*** indicates that the price is a "manufacturer's suggested retail price." ***25*** indicates that the price is $25.00. ***1*** indicates the price applies to a quantity of one. ***EA*** indicates that the price applies to "each" item.
LIN*2*VA*ABC123*UP*100000000002*CM* 410*SM*10970	***2*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***ABC123*** is the trade item. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***100000000002*** is the GTIN. ***CM*** is the qualifier indicating that the following value is an NRF color code. ***410*** is the NRF color code for "navy." ***SM*** is the qualifier indicating that the following value is an NRF size code. ***10970*** is the NRF size code for "medium."
PID*F*08*CREW-NECK T****EN**	***F*** indicates that the description is free-form. ***08*** indicates that this is a style description. ***Crew-Neck T*** is the short free-form style description. ***EN*** is the language code for "English."
PID*F*73*NAVY****EN**	***F*** indicates that the description is free-form. ***73*** indicates that this is a color description. ***Navy*** is the short free-form color description. ***EN*** is the language code for "English."
PID*F*73*M****EN**	***F*** indicates that the description is free-form. ***74*** indicates that this is a size description. ***M*** is the short free-form size description ("medium"). ***EN*** is the language code for "English."
G55*UP*100000000002********1***NAVY CREW-NECK T MD**********WRP79**	***UP*** is the qualifier indicating that the following value is a GTIN. ***100000000002*** is the GTIN for the current trade item. ***1*** is the number of consumer units. ***Navy Crew-Neck T Md*** is the cash register description. ***WRP79*** indicates that the consumer unit is wrapped in plastic.
CTP*WH*MSR*25*1*EA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***MSR*** indicates that the price is a "manufacturer's suggested retail price." ***25*** indicates that the price is $25.00. ***1*** indicates the price applies to a quantity of one. ***EA*** indicates that the price applies to "each" item.

EDI TRANSMISSION DATA	EXPLANATION
LIN*3*VA*ABC123*UP*100000000003*CM*410*SM*10975	***3*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***ABC123*** is the trade item. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***100000000003*** is the GTIN. ***CM*** is the qualifier indicating that the following value is an NRF color code. ***410*** is the NRF color code for "navy." ***SM*** is the qualifier indicating that the following value is an NRF size code. ***10975*** is the NRF size code for "large."
PID*F*08*CREW-NECK T****EN**	***F*** indicates that the description is free-form. ***08*** indicates that this is a style description. ***Crew-Neck T*** is the short free-form style description. ***EN*** is the language code for "English."
PID*F*73*NAVY****EN**	***F*** indicates that the description is free-form. ***73*** indicates that this is a color description. ***Navy*** is the short free-form color description. ***EN*** is the language code for "English."
PID*F*73*L****EN**	***F*** indicates that the description is free-form. ***74*** indicates that this is a size description. ***L*** is the short free-form size description ("large"). ***EN*** is the language code for "English."
G55*UP*100000000003********1*** **NAVY CREW-NECK T** **LG**********WRP79**	***UP*** is the qualifier indicating that the following value is a GTIN. ***100000000003*** is the GTIN for the current trade item. ***1*** is the number of consumer units. ***Navy Crew-Neck T Lg*** is the cash register description. ***WRP79*** indicates that the consumer unit is wrapped in plastic.
CTP*WH*MSR*25*1*EA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***MSR*** indicates that the price is a "manufacturer's suggested retail." ***25*** indicates that the price is $25.00. ***1*** indicates the price applies to a quantity of one. ***EA*** indicates that the price applies to "each" item.
LIN*4*VA*ABC123*UP*100000000004*CM*410*SM*10980	***4*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***ABC123*** is the trade item. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***100000000004*** is the GTIN. ***CM*** is the qualifier indicating that the following value is an NRF color code. ***410*** is the NRF color code for "navy." ***SM*** is the qualifier indicating that the following value is an NRF size code. ***10980*** is the NRF size code for "X large."

EDI TRANSMISSION DATA	EXPLANATION
PID*F*08*CREW-NECK T****EN**	***F*** indicates that the description is free-form. ***08*** indicates that this is a style description. ***Crew-Neck T*** is the short free-form style description. ***EN*** is the language code for "English."
PID*F*73*NAVY***EN**	***F*** indicates that the description is free-form. ***73*** indicates that this is a color description. ***Navy*** is the short free-form color description. ***EN*** is the language code for "English."
PID*F*73*XL****EN**	***F*** indicates that the description is free-form. ***74*** indicates that this is a size description. ***XL*** is the short free-form size description ("X large"). ***EN*** is the language code for "English."
G55*UP*100000000004********1*** **NAVY CREW-NECKT** **XL*****************WRP79**	***UP*** is the qualifier indicating that the following value is a GTIN. ***100000000004*** is the GTIN for the current trade item. ***1*** is the number of consumer units. ***Navy Crew-Neck T XL*** is the cash register description. ***WRP79*** indicates that the consumer unit is wrapped in plastic.
CTP*WH*MSR*25*1*EA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***MSR*** indicates that the price is a "manufacturer's suggested retail price." ***25*** indicates that the price is $25.00. ***1*** indicates the price applies to a quantity of one. ***EA*** indicates that the price applies to "each" item.
Setup Case UCC-12 (U.P.C.) ID Numbers ***&*** ***Components For Cases 1 & 2***	***Case of Navy T-Shirts in assorted sizes.***
LIN*5*VA*ABC123*UA*222222222222	***5*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***ABC123*** is the trade item. ***UA*** is the qualifier indicating that the following value is a 12-digit Logistic Unit Identifier. ***222222222222*** is the Logistic Unit Identifier.
G39*222222222222**10*G*L*2*FT*2*FT*3*FT*12*CF**24**********BOX25**	***222222222222*** is the Logistic Unit Identifier provided in the LIN segment. ***10*** is the case weight. ***G*** indicates it is a gross weight. ***L*** is the weight unit of measure representing "pounds." ***2*** is the case height. ***FT*** is the height unit of measure representing "feet." ***2*** is the case width. ***FT*** is the width unit of measure representing "feet." ***3*** is the case length. ***FT*** is the length unit of measure representing "feet." ***12*** is the case volume. ***CF*** is the volume unit of measure representing "cubic feet." ***24*** is the total number of units in the case (there are no inner packs in this case). ***BOX25*** indicates that the case material is a corrugated carton.

EDI TRANSMISSION DATA	EXPLANATION
SLN*5*1*I*6*EA**UP*100000000001**	***5*** is the assigned identification number for this line item. ***1*** is the assigned identification number for this sub-line item component. ***I*** indicates that a GTIN is being defined. ***6*** is the quantity of GTINs contained in the case. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***100000000001*** is the GTIN contained in the case.
SLN*5*2*I*6*EA**UP*100000000002**	***5*** is the assigned identification number for this line item. ***2*** is the assigned identification number for this sub-line item component. ***I*** indicates that a GTIN is being defined. ***6*** is the quantity of GTINs contained in the case. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***100000000002*** is the GTIN contained in the case.
SLN*5*3*I*6*EA**UP*100000000003**	***5*** is the assigned identification number for this line item. ***3*** is the assigned identification number for this sub-line item component. ***I*** indicates that a GTIN is being defined. ***6*** is the quantity of GTINs contained in the case. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***100000000003*** is the GTIN contained in the case.
SLN*5*4*I*6*EA**UP*100000000004**	***5*** is the assigned identification number for this line item. ***4*** is the assigned identification number for this sub-line item component. ***I*** indicates that a GTIN is being defined. ***6*** is the quantity of GTINs contained in the case. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***100000000004*** is the GTIN contained in the case.
Setup Consumer Unit Items for Cases 3 & 4	***White T-Shirts in S, M, L, XL***
LIN*6*VA*ABC123*UP*200000000001*CM*100*SM*10965	***6*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***ABC123*** is the trade item. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***200000000001*** is the GTIN. ***CM*** is the qualifier indicating that the following value is an NRF color code. ***100*** is the NRF color code for “white.” ***SM*** is the qualifier indicating that the following value is an NRF size code. ***10965*** is the NRF size code for “small.”
PID*F*08*CREW-NECK T****EN**	***F*** indicates that the description is free-form. ***08*** indicates that this is a style description. ***Crew-Neck T*** is the short free-form style description. ***EN*** is the language code for “English.”

EDI TRANSMISSION DATA	EXPLANATION
PID*F*73*WHITE****EN**	***F*** indicates that the description is free-form. ***73*** indicates that this is a color description. ***White*** is the short free-form color description. ***EN*** is the language code for "English."
PID*F*73*S****EN**	***F*** indicates that the description is free-form. ***74*** indicates that this is a size description. ***S*** is the short free-form size description ("small"). ***EN*** is the language code for "English."
G55*UP*200000000001********1*** **WHITE CREW-NECK T S**********WRP79**	***UP*** is the qualifier indicating that the following value is a GTIN. ***200000000001*** is the GTIN for the current trade item. ***1*** is the number of consumer units. ***White Crew-Neck T S*** is the cash register description. ***WRP79*** indicates that the consumer unit is wrapped in plastic.
CTP*WH*MSR*25*1*EA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***MSR*** indicates that the price is a "manufacturer's suggested retail price." ***25*** indicates that the price is $25.00. ***1*** indicates the price applies to a quantity of one. ***EA*** indicates that the price applies to "each" item.
LIN*7*VA*ABC123*UP*200000000002*CM*1 00*SM*10970	***7*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***ABC123*** is the trade item. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***200000000002*** is the GTIN. ***CM*** is the qualifier indicating that the following value is an NRF color code. ***100*** is the NRF color code for "white." ***SM*** is the qualifier indicating that the following value is an NRF size code. ***10970*** is the NRF size code for "medium."
PID*F*08*CREW-NECK T****EN**	***F*** indicates that the description is free-form. ***08*** indicates that this is a style description. ***Crew-Neck T*** is the short free-form style description. ***EN*** is the language code for "English."
PID*F*73*WHITE****EN**	***F*** indicates that the description is free-form. ***73*** indicates that this is a color description. ***White*** is the short free-form color description. ***EN*** is the language code for "English."
PID*F*73*M****EN**	***F*** indicates that the description is free-form. ***74*** indicates that this is a size description. ***M*** is the short free-form size description ("medium"). ***EN*** is the language code for "English."
G55*UP*200000000002********1***WHIT E CREW-NECK T M**********WRP79**	***UP*** is the qualifier indicating that the following value is a GTIN. ***200000000002*** is the GTIN for the current trade item. ***1*** is the number of consumer units. ***White Crew-Neck T M*** is the cash register description. ***WRP79*** indicates that the consumer unit is wrapped in plastic.

EDI TRANSMISSION DATA	EXPLANATION
CTP*WH*MSR*25*1*EA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***MSR*** indicates that the price is a "manufacturer's suggested retail price." ***25*** indicates that the price is $25.00. ***1*** indicates the price applies to a quantity of one. ***EA*** indicates that the price applies to "each" item.
LIN*8*VA*ABC123*UP*200000000003*CM*100*SM*10975	***8*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***ABC123*** is the trade item. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***200000000003*** is the GTIN. ***CM*** is the qualifier indicating that the following value is an NRF color code. ***100*** is the NRF color code for "white." ***SM*** is the qualifier indicating that the following value is an NRF size code. ***10975*** is the NRF size code for "large."
PID*F*08*CREW-NECK T****EN**	***F*** indicates that the description is free-form. ***08*** indicates that this is a style description. ***Crew-Neck T*** is the short free-form style description. ***EN*** is the language code for "English."
PID*F*73*WHITE****EN**	***F*** indicates that the description is free-form. ***73*** indicates that this is a color description. ***White*** is the short free-form color description. ***EN*** is the language code for "English."
PID*F*73*L****EN**	***F*** indicates that the description is free-form. ***74*** indicates that this is a size description. ***L*** is the short free-form size description ("large"). ***EN*** is the language code for "English."
G55*UP*200000000003********1***WHITE CREW-NECK T L**********WRP79**	***UP*** is the qualifier indicating that the following value is a GTIN. ***200000000003*** is the GTIN for the current trade item. ***1*** is the number of consumer units. ***White Crew-Neck T L*** is the cash register description. ***WRP79*** indicates that the consumer unit is wrapped in plastic.
CTP*WH*MSR*25*1*EA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***MSR*** indicates that the price is a "manufacturer's suggested retail price." ***25*** indicates that the price is $25.00. ***1*** indicates the price applies to a quantity of one. ***EA*** indicates that the price applies to "each" item.

EDI TRANSMISSION DATA	EXPLANATION
LIN*9*VA*ABC123*UP*200000000004*CM*100*SM*10980	***9*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***ABC123*** is the trade item. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***200000000004*** is the GTIN. ***CM*** is the qualifier indicating that the following value is an NRF color code. ***100*** is the NRF color code for "white." ***SM*** is the qualifier indicating that the following value is an NRF size code. ***10980*** is the NRF size code for "X large."
PID*F*08*CREW-NECK T****EN**	***F*** indicates that the description is free-form. ***08*** indicates that this is a style description. ***Crew-Neck T*** is the short free-form style description. ***EN*** is the language code for "English."
PID*F*73*WHITE****EN**	***F*** indicates that the description is free-form. ***73*** indicates that this is a color description. ***White*** is the short free-form color description. ***EN*** is the language code for "English."
PID*F*73*XL****EN**	***F*** indicates that the description is free-form. ***74*** indicates that this is a size description. ***XL*** is the short free-form size description ("X large"). ***EN*** is the language code for "English."
G55*UP*200000000004********1***White Crew-Neck T XL**********WRP79**	***UP*** is the qualifier indicating that the following value is a GTIN. ***200000000004*** is the GTIN for the current trade item. ***1*** is the number of consumer units. ***White Crew-Neck T XL*** is the cash register description. ***WRP79*** indicates that the consumer unit is wrapped in plastic.
CTP*WH*MSR*25*1*EA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***MSR*** indicates that the price is a "manufacturer's suggested retail price." ***25*** indicates that the price is $25.00. ***1*** indicates the price applies to a quantity of one. ***EA*** indicates that the price applies to "each" item.
Setup Logistic Unit Identifier & Components for Cases 3 & 4	***Case of White T-Shirts in assorted sizes.***
LIN*10*VA*ABC123*UA*333333333333	***10*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***ABC123*** is the trade item. ***UA*** is the qualifier indicating that the following value is a 12-digit Logistic Unit Identifier. ***333333333333*** is the Logistic Unit Identifier.

EDI TRANSMISSION DATA	EXPLANATION
G39*3333333333**10*G*L*2*FT*2*FT*3*FT*12*CF**24**********BOX25**	***333333333333*** is the Logistic Unit Identifier provided in the LIN segment. ***10*** is the case weight. ***G*** indicates it is a gross weight. ***L*** is the weight unit of measure representing "pounds." ***2*** is the case height. ***FT*** is the height unit of measure representing "feet." ***2*** is the case width. ***FT*** is the width unit of measure representing "feet." ***3*** is the case length. ***FT*** is the length unit of measure representing "feet." ***12*** is the case volume. ***CF*** is the volume unit of measure representing "cubic feet." ***24*** is the total number of units in the case (there are no inner packs in this case). ***BOX25*** indicates that the case material is a corrugated carton.
SLN*10*1*I*6*EA**UP*200000000001**	***10*** is the assigned identification number for this line item. ***1*** is the assigned identification number for this sub-line item component. ***I*** indicates that a GTIN is being defined. ***6*** is the quantity of GTINs contained in the case. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***200000000001*** is the GTIN contained in the case.
SLN*10*2*I*6*EA**UP*200000000002**	***10*** is the assigned identification number for this line item. ***2*** is the assigned identification number for this sub-line item component. ***I*** indicates that a GTIN is being defined. ***6*** is the quantity of GTINs contained in the case. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***200000000002*** is the GTIN contained in the case.
SLN*10*3*I*6*EA**UP*200000000003**	***10*** is the assigned identification number for this line item. ***3*** is the assigned identification number for this sub-line item component. ***I*** indicates that a GTIN is being defined. ***6*** is the quantity of GTINs contained in the case. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***200000000003*** is the GTIN contained in the case.
SLN*10*4*I*6*EA**UP*200000000004**	***10*** is the assigned identification number for this line item. ***4*** is the assigned identification number for this sub-line item component. ***I*** indicates that a GTIN is being defined. ***6*** is the quantity of GTINs contained in the case. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***200000000004*** is the GTIN contained in the case.
Setup Consumer Unit Items for Cases 5, 6, 7, & 8	***One-size-fits-all caps in red, blue, gold, and white.***

EDI TRANSMISSION DATA	EXPLANATION
LIN*11*VA*DEF456*UP*500000000001*CM*600*SM*10001	***11*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***DEF456*** is the trade item. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***500000000001*** is the GTIN. ***CM*** is the qualifier indicating that the following value is an NRF color code. ***600*** is the NRF color code for "red." ***SM*** is the qualifier indicating that the following value is an NRF size code. ***10001*** is the NRF size code for "one size fits all."
PID*F*08*LOGO CAP****EN**	***F*** indicates that the description is free-form. ***08*** indicates that this is a style description. ***Logo Cap*** is the short free-form style description. ***EN*** is the language code for "English."
PID*F*73*RED****EN**	***F*** indicates that the description is free-form. ***73*** indicates that this is a color description. ***Red*** is the short free-form color description. ***EN*** is the language code for "English."
PID*F*73*ONE SIZE FITS ALL****EN**	***F*** indicates that the description is free-form. ***74*** indicates that this is a size description. ***One size fits all*** is the short free-form size description. ***EN*** is the language code for "English."
G55*UP*500000000001********1***RED LOGO CAP**********WRP79**	***UP*** is the qualifier indicating that the following value is a GTIN. ***500000000001*** is the GTIN for the current trade item. ***1*** is the number of consumer units. ***Red Logo Cap*** is the cash register description. ***WRP79*** indicates that the consumer unit is wrapped in plastic.
CTP*WH*MSR*12.50*1*EA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***MSR*** indicates that the price is a "manufacturer's suggested retail price." ***12.50*** indicates that the price is $12.50. ***1*** indicates the price applies to a quantity of one. ***EA*** indicates that the price applies to "each" item.
LIN*12*VA*DEF456*UP*600000000001*CM*400*SM*10001	***12*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***DEF456*** is the trade item. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***600000000001*** is the GTIN. ***CM*** is the qualifier indicating that the following value is an NRF color code. ***400*** is the NRF color code for "blue." ***SM*** is the qualifier indicating that the following value is an NRF size code. ***10001*** is the NRF size code for "one size fits all."

EDI TRANSMISSION DATA	EXPLANATION
PID*F*08*LOGO CAP****EN**	***F*** indicates that the description is free-form. ***08*** indicates that this is a style description. ***Logo Cap*** is the short free-form style description. ***EN*** is the language code for "English."
PID*F*73*BLUE****EN**	***F*** indicates that the description is free-form. ***73*** indicates that this is a color description. ***Blue*** is the short free-form color description. ***EN*** is the language code for "English."
PID*F*73*ONE SIZE FITS ALL****EN**	***F*** indicates that the description is free-form. ***74*** indicates that this is a size description. ***One size fits all*** is the short free-form size description. ***EN*** is the language code for "English."
G55*UP*600000000001********1***BLUE LOGO CAP**********WRP79**	***UP*** is the qualifier indicating that the following value is a GTIN. ***600000000001*** is the GTIN for the current trade item. ***1*** is the number of consumer units. ***Blue Logo Cap*** is the cash register description. ***WRP79*** indicates that the consumer unit is wrapped in plastic.
CTP*WH*MSR*12.50*1*EA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***MSR*** indicates that the price is a "manufacturer's suggested retail price." ***12.50*** indicates that the price is $12.50. ***1*** indicates the price applies to a quantity of one. ***EA*** indicates that the price applies to "each" item.
LIN*13*VA*DEF456*UP*700000000001*CM*710*SM*10001	***13*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***DEF456*** is the trade item. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***700000000001*** is the GTIN. ***CM*** is the qualifier indicating that the following value is an NRF color code. ***710*** is the NRF color code for "gold." ***SM*** is the qualifier indicating that the following value is an NRF size code. ***10001*** is the NRF size code for "one size fits all."
PID*F*08*LOGO CAP****EN**	***F*** indicates that the description is free-form. ***08*** indicates that this is a style description. ***Logo Cap*** is the short free-form style description. ***EN*** is the language code for "English."
PID*F*73*GOLD****EN**	***F*** indicates that the description is free-form. ***73*** indicates that this is a color description. ***Gold*** is the short free-form color description. ***EN*** is the language code for "English."
PID*F*73*ONE SIZE FITS ALL****EN**	***F*** indicates that the description is free-form. ***74*** indicates that this is a size description. ***One size fits all*** is the short free-form size description. ***EN*** is the language code for "English."

EDI TRANSMISSION DATA	EXPLANATION
G55*UP*700000000001********1***GOLD LOGO CAP**********WRP79**	***UP*** is the qualifier indicating that the following value is a GTIN. ***700000000001*** is the GTIN for the current trade item. ***1*** is the number of consumer units. ***Gold Logo Cap*** is the cash register description. ***WRP79*** indicates that the consumer unit is wrapped in plastic.
CTP*WH*MSR*12.50*1*EA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***MSR*** indicates that the price is a "manufacturer's suggested retail price." ***12.50*** indicates that the price is $12.50. ***1*** indicates the price applies to a quantity of one. ***EA*** indicates that the price applies to "each" item.
LIN*14*VA*DEF456*UP*800000000001*CM*100*SM*10001	***14*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***DEF456*** is the trade item. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***800000000001*** is the GTIN. ***CM*** is the qualifier indicating that the following value is an NRF color code. ***100*** is the NRF color code for "white." ***SM*** is the qualifier indicating that the following value is an NRF size code. ***10001*** is the NRF size code for "one size fits all."
PID*F*08*LOGO CAP****EN**	***F*** indicates that the description is free-form. ***08*** indicates that this is a style description. ***Logo Cap*** is the short free-form style description. ***EN*** is the language code for "English."
PID*F*73*WHITE****EN**	***F*** indicates that the description is free-form. ***73*** indicates that this is a color description. ***White*** is the short free-form color description. ***EN*** is the language code for "English."
PID*F*73*ONE SIZE FITS ALL****EN**	***F*** indicates that the description is free-form. ***74*** indicates that this is a size description. ***One size fits all*** is the short free-form size description. ***EN*** is the language code for "English."
G55*UP*800000000001********1*** WHITE LOGO CAP**********WRP79**	***UP*** is the qualifier indicating that the following value is a GTIN. ***800000000001*** is the GTIN for the current trade item. ***1*** is the number of consumer units. ***White Logo Cap*** is the cash register description. ***WRP79*** indicates that the consumer unit is wrapped in plastic.
CTP*WH*MSR*12.50*1*EA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***MSR*** indicates that the price is a "manufacturer's suggested retail price." ***12.50*** indicates that the price is $12.50. ***1*** indicates the price applies to a quantity of one. ***EA*** indicates that the price applies to "each" item.
Setup Inner Packs 1, 2, 3, & 4	***Each Inner Pack contains 12 qty of one color of cap.***

EDI TRANSMISSION DATA	EXPLANATION
LIN*15*VA*DEF456*UA*555555555555	***15*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. DEF456 is the trade item. ***UA*** is the qualifier indicating that the following value is a 12-digit Logistic Unit Identifier. ***555555555555*** is the Logistic Unit Identifier identifying the inner pack.
G39*555555555555**2*G*L*1*FT*1*FT*1*FT*1*CF**12**********BOX25**	***555555555555*** is the inner pack Logistic Unit Identifier provided in the LIN segment. ***2*** is the case weight. ***G*** indicates it is a gross weight. ***L*** is the weight unit of measure representing "pounds." ***1*** is the case height. ***FT*** is the height unit of measure representing "feet." ***1*** is the case width. ***FT*** is the width unit of measure representing "feet." ***1*** is the case length. ***FT*** is the length unit of measure representing "feet." ***1*** is the case volume. ***CF*** is the volume unit of measure representing "cubic feet." ***12*** is the total number of units in the inner pack (there are no inner packs in this inner pack). ***BOX25*** indicates that the inner pack material is a corrugated carton.
SLN*15*1*I*12*EA**UP*500000000001**	***15*** is the assigned identification number for this line item. ***1*** is the assigned identification number for this sub-line item component. ***I*** indicates that a GTIN is being defined. ***12*** is the quantity of GTINs contained in the inner pack. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***500000000001*** is the GTIN contained in the inner pack.
LIN*16*VA*DEF456*UA*666666666666	***16*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***DEF456*** is the trade item. ***UA*** is the qualifier indicating that the following value is a 12-digit Logistic Unit Identifier. ***666666666666*** is the Logistic Unit Identifier identifying the inner pack.

EDI TRANSMISSION DATA	EXPLANATION
G39*666666666666**2*G*L*1*FT*1*FT*1*FT*1*CF**12**********BOX25**	***666666666666*** is the inner pack Logistic Unit Identifier provided in the LIN segment. ***2*** is the case weight. ***G*** indicates it is a gross weight. ***L*** is the weight unit of measure representing "pounds." ***1*** is the case height. ***FT*** is the height unit of measure representing "feet." ***1*** is the case width. ***FT*** is the width unit of measure representing "feet." ***1*** is the case length. ***FT*** is the length unit of measure representing "feet." ***1*** is the case volume. ***CF*** is the volume unit of measure representing "cubic feet." ***12*** is the total number of units in the inner pack (there are no inner packs in this inner pack). ***BOX25*** indicates that the inner pack material is a corrugated carton.
SLN*16*1*I*12*EA**UP*600000000001**	***16*** is the assigned identification number for this line item. ***1*** is the assigned identification number for this sub-line item component. ***I*** indicates that a GTIN is being defined. ***12*** is the quantity of GTINs contained in the inner pack. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***600000000001*** is the GTIN contained in the inner pack.
LIN*17*VA*DEF456*UA*777777777777	***17*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***DEF456*** is the trade item. ***UA*** is the qualifier indicating that the following value is a 12-digit Logistic Unit Identifier. ***777777777777*** is the Logistic Unit Identifier identifying the inner pack.
G39*777777777777**2*G*L*1*FT*1*FT*1*FT*1*CF**12**********BOX25**	***777777777777*** is the inner pack Logistic Unit Identifier provided in the LIN segment. ***2*** is the case weight. ***G*** indicates it is a gross weight. ***L*** is the weight unit of measure representing "pounds." ***1*** is the case height. ***FT*** is the height unit of measure representing "feet." ***1*** is the case width. ***FT*** is the width unit of measure representing "feet." ***1*** is the case length. ***FT*** is the length unit of measure representing "feet." ***1*** is the case volume. ***CF*** is the volume unit of measure representing "cubic feet." ***12*** is the total number of units in the inner pack (there are no inner packs in this inner pack). ***BOX25*** indicates that the inner pack material is a corrugated carton.

EDI TRANSMISSION DATA	EXPLANATION
SLN*17*1*I*12*EA**UP*700000000001**	***17*** is the assigned identification number for this line item. ***1*** is the assigned identification number for this sub-line item component. ***I*** indicates that a GTIN is being defined. ***12*** is the quantity of GTINs contained in the inner pack. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***700000000001*** is the GTIN contained in the inner pack.
LIN*18*VA*DEF456*UA*888888888888	***18*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***DEF456*** is the trade item. ***UA*** is the qualifier indicating that the following value is a 12-digit Logistic Unit Identifier. ***888888888888*** is the Logistic Unit Identifier identifying the inner pack.
G39*888888888888**2*G*L*1*FT*1*FT*1*FT*1*CF**12**********BOX25**	***888888888888*** is the inner pack Logistic Unit Identifier provided in the LIN segment. ***2*** is the case weight. ***G*** indicates it is a gross weight. ***L*** is the weight unit of measure representing "pounds." ***1*** is the case height. ***FT*** is the height unit of measure representing "feet." ***1*** is the case width. ***FT*** is the width unit of measure representing "feet." ***1*** is the case length. ***FT*** is the length unit of measure representing "feet." ***1*** is the case volume. ***CF*** is the volume unit of measure representing "cubic feet." ***12*** is the total number of units in the inner pack (there are no inner packs in this inner pack). ***BOX25*** indicates that the inner pack material is a corrugated carton.
SLN*18*1*I*12*EA**UP*800000000001**	***18*** is the assigned identification number for this line item. ***1*** is the assigned identification number for this sub-line item component. ***I*** indicates that a GTIN is being defined. ***12*** is the quantity of GTINs contained in the inner pack. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***800000000001*** is the GTIN contained in the inner pack.
Setup Logistic Unit Identifiers & Components for Cases 5, 6, 7, & 8	***Case contains one each of four inner packs***
LIN*19*VA*DEF456*UA*444444444444	***19*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***DEF456*** is the trade item. ***UA*** is the qualifier indicating that the following value is a 12-digit Logistic Unit Identifier. ***444444444444*** is the Logistic Unit Identifier identifying the case of caps in assorted colors.

EDI TRANSMISSION DATA	EXPLANATION
G39*444444444444**8*G*L*4*FT*4*FT*4*FT*64*CF**4**********12*BOX25**	***444444444444*** is the Logistic Unit Identifier provided in the LIN segment. ***8*** is the case weight. ***G*** indicates it is a gross weight. ***L*** is the weight unit of measure representing "pounds." ***4*** is the case height. ***FT*** is the height unit of measure representing "feet." ***4*** is the case width. ***FT*** is the width unit of measure representing "feet." ***4*** is the case length. ***FT*** is the length unit of measure representing "feet." ***64*** is the case volume. ***CF*** is the volume unit of measure representing "cubic feet." ***4*** is the number of inner packs in the case. ***12*** is the number of consumer units in each inner pack. ***BOX25*** indicates that the case material is a corrugated carton.
SLN*19*1*I*1*EA**UA*555555555555**	***19*** is the assigned identification number for this line item. ***1*** is the assigned identification number for this sub-line item component. ***I*** indicates that a GTIN is being defined. ***1*** is the quantity of this inner pack contained in the case. ***UA*** is the qualifier indicating that the following value is a 12-digit Logistic Unit Identifier. ***555555555555*** is the inner pack Logistic Unit Identifier contained in the case.
SLN*19*2*I*1*EA**UA*666666666666**	***19*** is the assigned identification number for this line item. ***2*** is the assigned identification number for this sub-line item component. ***I*** indicates that a GTIN is being defined. ***1*** is the quantity of this inner pack contained in the case. ***UA*** is the qualifier indicating that the following value is a 12-digit Logistic Unit Identifier. ***666666666666*** is the inner pack Logistic Unit Identifier contained in the case.
SLN*19*3*I*1*EA**UA*777777777777**	***19*** is the assigned identification number for this line item. ***3*** is the assigned identification number for this sub-line item component. ***I*** indicates that a GTIN is being defined. ***1*** is the quantity of this inner pack contained in the case. ***UA*** is the qualifier indicating that the following value is a 12-digit Logistic Unit Identifier. ***777777777777*** is the inner pack Logistic Unit Identifier contained in the case.

EDI TRANSMISSION DATA	EXPLANATION
SLN*19*4*I*1*EA**UA*888888888888**	***19*** is the assigned identification number for this line item. ***4*** is the assigned identification number for this sub-line item component. ***I*** indicates that a GTIN is being defined. ***1*** is the quantity of this inner pack contained in the case. ***UA*** is the qualifier indicating that the following value is a 12-digit Logistic Unit Identifier. ***888888888888*** is the inner pack Logistic Unit Identifier contained in the case.
Setup PALLET GTINs and components	***Contains multiple cases of different types***
LIN*20*VA*P1-SYDNEY*UK*11111111111111	***20*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***P1-SYDNEY*** is the trade item for the pallet. ***UK*** is the qualifier indicating that the following value is a GTIN. ***11111111111111*** is the pallet GTIN.
CTP*WH*UCP*1000*1*PL	***WH*** indicates that the price belongs to "wholesale" class of trade. ***UCP*** indicates that the price is a "Unit Cost" for the pallet. ***1000*** indicates that the price is $1000.00. ***1*** indicates the price applies to a quantity of one. ***PL*** indicates that the price applies to a pallet.
G39UK*11111111111111**72*G*L*6*FT*6*FT*6*FT*216*CF**8**********PLT94**	***UK*** is the qualifier indicating that the following value is a GTIN identifying a pallet. ***11111111111111*** is the pallet GTIN provided in the LIN segment. ***72*** is the case weight. ***G*** indicates it is a gross weight. ***L*** is the weight unit of measure representing "pounds." 6 is the case height. ***FT*** is the height unit of measure representing "feet." 6 is the case width. ***FT*** is the width unit of measure representing "feet." 6 is the case length. ***FT*** is the length unit of measure representing "feet." 216 is the case volume. ***CF*** is the volume unit of measure representing "cubic feet." ***8*** is the number of cases contained in the pallet. ***PLT94*** indicates that the pallet container is made of wood.
SLN*20*1*I*2*CA**UA*222222222222**	***20*** is the assigned identification number for this line item. ***1*** is the assigned identification number for this sub-line item component. ***I*** indicates that a GTIN is being defined. ***2*** is the quantity of this type of case contained in the pallet. ***CA*** indicates the component is a case. ***UA*** is the qualifier indicating that the following value is a 12-digit Logistic Unit Identifier. ***222222222222*** is the Logistic Unit Identifier contained in the pallet.

EDI TRANSMISSION DATA	EXPLANATION
SLN*20*2*I*2*CA**UA*333333333333**	***20*** is the assigned identification number for this line item. ***2*** is the assigned identification number for this sub-line item component. ***I*** indicates that a GTIN is being defined. ***2*** is the quantity of this type of case contained in the pallet. ***CA*** indicates the component is a case. ***UA*** is the qualifier indicating that the following value is a 12-digit Logistic Unit Identifier. ***333333333333*** is the Logistic Unit Identifier contained in the pallet.
SLN*20*3*I*4*CA**UA*444444444444**	***20*** is the assigned identification number for this line item. ***3*** is the assigned identification number for this sub-line item component. ***I*** indicates that a GTIN is being defined. ***4*** is the quantity of this type of case contained in the pallet. ***CA*** indicates the component is a case. ***UA*** is the qualifier indicating that the following value is a 12-digit Logistic Unit Identifier. ***444444444444*** is the Logistic Unit Identifier contained in the pallet.
CTT*20	***20*** is the number of line items (LIN segments) present in this transaction set.
SE*113*0001	***113*** is the number of included segments in this transaction set, including the ST and SE segments. ***0001*** is the transaction set control number.

6. Indirect via a Third Party Catalog

6.1. Introduction

Trading partners may choose to communicate product catalog information directly with each trading partner or indirectly through a third party service.

Companies can choose to transmit their catalog information using their own EDI systems or alternatively through a third party EDI service bureau.

Buyers and sellers may elect to use a third party catalog service to provide some of the automation needed. As is the case for direct communications, when a third party service is used, product catalog information is most often transmitted using an EDI "Price/Sales Catalog" (832 Transaction Set).

6.2. What is a Third Party Catalog Service?

A third party catalog service is a centralized electronic product catalog and data alignment service for GTINs and their associated descriptive information. This allows sellers to maintain their catalogs through a single source for buyers to access product information as needed. Sellers control buyer access to their catalog information. A centralized database allows for one point item setup and maintenance for the seller and one point item lookup and download for the buyer. Automated processes are available to provide product data quickly and efficiently. Third party catalog services help to streamline data alignment operations for thousands of companies and millions of products.

6.2.1. Typical Third Party Users

Typical buyers and sellers who use a third party catalog service include:

Types of Buyers	Types of Sellers
Department store buyers Mass merchants Distributors Ticket & label printers Graphics companies Sub-contractors VMI service providers Internet retailers Mail order catalog retailers Others	Manufacturers Sub-contractors Distributors Brokers Buyers who assign their own GTINs to private label products Others

Companies using a third party catalog service typically represent these industry sectors:

- Men's, women's, and children's apparel
- Lingerie
- Footwear
- Sportswear and sporting goods/equipment
- Health and beauty
- Baby/children's products and clothing

- Linens and fabrics
- Housewares, cookware, and appliances
- Fragrances
- Luggage
- Leather goods
- Candy and specialty foods
- Office and school supplies
- Greeting cards and stationery
- China, flatware, and crystal
- Kitchen supplies
- Consumer goods and products
- Grocery
- Hardlines, electronics, and high-tech

6.2.2. A Quick Response Initiative Enabler

Supports the Quick Response Initiative, which recommends the use of EDI to transmit business documents and the use of GTINs to identify all products among trading partners. The goal of Quick Response is to ensure that a buyer has the right product on the shelf at the right price, and in the right color and size, in order to anticipate and meet consumer needs. Implementing a Quick Response program increases inventory turnover and sales volumes for buyers, and increases profits and decreases accounts payable for sellers.

Promotes standardized product identification using GTINs and supporting product attributes across the entire supply chain.

6.2.3. Single Source for Product Information

- Automatically handles data format, version, and media translations, so that each company can transmit or receive catalog information according to its preferences
- Provides a single location where sellers maintain their product catalogs
- Provides buyers with a single source for all sellers' catalog information
- Eliminates the need to directly manage point-to-point communications of product catalog information. It handles seller catalog access controls and buyer automatic update profiles.

6.2.4. Reduces EDI and IT Costs

- Significantly reduces on-going EDI costs. Fewer EDI sends and receives are necessary, and related costs are much lower than when transmitting updates to each partner directly.
- Provides the option to use magnetic tapes for initial or large catalog loads, which helps reduce EDI costs
- Eliminates the need to manage catalog access controls and automatic-update profiles internally
- Streamlines retailer item setup, item maintenance, and cross-referencing tasks
- Enables users to receive only those products they order and track, and only the specific attributes they require for an individual product
- Expands EDI capabilities and benefits as further GTIN implementation increases the types of EDI documents traded with an increasing number of partners. Maximizes corporate EDI initiatives and investments

6.2.5. Improves Accuracy

- Reduces errors that are often introduced through manual data entry tasks
- Reduces Point-of-Sale scanning errors. Facilitates automated, real-time Point-of-Sale lookups, as well as lookups for products that would not scan at Point-of-Sale
- Reduces distribution center scanning errors and facilitates floor-ready orders.
- Increases accuracy of item setup information, thus increasing the accuracy of orders, invoices, and other EDI documents
- Standardizes compliance checking and data content editing according to published VICS and NRF guidelines. Ensures accuracy and consistency of U.P.C. Catalog information across all sellers

6.2.6. Encourages Independence of Trading Partners

- Enables you to request and receive U.P.C. Catalog information around the clock, independent of sellers' schedules.
- Delivers desired product information via standard EDI documents. This helps to decrease order cycle time and increase order-processing automation.
- Sends and receives data in the format and version that you prefer and at your timing preference

6.2.7. Facilitates New Item Setup and Cross-Reference

- Encourages automation of new item setup and on-going maintenance processes among all business partners
- Facilitates buyer ability to cross-reference item files between proprietary SKUs and GTINs. This is a critical component of implementing a Quick Response program.

6.2.8. Speeds New Partner Implementation

- Reduces the time and cost associated with ramping new trading partners
- Provides trading partner implementation services

6.3. Sellers

This section describes how sellers use a third party catalog service to automatically distribute key product catalog information to their business partners. The following topics are addressed in this section:

- General features and capabilities
- Process overview
- Assigning GTINs to individual trade items
- Organizing GTINs by selection code and trade item
- Loading the catalog
- Granting catalog access to buyers
- Updating the catalog
- Incremental catalog updates
- Complete catalog reload
- Updating buyer catalog access

6.3.1. General Features and Capabilities

Third party catalog services provide a variety of features for sellers, including:

- 24/7 service availability
- Online and batch interfaces
- EDI, magnetic tape, and other transmissions media
- Catalog browse and maintenance capabilities
- Catalog access control management
- Automated distribution to buyers of catalog updates (“automatic updates” or “standing requests”)
- Multiple data formats and versions
- Standardized GTIN coding, compliance-checking, and data content editing
- Support for GS1 Data Structures
- Support for basic data elements, including NRF color and size codes, and extended data elements according to published industry guidelines
- Functional Acknowledgements in response to batch files received
- Error handling, support, reporting, and notification
- Ability to download product data to synchronize product data files
- Implementation assistance and testing verification
- Experienced customer support
- Catalog data management support
- Product images

6.3.2. Process Overview

The basic process that a seller follows to load and maintain his catalog using a third party service and grant access to his buyers includes:

- Assigning GTINs to individual trade items
- Organizing GTINs by selection code and trade item
- Loading the catalog
- Granting catalog access to buyers
- Updating the catalog
- Updating buyer catalog access

The steps outlined above are addressed in subsequent pages of this section.

6.3.3. Assigning GTINs to Individual Trade Items

Refer to Section 3.1of this manual for this information.

6.3.4. Organizing GTINs by Selection Code and Trade Item

Refer to Section 3.3.4 of this manual for this information.

6.3.5. Loading the Catalog

Once a seller has effectively organized his catalog and assigned GTINs to individual trade items, he is ready

to load his catalog. If performed in batch mode, this initial catalog load process usually involves first sending and verifying small "test" transmissions to the third party service, prior to actually transmitting the entire initial catalog load.

Sellers initially load their catalogs using one of the following methods:

- VICS 832 Transaction Set via EDI or tape
- GMAIC+ flat file via EDI or tape
- Online data entry

Additional third party features for seller initial catalog loads include:

- Online interactive catalog setup and data entry
- Ability to view product data online
- Multiple VICS 832 versions supported
- Load status report for each catalog update session
- VICS 832 test file verification
- Functional Acknowledgement (FA, 997) in response to each interchange the seller transmits to the third party catalog service
- Data content error notification and online error handling
- Standardized GTIN coding, compliance checking, GS1 Company Prefix validation, and data content editing
- Catalog data management support
- Translation software and 832 mapping support
- EDI services and support

6.3.6. Granting Catalog Access to Buyers

Once a seller has successfully loaded his catalog, he grants buyers access to the product information stored in his catalog. Until a seller has granted a particular buyer access to his catalog, that buyer cannot access the seller's U.P.C. Catalog in any way. The seller may change a buyer's catalog access profile at any time. Once the seller has granted a buyer access to his catalog, the buyer is able to access that portion of the seller's catalog. This is termed the buyer's "view" of the seller's catalog.

Sellers may grant or revoke catalog access to buyers at the following levels:

- Entire catalog
- By specific selection code(s)

Sellers can manage catalog access controls in the following ways:

- Online
- Using a VICS 832 Transaction Set
- Third party customer support

Additional third party features for seller catalog access controls include:

- Status reports for each EDI catalog access update session
- Functional Acknowledgement (FA, 997) in response to each interchange the seller transmits to the third party catalog service

- Multiple VICS 832 versions supported
- VICS 832 test file verification
- Rejected EDI file notification and support
- Data content error notification and online error handling
- Translation software and 832 mapping support
- EDI services and support

Once the seller has granted a buyer unlimited or limited access to his catalog, the buyer is able to access the viewable portion of the catalog as required.

6.3.7. Updating the Catalog

Periodically, a seller may wish to update his U.P.C. Catalog for a variety of reasons, including:

- To ensure that the catalog is as current and accurate as possible, in the spirit of Quick Response
- To ensure that buyers receive the latest catalog changes as soon as possible
- To reflect a discontinued or reinstated product or trade item
- To reflect product substitutions
- To respond to volatile, rapidly, and frequently changing product lines
- To make normal seasonal product line and style changes
- To correct invalid catalog data
- To introduce a new product line or division, as when one company is acquired by another

6.3.7.1. Incremental Catalog Updates

Normally, sellers set up their internal systems to transmit daily catalog updates to third party catalog services. This usually occurs because sellers want to ensure that their business partners can access and receive the most up-to-date product information. However, if a seller's trade items change less frequently than daily, he may choose to transmit his catalog updates on a less frequent basis (e.g., weekly, monthly, seasonally).

In the majority of cases, sellers choose to transmit incremental changes to their U.P.C. Catalog. The advantages of transmitting incremental catalog updates include the following:

- Lower EDI costs since fewer trade items are transmitted
- More satisfied buyers, whose internal processing systems most readily accept incremental updates

Incremental catalog updates include any of the following transaction types:

- Adds of new trade items
- Changes to or replacements of existing trade items
- Discontinues or reinstatements of existing trade items
- Deletes of previously discontinued trade items after required retention period
- Substitutions of new GTINs for previously assigned GTINs
- Cancellation of trade items that were never manufactured

Incremental catalog updates may be transmitted in the following ways:

- VICS 832 Transaction Set via EDI or tape
- GMAIC+ flat file via EDI or tape
- Online data entry

Catalog updates are automatically distributed to buyers (“automatic updates” or “standing requests”) according to previously established buyer auto update profiles.

6.3.7.2. Complete Catalog Reload

A seller may choose to periodically transmit a complete catalog reload (“refresh”) for any of the following reasons:

- Seasonal replacement of the entire catalog
- Major restructuring of catalog contents for effectiveness, or to incorporate new product lines or divisions
- Error correction impacting the entire catalog
- Seller’s internal systems cannot generate incremental updates

A complete catalog reload must contain only “add” transactions. The seller must notify the third party service provider that he plans to reload his entire catalog prior to transmitting the reload file to the third party service. In general, complete catalog reloads are performed during non-peak hours in order to ensure maximum availability of the seller’s catalog to his buyers.

A complete catalog reload may be in one of the following formats:

- VICS 832 Transaction Set via EDI or tape
- GMAIC+ flat file via EDI or tape

Catalog reload data is automatically distributed to buyers (“automatic updates” or “standing requests”) according to previously established buyer auto-update profiles.

6.3.8. Updating Buyer Catalog Access

At any time, a seller can change or revoke a buyer’s access to his U.P.C. Catalog. Refer to “Granting Buyers Catalog Access” for more information.

6.3.8.1. Buyers

This section describes how buyers use a third party catalog service to automatically request and receive key product catalog information from sellers. The following topics are addressed in this section:

- General features and capabilities
- Process overview
- Requesting catalog access
- Activating automatic updates
- Requesting GTINs
- Receiving GTINs

6.4. General Features and Capabilities

Third party catalog services provide a variety of features for buyers, including:

- 24/7 service availability
- Online, batch, and real-time interfaces
- EDI, magnetic tape, and other transmissions media
- Ability to export catalog information directly
- Catalog browse and request capabilities
- Automatic updates, or standing requests
- Ability to specify which products and which product attributes are to be received for each product
- Multiple data formats and versions
- Consistent, accurate product catalog information across all sellers
- Support for GS1 Data Structures
- Support for basic data elements, including NRF color and size codes, and extended data elements according to published industry guidelines
- Functional Acknowledgements in response to batch files requested
- Error handling, support, reporting, and notification
- Implementation assistance and testing verification
- Experienced customer support
- Assistance requesting seller access and enforcing buyer data compliance guidelines
- Product images

6.5. Process Overview

The basic process that a buyer follows to access, request, and receive seller catalog information using a third party service on an as-needed or automated basis includes:

- Requesting catalog access
- Activating automatic updates
- Requesting GTINs
- Receiving GTINs

The steps outlined above are addressed in subsequent pages of this section.

6.5.1. Requesting Catalog Access

Buyers can request that seller(s) grant them catalog access by contacting the seller directly or by asking the third party catalog service to contact the seller(s) on behalf of the buyer. Activating Automatic Updates (“Standing Requests”)

Buyers may activate or de-activate automatic updates (also termed “standing requests” or “auto update profiles”) for each of their accessible seller’s catalogs.

Buyers activate and de-activate automatic updates at the following levels:

- Entire catalog view
- By specific selection code
- By specific trade item

Buyers activate and de-activate automatic updates in the following ways:

- Online
- Via EDI using a VICS 832 Transaction Set

Within their automatic update profiles, buyers can specify the level of data they wish to receive. This specification can be performed either online or using an EDI 832 Transaction Set. The following detail levels may be set for data returned as the result of automatic updates:

Level Selected	Returns this catalog information
Trade item	Selection codes & descriptions Trade items & descriptions
Trade item & color	Selection codes & descriptions Trade items & descriptions Color codes & descriptions for each trade item
Trade item & size	Selection codes & descriptions Trade items & descriptions Size codes & descriptions for each trade item
GTIN level	Selection codes & descriptions Trade items & descriptions GTIN full item detail

When a buyer initially activates automatic updates, that subset of the seller's catalog is automatically transmitted to the buyer to provide a baseline for future incremental automatic updates. Whenever sellers update their catalogs within a buyer's established automatic update profile, the updates are automatically transmitted to the buyer in the buyer's preferred format and version.

Buyers can de-activate automatic updates at any time, using the formats and methods outlined above. Once a buyer de-activates automatic updates for a portion of a seller's catalog (or for the entire catalog), automatic updates will no longer flow to the buyer.

Additional third party features for automatic updates include:

- Status reports for each batch file processed
- Functional Acknowledgement (997) Transaction Sets for each auto update file sent
- Multiple VICS 832 versions supported
- VICS 832 test file verification
- Data content error notification and online error handling

The diagram on the following page illustrates the methods buyers can use to set their automatic update profiles.

6.5.2. Requesting GTINs

- Buyers can explicitly request seller catalog information online or by using a VICS 832 Transaction Set or real-time interface.

6.5.2.1. Online Requests

Using an online interface, buyers can browse through sellers' catalogs and request GTINs at the following levels:

- By catalog (accessible)
- By selection code
- By trade item
- By GTIN

Request levels may be further qualified by a “change date,” which requests that catalog data be updated within a specified time period

Buyers can request delivery of their requests via EDI or tape in the VICS 832 or GMAIC+

formats. One request session results in a file containing requested data from one seller’s

catalog.

6.5.2.2. VICS 832 Requests

VICS 832 requests are transmitted by the buyer to the third party catalog service via EDI. Buyers may make requests at any of the following levels:

Criteria Specified	Catalog Subset Returned
Seller ID	Complete catalog
Seller ID & selection code	All products with matching selection code
Seller ID & trade item	All colors and sizes for the specified trade item
Seller ID & trade item + color code	All sizes for the product matching the specified color.
Seller ID & trade item & size code	All colors for the product matching the specified size.
Seller ID & trade item & color code & size code	A unique item (specific GTIN).
Seller ID & GTIN	A unique item (specific GTIN).
GTIN	A unique item (specific GTIN) where the seller is not specified.

Request levels may be further qualified by a “change date,” which requests that catalog data be updated within a specified time period

Additional third party features for VICS 832 requests include:

- Functional Acknowledgement (997) Transaction Sets for each batch file received
- Multiple VICS 832 versions supported
- VICS 832 test file verification
- Data content error notification and online error handling

6.5.2.3. Real-Time Requests

Buyers may choose to integrate a real-time connection between their companies and the third party catalog service to request and receive seller catalog information. This connection consists of a direct pipeline through which buyer requests and seller catalog responses flow in real-time, with virtually immediate response.

A real-time access method is most often used in conjunction

with:

- Buyer Point-of-Sale lookups
- Buyer offices, logistics department, or distribution center lookups
- Buyer ordering processes and systems requiring real-time lookups of GTINs
- Other buyer processes

Integrating real-time access in conjunction with a third party catalog service is a complex process that involves system integration tasks such as:

- Installing and testing of service provider software
- Developing proprietary request and response transaction mappings
- Installing and testing of the direct communications line between the buyer and the third party service
- Integrating real-time lookups into a buyer's internal business processes and programs

6.5.3. Receiving GTINs

Buyers receive seller U.P.C. Catalog information as the result of any of the following activities (real-time not included):

- Buyer online request
- Buyer VICS 832 request
- Automatic updates set by buyer

Buyers can receive GTINs in the following formats:

- VICS 832 Transaction Set via EDI or tape
- GMAIC+ flat file via EDI or tape

Additional third party features for receiving GTINs include:

- Ability to specify which product attributes are to be received for each product
- Multiple VICS 832 versions supported
- VICS 832 test file verification
- Standardized GTIN coding, UCC Company Prefix (Block ID) validation, ownership lookups

6.6. Frequently Asked Questions

Here are some answers to the most frequently asked questions regarding third party catalog services.

6.6.1. Value Proposition

- ***How did the concept of a third party catalog service develop?***

  The first third party catalog services were established in 1988 in response to Retail Apparel and General Merchandise buyers and sellers who were instrumental in developing the Quick Response Initiative. This group of companies created the first set of EDI guidelines to be used for communicating U.P.C. Catalog information, which is today known as the *VICS Electronic Commerce Standards & Implementation Guidelines for Retail Apparel and General Merchandise*.

  Before third party catalogs

  SELLER

  Sellers had to transmit their U.P.C. Catalog information directly, point-to-point, to all their buyer partners and customers. This required separate and duplicate transmissions by seller

to each buyer, and often in a variety of data formats, versions, and media. Sellers were also required to manage their buyers' catalog access controls internally, including determining which public and private data each buyer should receive.

BUYER

Buyers had to be capable of receiving and processing direct product catalog transmissions from all their sellers separately, often in a variety of data formats, versions, and media. Buyers were at the mercy of their sellers' direct transmissions, and they frequently received and processed unnecessary product attributes and information.

BOTH SELLERS and BUYERS

On both sides, this resulted in a huge investment in order to handle a virtually limitless combination of data formats, versions, media, and timing and data priorities. In addition, inconsistency and non- standards compliance across all suppliers required significant investment to reconcile and correct.

- **With third party catalogs**

SELLERS

Sellers who use third party catalogs only have to maintain ONE COPY of their product catalog; this includes initial catalog loading as well as introduction of new products and changes to existing products. Once sellers update their catalogs (whether on a daily basis, or more or less frequently), the catalog service automatically transmits those updates to buyer partners, ensuring that buyers receive only information about products for which they have expressed an interest.

BUYERS

Buyers can specify that they only receive certain product attributes and descriptors rather than receive all the information transmitted by the seller. The third party catalog service manages a seller's catalog access controls as well as a buyer's automatic-update specifications and customized 832 mappings. It also automatically handles data format, version, media, and timing requirements for all trading partners throughout the supply chain.

6.6.2. Security Considerations

- ***How do I know that my product identification information is secure?***

Strict security measures are in place to ensure complete security of a seller's catalog information and to prevent unauthorized access to the catalog. These include:

- Standard EDI transmission validation among trading partners
- At least two levels of validation for every batch catalog update
- Online user validation for online catalog updates
- Seller-granted buyer catalog access
- Comprehensive data content compliance-checking, content editing, and verification to ensure that the right catalog is updating with accurate information
- Automated catalog backups

6.6.3. Service Requirements

- ***What are the requirements for buyers and sellers to use a third party catalog***

service effectively?

Here's what you need for most services:

EDI processing capability: An absolute requirement unless your company is relatively small and you plan to perform your catalog updates or queries exclusively online

EDI translation software: mapping for VICS 832 Transaction Set

Software to update your internal item files with VICS 832 or flat

files Standard personal computer and modem

3270-emulation software: to access mainframe screens (often provided by third party)

Standard web browser and Internet service provider: to access Web pages

- ***Can I access third party catalog services on the Internet?***

  Some are available with Internet access today. Check with each provider to determine whether or not this type of access is currently available.

- ***Besides the Internet, what other access methods are available?***

  There are a number of access methods available, and these may vary depending upon the particular service provider. In general, the following access methods are available:

Online catalog browse and maintenance through mainframe screens

EDI or magnetic tape for seller updates, refresh/reloads

EDI or magnetic tape for buyer responses

EDI for buyer requests

For buyers, real-time mainframe interface for requests and responses

6.6.4. Data Formats and Versions

- ***What data formats and versions are supported for updating, requesting, and receiving product catalog information?***

  Third party catalog services in general support the most recent versions of the published standards. Check with each third party to determine specific availability. The following formats and versions may be available, but you are encouraged to use the most recently published versions.

ANSI	VICS	Flat file Formats
002001		GMAIC
	002002VICS	GMAIC+
	002003VICS	
004010	004010VICS	
004020	004020VICS	
004030	004030VICS	
Thru	Thru	
004060	004060VICS	
005010	005010VICS	
Thru	Thru	
005050	005050VICS	
006010	006010VICS	

Thru	Thru
006040	006040VICS

- ***What about my international trading partners?***

  Within North America (U.S., Canada, Mexico), the VICS 832 Transaction Set should be used and is available in the majority of third party catalog services.

  For your trading partners outside North America, the EDIFACT (EANCOM subset) PRICAT, and PROINQ messages should be used. Check with individual third parties to determine the available of these international standards.

7. Business Examples

7.1. Additional Seller Examples

Selection Code Change

The vendor wants to change the selection code for a specific ID number. The ID number currently exists in the catalog in selection code 100. The vendor wants to change the selection code to 200.

Relevant data:	Current selection code	100
	New selection code	200
	Trade item	4550A
	Color code	450
	Size code	21777
	GTIN	01234563334445

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001	***832*** is the Transaction Set Identifier for the Price/Sales Catalog Transaction set. ***001*** is the transaction set control number.
BCT*RC*6000010000*200*****04**	***RC*** is the catalog purpose code indicating that this is to set a U.P.C. Catalog profile. ***6000010000*** is the vendor ID, which identifies the vendor catalog. ***200*** is the NEW selection code to be associated with the GTIN ***04*** is the action code, which means a modify (change) to the vendor's catalog information. ***NOTE:*** The current selection code assigned to the GTIN (100) is not transmitted in this transaction set.
LIN*1*VA*4550A*UP*0123453334445*CM*450*SM*21777	***1*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***4550A*** is the trade item. ***0123453334445*** is the GTIN. ***CM*** is the trade item qualifier, which indicates the trade item that follows is an NRF color code. ***450*** is the NRF color code assigned to the GTIN. ***SM*** is the NRF size code assigned to the GTIN. ***NOTE:*** All these values must match their current values in the catalog prior to sending this change request.
CTT*1	***1*** is the number of line items (LIN segments) present in this transaction set.
SE5*0001**	***5*** is the number of included segments in this transaction set, including the ST and SE segments. ***0001*** is the transaction set control number.

7.2. Discontinue a Trade Item

The vendor wants to discontinue a trade item to indicate to his retailers that it will no longer be available for order on or after the discontinue date. The GTINs associated with the trade item are therefore discontinued.

Relevant data: Selection code 200

Trade item 4550A

NOTE: This example assumes the 832 version to be 004010VICS, in which eight-digit dates that include a two-digit century are available for use.

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001	***832*** is the Transaction Set Identifier for the Price/Sales Catalog Transaction Set. ***001*** is the transaction set control number.
BCT*RC*6000010000*200*****04**	***RC*** is the catalog purpose code indicating that this is to set a U.P.C. Catalog profile. ***6000010000*** is the vendor ID, which identifies the vendor catalog. ***200*** is the current selection code associated with the GTIN. ***04*** is the action code, which means a modify (change) to the vendor's catalog information.
LIN*1*VA*4550A	***1*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***4550A*** is the trade item being discontinued.
DTM*036*19991231	***036*** is the date qualifier indicating that the next field contains a discontinue date. ***19991231*** is the discontinue date when the trade item will no longer be available for order.
CTT*1	***1*** is the number of line items (LIN segments) present in this transaction set.
SE6*0001**	6 is the number of included segments in this transaction set, including the ST and SE segments. ***0001*** is the transaction set control number.

7.3. Reinstate a Trade Item

The vendor has previously discontinued a trade item, including all GTINs in the trade item. He wants to reinstate the trade item, to indicate to his retailers that it will again be available for order on the reinstatement date. The GTINs associated with the trade item can be reinstated and available for order.

Relevant data: Selection code 200

Trade item 4550A

NOTE: This example assumes the 832 version to be 004010VICS, in which eight-digit dates that include a two-digit century are available for use.

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001	***832*** is the Transaction Set Identifier for the Price/Sales Catalog Transaction Set. ***001*** is the transaction set control number.
BCT*RC*6000010000*200*****04**	***RC*** is the catalog purpose code indicating that this is to set a U.P.C. Catalog profile. ***6000010000*** is the vendor ID, which identifies the vendor catalog. ***200*** is the current selection code associated with the GTIN. ***04*** is the action code, which means a modify (change) to the vendor's catalog information.

EDI TRANSMISSION DATA	EXPLANATION
LIN*1*VA*4550A	***1*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***4550A*** is the trade item being reinstated.
DTM*584*20000315	***036*** is the date qualifier indicating that the next field contains a discontinue date. ***20000315*** is the discontinue date when the trade item will again be available for order.
CTT*1	***1*** is the number of line items (LIN segments) present in this transaction set.
SE6*0001**	6 is the number of included segments in this transaction set, including the ST and SE segments. ***0001*** is the transaction set control number.

7.4. Discontinue a GTIN

The vendor wants to discontinue a GTIN, which will no longer be available for order on or after the discontinue date.

Relevant data: Selection code 200
Trade item 4550A
GTIN 0123453334445

NOTE: This example assumes the 832 version to be 004010VICS, in which eight-digit dates that include a two-digit century are available for use.

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001	***832*** is the Transaction Set Identifier for the Price/Sales Catalog Transaction Set. ***001*** is the transaction set control number.
BCT*RC*6000010000*200*****04**	***RC*** is the catalog purpose code indicating that this is to set a U.P.C. Catalog profile. ***6000010000*** is the vendor ID, which identifies the vendor catalog. ***200*** is the current selection code associated with the GTIN. ***04*** is the action code, which means a modify (change) to the vendor's catalog information.
LIN*1*VA*4550A*UP*0123453334445	***1*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***4550A*** is the trade item. ***UP*** is the product/service qualifier indicating that the next field will contain a GTIN. ***0123453334445*** is the GTIN to be discontinued.
DTM*036*19991231	***036*** is the date qualifier indicating that the next field contains a discontinue date. ***19991231*** is the discontinue date when the ID number will no longer be available for order.
CTT*1	***1*** is the number of line items (LIN segments) present in this transaction set.

EDI TRANSMISSION DATA	EXPLANATION
SE6*0001**	***6*** is the number of included segments in this transaction set, including the ST and SE segments. ***0001*** is the transaction set control number.

7.5. Reinstate a GTIN

The vendor has previously discontinued a GTIN. He wants to reinstate the ID number to indicate to his retailers that it will again be available for order on the reinstatement date.

Relevant data: Selection code 200
Trade item 4550A
GTIN 0123453334445

NOTE: This example assumes the 832 version to be 004010VICS or later, in which eight-digit dates that include a two-digit century are available for use.

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001	***832*** is the Transaction Set Identifier for the Price/Sales Catalog Transaction Set. ***001*** is the transaction set control number.
BCT*RC*6000010000*200*****04**	***RC*** is the catalog purpose code indicating that this is to set a U.P.C. Catalog profile. ***6000010000*** is the vendor ID, which identifies the vendor catalog. ***200*** is the current selection code associated with the GTIN. ***04*** is the action code which means a modify (change) to the vendor's catalog information.
LIN*1*VA*4550A*UP*0123453334445	***1*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***4550A*** is the trade item. ***UP*** is the product/service qualifier indicating that the next field will contain a GTIN. ***0123453334445*** is the GTIN to be reinstated.
DTM*584*20000315	***036*** is the date qualifier indicating that the next field contains a discontinue date. ***20000315*** is the discontinue date when the ID number will again be available for order.
CTT*1	***1*** is the number of line items (LIN segments) present in this transaction set.
SE6*0001**	***6*** is the number of included segments in this transaction set, including the ST and SE segments. ***0001*** is the transaction set control number.

7.6. Modify the Short and Extended Product, Color, and Size Descriptions for a GTIN

The vendors want to modify the short and extended trade item descriptions, color descriptions, and size descriptions for a specific GTIN.

Relevant data: Selection code 200

Trade item 4550A

GTIN 0123453334445

NOTE: This example assumes the 832 version to be 004010VICS, in which eight-digit dates that include a two-digit century are available for use.

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001	***832*** is the Transaction Set Identifier for the Price/Sales Catalog Transaction Set. ***001*** is the transaction set control number.
BCT*RC*6000010000*200****WOMEN'S BLOUSES*04**	***RC*** is the catalog purpose code indicating that this is to set a U.P.C. Catalog profile. ***6000010000*** is the vendor ID, which identifies the vendor catalog. ***200*** is the current selection code associated with the GTIN. ***WOMEN'S BLOUSES*** is the selection code description ***04*** is the action code, which means a modify (change) to the vendor's catalog information.
LIN*1*VA*4550A*UP*0123453334445	***1*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***4550A*** is the trade item for which short and extended descriptions are being modified. ***UP*** is the product/service qualifier indicating that the next field will contain a GTIN. ***0123453334445*** is the ID number for which short and extended descriptions are being modified.
DTM*043*19990515	***043*** is the date qualifier indicating that the next field contains a change date. ***19990515*** is the change date.
PID*F*08*SILK CHEMISE**	***F*** is the Item description type which indicates that the information following will be free-form text found in PID05. ***08*** is the product/process characteristic code, which identifies the text in PID05 as a product description. ***SILK CHEMISE*** is the SHORT product description.
PID*X*08*VI*ED*SILK CHEMISE WITH LACE COLLAR and CUFFS	***F*** is the Item description type, which indicates that the information following will be free-form text found in PID05. ***08*** is the product/process characteristic code which identifies the text in PID05 as a product description. ***VI*** indicates that PID04 comes from a VICS code list. ***ED*** indicates that PID05 contains an EXTENDED description. ***SILK CHEMISE WITH LACE COLLAR and CUFFS*** is the EXTENDED product description.
PID*F*73*LILY WHITE**	***F*** is the item description type which indicates that the information following will be free-form text found in PID05. ***73*** is the product/process characteristic code, which identifies the text in PID05 as a color description. ***LILY WHITE*** is the SHORT color description.

EDI TRANSMISSION DATA	EXPLANATION
PID*X*73*VI*ED*LILY WHITE WITH NAVY PIPING	***F*** is the item description type which indicates that the information following will be free-form text found in PID05. 73***8*** is the product/process characteristic code, which identifies the text in PID05 as a color description. ***VI*** indicates that PID04 comes from a VICS code list. ***ED*** indicates that PID05 contains an EXTENDED description. ***LILY WHITE WITH NAVY PIPING*** is the EXTENDED color description.
PID*F*74*XLARGE**	***F*** is the item description type, which indicates that the information following will be free-form text found in PID05. ***74*** is the product/process characteristic code, which identifies the text in PID05 as a size description. ***XLARGE*** is the SHORT size description.
PID*X*74*VI*ED*XLARGE PETITE WOMENS	***F*** is the item description type, which indicates that the information following will be free-form text found in PID05. 73***8*** is the product/process characteristic code, which identifies the text in PID05 as a size description. ***VI*** indicates that PID04 comes from a VICS code list. ***ED*** indicates that PID05 contains an EXTENDED description. ***XLARGE PETITE WOMENS*** is the EXTENDED size description.
CTT*1	***1*** is the number of line items (LIN segments) present in this transaction set.
SE*12*0001	***12*** is the number of included segments in this transaction set, including the ST and SE segments. ***0001*** is the transaction set control number.

7.7. Grant Whole Catalog Access

The vendor wants to grant one of his retailers access to his entire product catalog ("unlimited catalog access").

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001	***832*** is the Transaction Set Identifier for the Price/Sales Catalog Transaction Set. ***001*** is the transaction set control number.
BCT*RC*6000010000**6000020001****02**	***RC*** is the catalog purpose code indicating that this is to set a U.P.C. Catalog profile. ***6000010000*** is the vendor ID which identifies the vendor catalog. ***6000020001*** is the retailer identifier for which the vendor wants to grant catalog access. ***02*** is the action code which means an <u>add</u> to the retailer's catalog access profile by the vendor. ***NOTE:*** BCT03 being null indicates that the vendor is granting the retailer access to his entire catalog.
CTT*0	***1*** is the number of line items (LIN segments) present in this transaction set.
SE*4*0001	***4*** is the number of included segments in this transaction set, including the ST and SE segments. ***0001*** is the transaction set control number.

7.8. Grant Catalog Access by Selection Code

The vendor wants to grant one of his retailers limited catalog access to a specific selection code.

Relevant data: Selection code 200

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001	***832*** is the Transaction Set Identifier for the Price/Sales Catalog Transaction Set. ***001*** is the transaction set control number.
BCT*RC*6000010000*200* 6000020001****02**	***RC*** is the catalog purpose code indicating that this is to set a U.P.C. Catalog profile. ***6000010000*** is the vendor ID, which identifies the vendor catalog. ***200*** is the selection code to which the retailer is being granted access by the vendor. ***6000020001*** is the retailer identifier for which the vendor wants to grant catalog access. ***02*** is the action code, which means an add to the retailer's catalog access profile by the vendor.
CTT*0	***0*** is the number of line items (LIN segments) present in this transaction set.
SE*4*0001	***4*** is the number of included segments in this transaction set, including the ST and SE segments. ***0001*** is the transaction set control number.

7.9. Additional Buyer Examples

7.9.1. Business Scenario: Buyer Requests Trade Item and Color Code

Buyer requests by trade item and color code. Response is all GTINs matching the trade item and color code specified in the buyer request.

Relevant data: Selection code 505
Trade item 4550A
Color code 450

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001	***832*** is the Transaction Set Identifier for the Price/Sales Catalog Transaction Set. ***001*** is the transaction set control number.
BCT*RC*6000010000*505* 6000020001****13**	***RC*** is the catalog purpose code indicating that this is to set a U.P.C. Catalog profile. ***6000010000*** is the vendor ID, which identifies the vendor catalog. ***505*** is the selection code. ***6000020001*** is the retailer identifier. ***13*** is the action code which means a request for catalog information.

EDI TRANSMISSION DATA	EXPLANATION
LIN*1*VA*4550A*CM*450	***1*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***4550A*** is the trade item for which catalog data is being requested. ***CM*** is the trade item qualifier, which indicates the trade item that follows is an NRF color code. ***450*** is the NRF color code for which catalog data is being requested.
CTT*1	***1*** is the number of line items (LIN segments) present in this transaction set.
SE*5*0001	***5*** is the number of included segments in this transaction set, including the ST and SE segments. ***0001*** is the transaction set control number.

The above example could have excluded the Selection Code, 505, in the BCT segment. This implies that all ID numbers in the trade item, 4550A, matching color code 450, will be automatically sent to the retailer, even if the product is in more than one selection code or if the retailer does not know the selection code issued by the vendor.

Business Scenario: Buyer requests trade item and size code

Buyer requests Trade Item and size code. Response is all GTINs matching the trade item and size code specified in the buyer request.

Relevant data: Selection code 505
Trade item 4550A
Size code 21777

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001	***832*** is the Transaction Set Identifier for the Price/Sales Catalog Transaction Set. ***001*** is the transaction set control number.
BCT*RC*6000010000*505* ***6000020001****13**	***RC*** is the catalog purpose code indicating that this is to set a U.P.C. Catalog profile. ***6000010000*** is the vendor ID which identifies the vendor catalog. ***505*** is the selection code. ***6000020001*** is the retailer identifier. ***13*** is the action code, which means a request for catalog information.
LIN*1*VA*4550A*SM*21777	***1*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***4550A*** is the trade item for which catalog data is being requested. ***SM*** is the trade item qualifier, which indicates the trade item that follows is an NRF size code. 21777 is the NRF size code for which catalog data is being requested.
CTT*1	***1*** is the number of line items (LIN segments) present in this transaction set.
SE*5*0001	***5*** is the number of included segments in this transaction set, including the ST and SE segments. ***0001*** is the transaction set control number.

The above example could have excluded the selection code, 505, in the BCT segment. This implies that all GTINs that have a trade item, 4550A, that matches the size code, 21777, will be automatically sent to the

retailer, even if the trade item is in more than one selection code or if the retailer does not know the selection code issued by the vendor.

Business Scenario: Example 832 Response Transaction Set With ID number level response and many product attributes

This example of an 832 Response Transaction Set contains the majority of available product attributes for the ID number.

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001	***832*** is the Transaction Set Identifier for the Price/Sales Catalog Transaction Set. ***001*** is the transaction set control number.
BCT*RC*6000010000*505****WOMEN'S BLOUSES*11**	***RC*** is the catalog purpose code indicating that this is to set a U.P.C. Catalog profile. ***6000010000*** is the vendor ID, which identifies the vendor catalog. ***505*** is the selection code. ***WOMEN'S BLOUSES*** is the selection code description. ***11*** is the action code which means a response to a previous retailer request for catalog information.
LIN*1*VA*4550A*UP*0123453334445*CM*450*SM*21777	***1*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***4550A*** is the trade item. ***UP*** is the product/service ID qualifier, which indicates the product/service ID that follows is a trade item. ***0123453334445*** is the trade item. ***CM*** is the trade item qualifier, which indicates the trade item that follows is an NRF color code. ***450*** is the NRF color code assigned to the ID number. ***SM*** is the trade item qualifier, which indicates the trade item that follows is an NRF size code. ***21777*** is the NRF size code assigned to the ID number.
DTM*043*19990515	***043*** is the date qualifier indicating that the next field contains a change date. ***19990515*** is the change date.
DTM*092*19990101	***092*** is the date qualifier indicating that the next field contains a booking date. ***19990101*** is the booking date.
DTM*018*19990215	***018*** is the date qualifier indicating that the next field contains an availability date. ***19990215*** is the availability date.
CTB*OR57*100**	***OR*** is a constant value indicating that CTB04 contains an ordering quantity. ***57*** is a constant value indicating that CTB04 contains a minimum order quantity. ***100*** is the minimum order quantity.
PID*F*08*SILK CHEMISE**	***F*** is the item description type, which indicates that the information following will be free-form text found in PID05. ***08*** is the product/process characteristic code, which identifies the text in PID05 as a product description. ***SILK CHEMISE*** is the SHORT product description.

EDI TRANSMISSION DATA	EXPLANATION
PID*X*08*VI*ED*SILK CHEMISE WITH LACE COLLAR AND CUFFS	***F*** is the item description type, which indicates that the information following will be free-form text found in PID05. ***08*** is the product/process characteristic code, which identifies the text in PID05 as a product description. ***VI*** indicates that PID04 comes from a VICS code list. ***ED*** indicates that PID05 contains an EXTENDED description. ***SILK CHEMISE WITH LACE COLLAR AND CUFFS*** is the EXTENDED product description.
PID*F*73*LILY WHITE**	***F*** is the item description type, which indicates that the information following will be free-form text found in PID05. ***73*** is the product/process characteristic code, which identifies the text in PID05 as a color description. ***LILY WHITE*** is the SHORT dolor description.
PID*X*73*VI*ED*LILY WHITE WITH NAVY PIPING	***F*** is the Item description type, which indicates that the information following will be free-form text found in PID05.73 ***8*** is the product/process characteristic code, which identifies the text in PID05 as a color description. ***VI*** indicates that PID04 comes from a VICS code list. ***ED*** indicates that PID05 contains an EXTENDED description. ***LILY WHITE WITH NAVY PIPING*** is the EXTENDED color description.
PID*F*74*XLARGE**	***F*** is the item description type, which indicates that the information following will be free-form text found in PID05. ***74*** is the product/process characteristic code, which identifies the text in PID05 as a size description. ***XLARGE*** is the SHORT size description.
PID*X*74*VI*ED*XLARGE PETITE WOMENS	***F*** is the item description type, which indicates that the information following will be free-form text found in PID05.73 ***8*** is the product/process characteristic code, which identifies the text in PID05 as a size description. ***VI*** indicates that PID04 comes from a VICS code list. ***ED*** indicates that PID05 contains an EXTENDED description. ***XLARGE PETITE WOMENS*** is the EXTENDED size description.
PID*F*92*100% CHINESE SILK**	***F*** is the item description type, which indicates that the information following will be free-form text found in PID05. 92 is the product/process characteristic code, which identifies the text in PID05 as a fabric description. ***100% CHINESE SILK*** is the fabric description.
PID*F*WD*2-YEAR MANUFACTURER'S WARRANTY**	***F*** is the item description type, which indicates that the information following will be free-form text found in PID05. ***WD*** is the product/process characteristic code, which identifies the text in PID05 as a warranty description. ***XLARGE*** is the warranty description.
PID*SVI*SY**	***S*** is the item description type, which indicates that the information following will be a coded description in PID04. ***VI*** indicates that the code in PID04 comes from a VICS-maintained code list. ***SY*** indicates that this product is a seasonal item that may be re-ordered.

EDI TRANSMISSION DATA	EXPLANATION
G55*UP*092204119551*33.4*IN*12.3*IN*24.2*IN***3**********.5*G*L*******5**	***UP*** is the trade item qualifier that indicates that the next field will contain an ID number. ***092204119551*** is the GTIN for which the G55 segment dimensions and pack sizes apply. ***33.4*** is the height of the consumer unit. ***IN*** indicates that the height is given in "inches." ***12.3*** is the width of the consumer unit. ***IN*** indicates that the width is given in "inches." ***24.2*** is the length of the consumer unit. ***IN*** indicates that the length is given in "inches." ***3*** is the number of inner containers in the outer container. ***.5*** is the gross weight of the item. ***G*** indicates that the gross weight is provided. ***L*** indicates that the weight is given in "pounds." ***5*** is the number of each in the inner container. "Each" is assumed for the unit of measure.
CTP*WH*MSR*45.00*200*EA	***WH*** is a price qualifier indicating that the price found in CTP03 is a wholesale price. ***MSR*** is a price type qualifier indicating that the price found in CTP03 is the manufacturer's suggested retail price. ***45.00*** is the unit price. ***200*** is the order quantity to which the CTP03 price applies. ***EA*** is the unit of measure that applies to the CTP04 quantity.
DTM*196*19990515	***196*** is the date qualifier indicating that DTM02 contains a start date for the price contained in the previous CTP segment. ***19990515*** is the start date for the price, the date when the price goes into effect.
DTM*197*19991231	***197*** is the date qualifier indicating that DTM02 contains an end date for the price contained in the previous CTP segment. ***19991231*** is the end date for the price, the date when the price is no longer in effect.
CTP*WH*UCP*20.00*200*EA	***WH*** is a price qualifier indicating that the price found in CTP03 is a wholesale price. ***UCP*** is a price type qualifier indicating that the price found in CTP03 is the manufacturer's list unit cost. ***20.00*** is the unit cost. ***200*** is the order quantity to which the CTP03 cost applies. ***EA*** is the unit of measure that applies to the CTP04 quantity.
DTM*196*19990515	***196*** is the date qualifier indicating that DTM02 contains a start date for the price contained in the previous CTP segment. ***19990515*** is the start date for the price, the date when the price goes into effect.
DTM*197*19991231	***197*** is the date qualifier indicating that DTM02 contains an end date for the price contained in the previous CTP segment. ***19991231*** is the end date for the price, the date when the price is no longer in effect.
CTT*1	***1*** is the number of line items (LIN segments) present in this transaction set.
SE*25*0001	***5*** is the number of included segments in this transaction set, including the ST and SE segments. ***0001*** is the transaction set control number.

8. Direct 832 Service

What is a Direct 832?

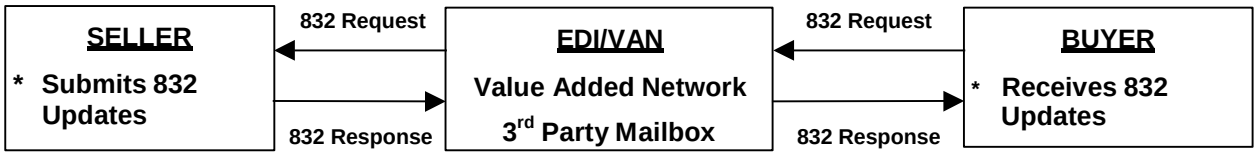
Direct trading of 832 catalog information involves an electronic partnership to provide product information between seller and buyer. The transaction set used is the Price Sales Catalog (832), which conveys the ID number and trade item attributes. There are two options that a buyer and seller can use to provide product information in a direct relationship. These options are:

1. 832 Request/Response: Allows the buyer to request GTIN information for a given seller's trade item. The buyer sends an 832 Transaction Set, identified as a *request*, listing the trade items for which GTIN information is being requested. The seller responds with an 832 Transaction Set, identified as a *response*, which will contain all GTIN data for every requested trade item for which seller trade item information is available.

2. 832 *Updates*: All changes made by sellers to their product files are automatically transmitted from sellers on a daily basis, or as changes or additions are made to a seller's catalog, they are transmitted to those trading partners who choose this option.

In addition to the 832 Response and 832 daily transactions, the seller provides an initial load of product/size information on a one-time-only basis. This is not a stand-alone option, as changes to product/size information occur often, sometimes daily, and should be retrieved by the buyer using one of the electronic transmission options described above.

Direct 832 Flow Chart



8.1. Primary Benefits

A Quick Response Initiative Enabler

- Supports the Quick Response Initiative, which recommends the use of EDI to transmit business documents and the use of GTINs to identify all products among trading partners.
- The goal of Quick Response is to ensure that a buyer has the right product on the shelf at the right price, in the right color and size, in order to anticipate and meet consumer needs. Implementing a Quick Response program increases inventory turnover and sales volumes for buyers, and Increases profits and decreases accounts payable for sellers
- Promotes, via the EDI 832, standardized product identification using GTINs and supporting data elements across the entire supply chain.

8.1.1. Eliminates Third Party Partnerships

- Leverages each company's EDI capabilities that are already in place for other EDI documents. These are also direct relationships.
- Less expense for buyers who only need GTIN information from a few sellers
- Less expense for sellers who only need to provide GTIN information to a few buyers

8.1.2. Timely receipt of Data

- Increases accuracy of item setup information, thus increasing the accuracy of orders, invoices, and

other EDI documents

- Standardizes data according to published VICS and NRF guidelines

- Reduces errors that are often introduced through manual data entry tasks
- Reduces Point-of-Sale scanning errors. Facilitates automated POS lookups. Enables real-time POS lookups, as well as lookups for products that would not scan at POS.
- Reduces distribution center scanning errors and facilitates display ready orders

8.1.3. Facilitates New Item Setup and Cross-Reference

Facilitates the new item setup and on-going maintenance processes, as well as cross-referencing of standard trade items as well as product, color, and size numbers to buyer's internal codes.

8.2. Basic Features of Direct 832

8.2.1. Features for Sellers

- Receive 832 request transactions from buyers
- Send 832 updates automatically to buyers
- Generate Functional Acknowledgement (997) Transaction Sets
- Seller controls buyer access to GTIN information
- VICS 832 test file verification
- Extended data elements may be available based on partnership
- May be a less expensive alternative for sellers who only need to provide GTIN information to a few buyers.

8.2.2. Features for Buyers

- Send 832 requests to seller for catalog information
- Receive 832s containing seller catalog information
- Generate Functional Acknowledgement (997) Transaction Sets
- Extended data elements may be available based on partnership
- May be a less expensive alternative for buyers who only need GTIN information from a few sellers

8.3. Seller Direct 832 Product Database Maintenance

Sellers maintain their product databases using the following methods:

- Trade item creation, update, and deletion
- Catalogs are maintained by sellers' internal GTIN and trade item cross reference systems
- GTINs must be retained in accordance to VICS guidelines

Sellers can transmit incremental catalog updates or complete catalog refresh/reloads using VICS 832 Transaction Sets, via EDI or magnetic tape. Magnetic tape is generally used for first time set-up only.

8.4. Buyer's Direct 832 Product Database Maintenance

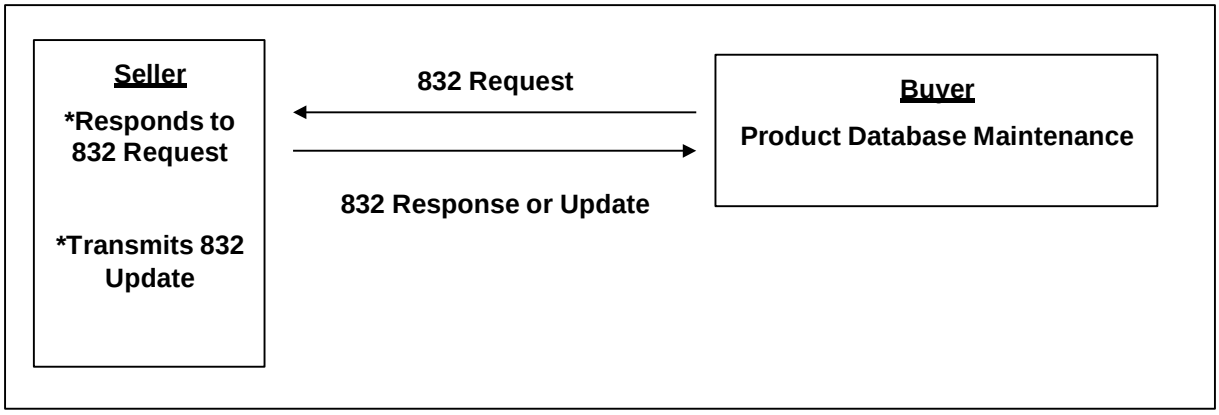
Buyers may set up their internal systems to receive seller catalog updates or to request trade items as they wish. Following are some scenarios for requesting trade items:

- New product information due to seasonal introductions
- Product updates

- Buying office requests
- To address scanning errors at POS (Point-of-Sale)

- To address missing product information in purchase order (buying office) or ship notice (distribution center) system
- Product database discrepancies

Buyer Direct 832 Product Database Maintenance



9. Prices and Costs

9.1. Types of Prices

A variety of types of prices and related information may be transmitted in the 832 Transaction Set, including:

- Manufacturer's suggested retail, unit cost, contract prices, bracket prices, and others
- Retail, wholesale, dealer, distributor, and other classes of trade
- Start and end dates indicating when a particular price or cost is effective
- Currency
- Price list reference number and date
- Market areas
- Pricing conditions
- Public prices that apply to all of a supplier's trading partners
- Private prices that apply to only selected trading partners

Pricing attributes may be transmitted, and may apply, to a GTIN at any hierarchical packaging level, whether pallet, module, case, prepack, or item. For example, "manufacturer's suggested retail price" applies to consumer unit items, and "unit cost" most often applies to packaging levels higher than consumer unit, such as prepack, case, module, and pallet.

Pricing information is primarily transmitted in the CTP loop within the 832 Transaction Set detail area. Price brackets and bracket prices are transmitted in the header area G93 segment and the detail area CTP loop G40 segment.

The table below shows the CTP loop segments used to transmit price related information:

CTP Loop Segment	Used to Transmit This Pricing Information
CTP	Class of trade Type of price Unit price

CTP Loop Segment	Used to Transmit This Pricing Information
	Quantity Unit of measure
DTM	Start date End date
G36	Price list reference number Price list date
CUR	Currency
REF	Specific retailers to whom the price applies (private prices—third party environment only)
G43	Market areas
SAC	Allowances and charges
G26	Pricing conditions
G40	Bracket prices ***NOTE***: The G93 in the 832 header area is used in conjunction with the CTP loop G40 segments to communicate price brackets and bracket prices.

9.2. Methods of Price Communication

Pricing information may be transmitted in the 832 in either of the following ways:

- Alone, where the 832 Transaction Set only contains the relevant pricing attributes for specified GTINs.

In this case, the BCT01 purpose code will be:

PS price sheet: retail price communication

- Along with other 832 product attributes in regular catalog maintenance transactions.

In this case, the BCT01 purpose code will be one of the following:

RC resale catalog: U.P.C. Catalog data, traditional vendor's catalog

SC sales catalog: Used only by the alcohol beverage industry

In a third party environment, the BCT01 purpose code originally transmitted by the supplier is passed on in related 832s transmitted by the third party to the supplier's trading partners.

9.3. Direct vs. Third Party

832 Transaction Sets used to for price communications may be transmitted directly between trading partners or, alternatively, through third party catalog services.

9.3.1. Direct

Direct price communications between trading partners automatically imply that the prices transmitted in the 832 apply only to the data receiver (retailer). These 832 transmissions may contain:

- Public prices: those that apply to all trading partners, including the specific retailer to whom the direct transmission is sent
- Private prices: those that apply only to the trading partner receiving the 832 (e.g., negotiated retailer-specific prices and costs)

Since the 832 is transmitted directly from the supplier to his retailer trading partner, there is *no need* to use the REF segment within the CTP loop to identify the retailer to whom the prices and costs apply.

9.3.2. Third Party

Price communications from the supplier to a third party catalog service, and ultimately to the supplier's retailer trading partners, is supported by some third parties. These 832 transmissions may contain:

- Public prices: those that apply to all trading partners
- Private prices: those that apply only to the trading partner receiving automatic updates in the 832 from the supplier's catalog (e.g., negotiated retailer-specific prices and costs).

Since the 832 is transmitted from the supplier to the third party catalog, and then ultimately on to the supplier's trading partners, the supplier must use the REF segment within the CTP loop to specifically identify private prices/costs that apply only to selected retailers. One or more REF segments per CTP loop may be provided to accomplish the task of transmitting retailer-specific prices and costs.

Some third party catalogs process and store various types of prices in a supplier's catalog, which may include public prices and costs, private prices and costs, or both. Public prices and costs are viewable in an online environment by all retailers to whom the supplier has previously granted catalog access. Private (retailer-specific) prices are only viewable online by the retailer(s) specified by the supplier in the REF segment of the CTP loop for a particular price or cost. Strict security measures are employed by third parties that support retailer-specific prices and costs to ensure that required price confidentiality is maintained.

When generating automatic updates to the supplier's retailer trading partners, the third party catalog generates all ***public prices*** to the supplier's retailer trading partners to whom:

- The supplier has previously granted catalog access
- The retailer trading partner has activated automatic updates for the catalog item associated with the price
- The retailer has specified that he wishes to receive pricing information in 832s transmitted by the third party

When generating automatic updates to the supplier's retailer trading partners, the third party catalog generates ***private (retailer-specific) prices*** to the supplier's retailer trading partners to whom:

- The supplier has previously granted catalog access
- The supplier has previously indicated the price applies
- The retailer trading partner has activated automatic updates for the catalog item associated with the price
- The retailer has specified that he wishes to receive pricing information in 832s transmitted by the third party

Strict security measures are employed by the third party to ensure that required price confidentiality is maintained.

10. Business Examples

10.1. Direct 832 Transmissions

This section contains business examples relating to direct price communications between trading partners (from supplier directly to retailer trading partner).

10.1.1. Direct Example 1: Price Information Only: Non-Bracketed Prices

This example relates to direct 832 price communication where only price information is contained in the 832 Transaction Set, and a pallet unit cost (non-bracketed) is transmitted. The GTIN identifying the pallet, as well as related pallet attributes, were previously transmitted to the retailer in a separate 832 Transaction Set at initial item setup time. The price information is being added to the existing pallet definition. Additionally, the manufacturer's suggested retail price for a consumer unit trade item is transmitted in the same 832.

Note that the REF segment *is not used* in the CTP loop since the direct transmission, by definition, implies that all prices and costs communicated apply only to the retailer receiving the 832.

Business Case Description

The 832 is transmitted directly from the supplier to one of his retailers.

LINE ITEM 1: PALLET

- Selection code: 100, description "Sydney 2000 Gear"
- Trade item: P1-SYDNEY
- GTIN: 11111111111111
- Pallet unit cost: $1000
- Price list ref # and date: PL12345, 1/1/2000
- Start and end date: 1/1/2000, 3/1/2000
- Currency: U.S. dollars
- Market area: All stores operated by the retailer
- Allowance: A promotional discount of 2.5 percent applies

LINE ITEM 2: CONSUMER UNIT

- Selection code: 100, description "Sydney 2000 Gear"
- Trade item: ABC123 ("Crew-Neck T shirt navy")
- GTIN: 022222222222
- MSR: $25.00
- Currency: U.S. dollars

832 Representation

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001	***832*** is the Transaction Set Identifier for the Price/Sales Catalog Transaction Set. ***0001*** is the transaction set control number.
BCT*PS*6000010000*100**** Sydney 2000 Gear*04**	***PS*** is the catalog purpose code indicating that this is a price communication. ***6000010000*** is the supplier ID, which identifies the supplier catalog. ***100*** is the selection code ***Sydney 2000 Gear*** is the selection code description (optional) ***04*** is the action code, which means to modify the existing line items within the supplier's catalog to include current price information contained in line items in this 832.
DTM*043*19991215	***043*** is the code representing change date. ***19991215*** is the change date of December 15, 1999.
LIN*1*VA*P1- SYDNEY*UK*11111111111111	***1*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***P1-SYDNEY*** is the trade item for the pallet. ***UK*** is the qualifier indicating that the following value is a GTIN. ***11111111111111*** is the pallet GTIN.

EDI TRANSMISSION DATA	EXPLANATION
CTP*WH*UCP*1000*1*PL	***WH*** indicates that the price belongs to "wholesale" class of trade. ***UCP*** indicates that the price is a "unit cost" for the pallet. ***1000*** indicates that the price is $1000.00. ***1*** indicates the price applies to a quantity of one. ***PL*** indicates that the price applies to a pallet.
DTM*196*20000101	***196*** is the qualifier representing "start date." ***20000101*** is the date when the price goes into effect, January 1, 2000.
DTM*197*20000301	***197*** is the qualifier representing "end date." ***20000301*** is the date when the price is no longer in effect, March 1, 2000.
G36*PL1234520000101**	***PL12345*** is the price list reference number ***20000101*** is the date on the price list
CUR*SE*USD	***SE*** is the qualifier for "selling party." ***USD*** indicates that the pallet cost is specified in U.S. dollars.
G43*006	***006*** is the qualifier indicating that the pallet cost is applicable to all stores operated by the retailer.
SAC*A* F810**1*2.5*****02**	***A*** indicates that this is an allowance to be applied to the base pallet cost. ***F810*** is the qualifier indicating that the allowance is a promotional discount. ***1*** indicates that the percent discount is applied to unit list cost. ***2.5*** indicates that the promotional discount is 2.5%. ***02*** indicates that the method of handling is "off invoice."
LIN*2*VA*ABC123*UP*0222222222222	***2*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***ABC123*** is the trade item for the consumer unit item. ***UP*** is the qualifier indicating that the following value is a GTIN. ***022222222222*** is the GTIN.
CTP*WH*MSR*25*1*EA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***MSR*** indicates that the price is the manufacturer's suggested retail price for the item. ***25*** indicates that the price is $25.00. ***1*** indicates the price applies to a quantity of one. ***EA*** indicates that the price applies to one item.
CUR*SE*USD	***SE*** is the qualifier for "selling party." ***USD*** indicates that the pallet cost is specified in U.S. dollars.
CTT*2	***2*** is the number of line Items (LIN segments) present in this transaction set.
SE*16*0001	***16*** is the number of included segments in this transaction set, including the ST and SE segments. ***0001*** is the transaction set control number.

10.1.2. Direct Example 2: Price and Product Information: Non-Bracketed Quantity Break Prices

This example relates to direct 832 price communication where price information along with regular product attributes is contained in the 832 Transaction Set at initial item setup time. A case of crew-neck T-shirts that contains 12 consumer units and may be purchased in varying quantities is described.

Note that the REF segment *is not used* in the CTP loop since the direct transmission, by definition, implies that all prices and costs communicated apply only to the retailer receiving the 832.

Business Case Description

The 832 is transmitted directly from the supplier to one of his retailers.

LINE ITEM 1: CONSUMER UNIT

- Selection code: 100, description “Sydney 2000 Gear”
- Trade item: ABC123, description “Crew-Neck T”
- GTIN: 011111111111
- Color: White
- Size: XL
- Packaging material: each item is wrapped in plastic
- MSR: $25.00
- Currency: U.S. dollars

LINE ITEM 2: CASE

- Selection code: 100, description “Sydney 2000 Gear”
- Trade item: ABC123, description “Crew-Neck T”
- GTIN: 00033333333333
- Case unit costs: Qty: 1 Cost: $100/case
  Qty: 10 Cost: $75/case
  Qty: 20 Cost: $50/case
- Case dimensions: 2’x2’x2’, weight 10 lbs., corrugated carton
- Case components: 12 qty of GTIN 011111111111
- Price list ref # and date: PL12345, 1/1/2000
- Start and end date: 1/1/2000, 3/1/2000
- Currency: U.S. dollars
- Market area: All stores operated by the retailer
- Allowance: A promotional discount of 2.5 percent applies

832 Representation

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001	***832*** is the Transaction Set Identifier for the Price/Sales Catalog Transaction Set. ***0001*** is the transaction set control number.
BCT*RC*6000010000*100**** SYDNEY 2000 GEAR*02**	***RC*** is the catalog purpose code indicating that this is a price communication. ***6000010000*** is the supplier ID, which identifies the supplier catalog. ***100*** is the selection code ***Sydney 2000 Gear*** is the selection code description (optional) ***02*** is the action code, which means to add all product and price information contained in line items in this 832 to the supplier's catalog..
DTM*043*19991215	***043*** is the code representing change date. ***19991215*** is the change date of December 15, 1999.
Setup Consumer Unit Item & MSR	
LIN*1*VA*ABC123*UP*011111111111*CM* 100*SM*10980	***1*** is the assigned line item identification. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***ABC123*** is the trade item. ***UP*** is the qualifier indicating that the next value is a GTIN. ***011111111111*** is the GTIN. ***CM*** is the qualifier indicating that the next value is an NRF color code. ***100*** is the NRF color code for "white." ***SM*** is the qualifier indicating that the next value is an NRF size code. ***10980*** is the NRF size code for "X large."
PID*F*08*CREW-NECK T****EN**	***F*** indicates that the description is free-form. ***08*** indicates that this is a style description. ***Crew-Neck T*** is the short free-form style description. ***EN*** is the language code for "English."
PID*F*73*WHITE****EN**	***F*** indicates that the description is free-form. ***73*** indicates that this is a color description. ***White*** is the short free-form color description. ***EN*** is the language code for "English."
PID*F*73*XL****EN**	***F*** indicates that the description is free-form. ***74*** indicates that this is a size description. ***XL*** is the short free-form size description ("X large"). ***EN*** is the language code for "English."
G55*UP*011111111111********1*** WHITE CREW-NECK T XL**********WRP79**	***UP*** is the qualifier indicating that the following value is a GTIN. ***011111111111*** is the GTIN for the current trade item. ***1*** is the number of consumer units. ***White Crew-Neck T XL*** is the cash register description. ***WRP79*** indicates that the consumer unit is wrapped in plastic.

EDI TRANSMISSION DATA	EXPLANATION
CTP*WH*MSR*25*1*EA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***MSR*** indicates that the price is a "manufacturer's suggested retail price."." ***25*** indicates that the price is $25.00. ***1*** indicates the price applies to a quantity of one. ***EA*** indicates that the price applies to "each" item.
CUR*SE*USD	***SE*** is the qualifier for "selling party." ***USD*** indicates that the pallet cost is specified in U.S. dollars.
Setup Case & Quantity Break Costs	
LIN*2*VA*ABC123*UA*033333333333	***2*** is the assigned line item identification. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***ABC123*** is the trade item. ***UA*** is the qualifier indicating that the next value is a Logistic Unit Identifier. ***033333333333*** is the Logistic Unit Identifier.
PID*F*08*CREW-NECK T****EN**	***F*** indicates that the description is free-form. ***08*** indicates that this is a style description. ***Crew-Neck T*** is the short free-form style description. ***EN*** is the language code for "English."
CTP*WH*UCP*100*1*CA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***UCP*** indicates that the price is a "unit cost." ***100*** indicates that the price is $100.00. ***1*** indicates the price applies to a quantity of one. ***CA*** indicates that the price applies to the case.
DTM*196*20000101	***196*** is the qualifier representing "start date." ***20000101*** is the date when the price goes into effect, January 1, 2000.
DTM*197*20000301	***197*** is the qualifier representing "end date." ***20000301*** is the date when the price is no longer in effect, March 1, 2000.
G36*PL1234520000101**	***PL12345*** is the price list reference number ***20000101*** is the date on the price list
CUR*SE*USD	***SE*** is the qualifier for "selling party." ***USD*** indicates that the pallet cost is specified in U.S. dollars.
G43*006	***006*** is the qualifier indicating that the pallet cost is applicable to all stores operated by the retailer.
SAC*A* F810**1*2.5*****02**	***A*** indicates that this is an allowance to be applied to the base pallet cost. ***F810*** is the qualifier indicating that the allowance is a promotional discount. ***1*** indicates that the percent discount is applied to unit list cost. ***2.5*** indicates that the promotional discount is 2.5%. ***02*** indicates that the method of handling is "off invoice."
CTP*WH*UCP*75*10*CA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***UCP*** indicates that the price is a "unit cost." ***75*** indicates that the price is $75.00. ***10*** indicates the price applies to a quantity of 10 cases. ***CA*** indicates that the price applies to the case.

EDI TRANSMISSION DATA	EXPLANATION
DTM*196*20000101	***196*** is the qualifier representing "start date." ***20000101*** is the date when the price goes into effect, January 1, 2000.
DTM*197*20000301	***197*** is the qualifier representing "end date." ***20000301*** is the date when the price is no longer in effect, March 1, 2000.
G36*PL1234520000101**	***PL12345*** is the price list reference number ***20000101*** is the date on the price list
CUR*SE*USD	***SE*** is the qualifier for "selling party." ***USD*** indicates that the pallet cost is specified in U.S. dollars.
G43*006	***006*** is the qualifier indicating that the pallet cost is applicable to all stores operated by the retailer.
SAC*A* F810**1*2.5*****02**	***A*** indicates that this is an allowance to be applied to the base pallet cost. ***F810*** is the qualifier indicating that the allowance is a promotional discount. ***1*** indicates that the percent discount is applied to unit list cost. ***2.5*** indicates that the promotional discount is 2.5%. ***02*** indicates that the method of handling is "off invoice."
CTP*WH*UCP*50*20*CA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***UCP*** indicates that the price is a "unit cost." ***50*** indicates that the price is $50.00. ***20*** indicates the price applies to a quantity of 20 cases. ***CA*** indicates that the price applies to the case.
DTM*196*20000101	***196*** is the qualifier representing "start date." ***20000101*** is the date when the price goes into effect, January 1, 2000.
DTM*197*20000301	***197*** is the qualifier representing "end date." ***20000301*** is the date when the price is no longer in effect, March 1, 2000.
G36*PL1234520000101**	***PL12345*** is the price list reference number ***20000101*** is the date on the price list
CUR*SE*USD	***SE*** is the qualifier for "selling party." ***USD*** indicates that the pallet cost is specified in U.S. dollars.
G43*006	***006*** is the qualifier indicating that the pallet cost is applicable to all stores operated by the retailer.
SAC*A* F810**1*2.5*****02**	***A*** indicates that this is an allowance to be applied to the base pallet cost. ***F810*** is the qualifier indicating that the allowance is a promotional discount. ***1*** indicates that the percent discount is applied to unit list cost. ***2.5*** indicates that the promotional discount is 2.5%. ***02*** indicates that the method of handling is "off invoice."

EDI TRANSMISSION DATA	EXPLANATION
G39*00033333333333**10*G*L*2*FT*2*FT*2*FT*8*CF**12**********BOX25**	***00033333333333*** is the Logistic Unit Identifier provided in the LIN segment. ***10*** is the case weight. ***G*** indicates it is a gross weight. ***L*** is the weight unit of measure representing "pounds." ***2*** is the case height. ***FT*** is the height unit of measure representing "feet." ***2*** is the case width. ***FT*** is the width unit of measure representing "feet." ***2*** is the case length. ***FT*** is the length unit of measure representing "feet." ***8*** is the case volume. ***CF*** is the volume unit of measure representing "cubic feet." ***12*** is the total number of units in the case (there are no inner packs in this case). ***BOX25*** indicates that the case material is a corrugated carton.
SLN*2*1*I*12*EA**UP*011111111111**	***2*** is the assigned identification number for this line item. ***1*** is the assigned identification number for this sub-line item component. ***I*** indicates that a component is being defined. ***12*** is the quantity of component contained in the case. ***EA*** is the unit of measure "each." ***UP*** is the qualifier indicating that the following value is a GTIN. ***011111111111*** is the GTIN contained in the case.
CTT*2	***2*** is the number of line items (LIN segments) present in this transaction set.
SE*37*0001	***37*** is the number of included segments in this transaction set, including the ST and SE segments. ***0001*** is the transaction set control number.

10.1.3. Direct Example 3: Price and Product Information: Bracket Prices

This example relates to direct 832 price communication where price information along with other product attributes is contained in the 832 Transaction Set at initial item setup time. A case of crew-neck T-shirts that contains 12 consumer units is bracket priced to the retailer. The manufacturer's suggested retail price for the consumer unit is also provided and is non-bracketed.

The header area G93 segment is used to transmit the price brackets and related information:

- Price bracket ID
- Quantity
- Unit of measure
- Description
- Method of transportation

The detail area CTP loop G40 segment is used to transmit the bracket prices associated with the brackets established in the header area G93 segments:

- Price bracket ID
- Unit cost

Multiple bracket prices (e.g., multiple G40 segments) may be contained in one CTP loop.

Since the CTP segment itself is not meaningfully used to communicate bracket prices, and since the CTP segment is required to indicate the start of each CTP loop, a non-meaningful CTP segment should be used with bracket prices. Examples of possible types of CTP segments to use when communicating price brackets include, but are not limited to, the following:

CTP*XX

CTP*WH*UCP

Note that the REF segment *is not used* in the CTP loop since the direct transmission, by definition, implies that all prices and costs communicated apply only to the retailer receiving the 832.

Business Case Description

- The 832 is transmitted directly from the supplier to one of his retailers
- The consumer unit item manufacturer's suggested retail price is transmitted and is **non-bracketed**
- The case costs are **bracket prices** as specified below

LINE ITEM 1: CONSUMER UNIT

- Selection code: 100, description "Sydney 2000 Gear"
- Trade item: ABC123, description "Crew-Neck T"
- GTIN: 011111111111
- Color: White
- Size: XL
- Packaging material: each item is wrapped in plastic
- MSR: $25.00
- Currency: U.S. dollars

LINE ITEM 2: CASE

- Selection code: 100, description "Sydney 2000 Gear"
- Trade item: ABC123, description "Crew-Neck T"
- GTIN: 00033333333333
- Price brackets:

Price Bracket ID	Qty	Unit of Meas, Description	Transp. Method
PB-1	1	CA Discount Qty 1	Motor, common carrier
PB-10	10	CA Discount Qty 10	Motor, common carrier
PB-20	20	CA Discount Qty 20	Motor, common carrier

- Bracket prices:

Price Bracket ID	Unit Cost
PB-1	$100
PB-10	$75
PB-20	$50

- Case dimensions: 2'x2'x2', weight 10 lbs., corrugated carton
- Case components: 12 qty of GTIN 011111111111

- Price list ref # and date: PL12345, 1/1/2000

- Start and end date: 1/1/2000, 3/1/2000
- Currency: U.S. dollars
- Market area: All stores operated by the retailer
- Allowance: A promotional discount of 2.5 percent applies

832 Representation

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001	***832*** is the Transaction Set Identifier for the Price/Sales Catalog Transaction Set. ***0001*** is the transaction set control number.
BCT*RC*6000010000*100****SYDNEY 2000 GEAR*02**	***RC*** is the catalog purpose code indicating that this is a price communication. ***6000010000*** is the supplier ID, which identifies the supplier catalog. ***100*** is the selection code ***Sydney 2000 Gear*** is the selection code description (optional) ***02*** is the action code, which means to add all product and price information contained in line items in this 832 to the supplier's catalog..
DTM*043*19991215	***043*** is the code representing change date. ***19991215*** is the change date in the format CCYYMMDD.
Setup price brackets in header area of 832	
G93*PB-1*1*CA*DISCOUNT Qty 1*M	***PB-1*** is the price bracket identifier ("price bracket ID"). ***1*** is the price bracket quantity. ***CA*** is the unit of measure for the quantity, "case." ***Discount Qty 1*** is the price bracket description. ***M*** indicates that the method of transportation is "motor, common carrier."
G93*PB-10*10*CA*DISCOUNT Qty 10*M	***PB-10*** is the price bracket identifier ("price bracket ID"). ***10*** is the price bracket quantity. ***CA*** is the unit of measure for the quantity, "case." ***Discount Qty 10*** is the price bracket description. ***M*** indicates that the method of transportation is "motor, common carrier."
G93*PB-20*20*CA*Discount Qty 20*M	***PB-20*** is the price bracket identifier ("price bracket ID"). ***20*** is the price bracket quantity. ***CA*** is the unit of measure for the quantity, "case." ***Discount Qty 20*** is the price bracket description. ***M*** indicates that the method of transportation is "motor, common carrier."
Setup Consumer Unit Item & MSR (non-bracketed)	

EDI TRANSMISSION DATA	EXPLANATION
LIN*1*VA*ABC123*UP*011111111111* CM*100*SM*10980	***1*** is the assigned line item identification. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***ABC123*** is the trade item. ***UP*** is the qualifier indicating that the next value is a GTIN. ***011111111111*** is the consumer unit GTIN. ***CM*** is the qualifier indicating that the next value is an NRF color code. ***100*** is the NRF color code for "white." ***SM*** is the qualifier indicating that the next value is an NRF size code. ***10980*** is the NRF size code for "X large."
PID*F*08*CREW-NECK T****EN**	***F*** indicates that the description is free-form. ***08*** indicates that this is a style description. ***Crew-Neck T*** is the short free-form style description. ***EN*** is the language code for "English."
PID*F*73*WHITE****EN**	***F*** indicates that the description is free-form. ***73*** indicates that this is a color description. ***White*** is the short free-form color description. ***EN*** is the language code for "English."
PID*F*73*XL****EN**	***F*** indicates that the description is free-form. ***74*** indicates that this is a size description. ***XL*** is the short free-form size description ("X large"). ***EN*** is the language code for "English."
G55*UP*011111111111********1*** WHITE CREW-NECK T XL**********WRP79**	***UP*** is the qualifier indicating that the following value is a GTIN. ***011111111111*** is the consumer unit GTIN for the current trade item. ***1*** is the number of consumer units. ***White Crew-Neck T XL*** is the cash register description. ***WRP79*** indicates that the consumer unit is wrapped in plastic.
CTP*WH*MSR*25*1*EA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***MSR*** indicates that the price is a "manufacturer's suggested retail price." ***25*** indicates that the price is $25.00. ***1*** indicates the price applies to a quantity of one. ***EA*** indicates that the price applies to "each" item.
CUR*SE*USD	***SE*** is the qualifier for "selling party." ***USD*** indicates that the pallet cost is specified in U.S. dollars.
Setup Case & Bracketed Case Prices	
LIN*2*VA*ABC123*UA*033333333333	***2*** is the assigned line item identification. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***ABC123*** is the trade item. ***UA*** is the qualifier indicating that the next value is a Logistic Unit Identifier. ***033333333333*** is the Logistic Unit Identifier
PID*F*08*CREW-NECK T****EN**	***F*** indicates that the description is free-form. ***08*** indicates that this is a style description. ***Crew-Neck T*** is the short free-form style description. ***EN*** is the language code for "English."

EDI TRANSMISSION DATA	EXPLANATION
CTP*XX	***XX*** is a place holder indicating the start of the CTP loop, since the CTP segment is not meaningfully used with price brackets but is still required to start the CTP loop.
DTM*196*20000101	***196*** is the qualifier representing "start date." ***20000101*** is the date when the price goes into effect January 1, 2000.
DTM*197*20000301	***197*** is the qualifier representing "end date." ***20000301*** is the date when the price is no longer in effect March 1, 2000..
G36*PL1234520000101**	***PL12345*** is the price list reference number ***20000101*** is the date on the price list
CUR*SE*USD	***SE*** is the qualifier for "selling party." ***USD*** indicates that the pallet cost is specified in U.S. dollars.
G43*006	***006*** is the qualifier indicating that the pallet cost is applicable to all stores operated by the retailer.
SAC*A* F810**1*2.5*****02**	***A*** indicates that this is an allowance to be applied to the base pallet cost. ***F810*** is the qualifier indicating that the allowance is a "promotional discount." ***1*** indicates that the percent discount is applied to "unit cost." ***2.5*** indicates that the promotional discount is 2.5%. ***02*** indicates that the method of handling is "off invoice."
G40*PB-1*100	***PB-1*** is the price bracket ID matching one of the header area G93 segments in this 832 Transaction Set. ***100*** is the unit cost of $100.00 for the specified price bracket ID (quantity of one case purchased).
G40*PB-10*75	***PB-10*** is the price bracket ID matching one of the header area G93 segments in this 832 Transaction Set. ***75*** is the unit cost of $75.00 for the specified price bracket ID (quantity of 10 cases purchased).
G40*PB-20*50	***PB-20*** is the price bracket ID matching one of the header area G93 segments in this 832 Transaction Set. ***50*** is the unit cost of $50.00 for the specified price bracket ID (quantity of 20 case purchased).
G39*033333333333**10*G*L*2*FT*2*FT*2*FT*8*CF**12**********BOX25**	***033333333333*** is the Logistic Unit Identifier provided in the LIN segment. ***10*** is the case weight. ***G*** indicates it is a gross weight. ***L*** is the weight unit of measure representing "pounds." ***2*** is the case height. ***FT*** is the height unit of measure representing "feet." ***2*** is the case width. ***FT*** is the width unit of measure representing "feet." ***2*** is the case length. ***FT*** is the length unit of measure representing "feet." ***8*** is the case volume. ***CF*** is the volume unit of measure representing "cubic feet." ***12*** is the total number of units in the case (there are no inner packs in this case). ***BOX25*** indicates that the case material is a corrugated carton.

EDI TRANSMISSION DATA	EXPLANATION
SLN*2*1*I*12*EA**UP*011111111111**	***2*** is the assigned identification number for this line item. ***1*** is the assigned identification number for this sub-line item component. ***I*** indicates that a GTIN is being defined. ***12*** is the quantity of GTINs contained in the case. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***011111111111*** is the GTIN contained in the case.
CTT*2	***2*** is the number of line items (LIN segments) present in this transaction set.
SE*29*0001	***36*** is the number of included segments in this transaction set, including the ST and SE segments. ***0001*** is the transaction set control number.

10.2. Third Party 832 Transmissions

This section contains business examples relating to third party price communications (from supplier to third party, and ultimately to retailer).

10.2.1. Third Party Example 1: Price Information Only: Non-Bracketed Prices

This example relates to third party 832 price communication where only price information is contained in the 832 Transaction Set, and a pallet unit cost (non-bracketed) is transmitted. The GTINs identifying the pallet, as well as related pallet attributes, were previously transmitted to the retailer. The price information is being added to the existing pallet definition. Additionally, the manufacturer's suggested retail price for a consumer unit item is transmitted in the same 832.

Note that *the REF segment in the CTP loop is used* to indicate to the third party catalog service that the cost and price information pertains only to retailer A.

Business Case Description:

- The 832 is transmitted directly from the supplier to one of his retailers
- The pallet cost applies only to retailer A, whose identification number to suppliers in the third party service is the UCC COMMID 6000022233
- The manufacturer's suggested retail price for the consumer unit trade item applies to all the supplier's retailer trading partners (e.g., is a "public" price)

LINE ITEM 1:

- Selection code: 100, description "Sydney 2000 Gear"
- Trade item: P1-SYDNEY
- GTIN: 11111111111111
- Pallet unit cost: $1000
- Price list ref # and date: PL12345, 1/1/2000
- Start and end date: 1/1/2000, 3/1/2000
- Currency: U.S. dollars
- Market area: All stores operated by the retailer
- Allowance: A promotional discount of 2.5 percent appli

LINE ITEM 2:

- Selection code: 100, description “Sydney 2000 Gear”
- Trade item: ABC123 (“crew-neck T shirt navy”)
- GTIN: 022222222222
- MSR: $25.00
- Currency: U.S. dollars

832 Representation

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001	***832*** is the Transaction Set Identifier for the Price/Sales Catalog Transaction Set. ***0001*** is the transaction set control number.
BCT*PS*6000010000*100**** SYDNEY 2000 GEAR*04**	***PS*** is the catalog purpose code indicating that this is a price communication. ***6000010000*** is the supplier ID, which identifies the supplier catalog. ***100*** is the selection code ***Sydney 2000 Gear*** is the selection code description (optional) ***04*** is the action code, which means to modify the existing GTIN within the supplier’s catalog to add current price information contained in line items in this 832 to the supplier’s catalog.
DTM*043*19991215	***043*** is the code representing change date. ***19991215*** is the change date of December 15, 1999.
LIN*1*VA*P1- SYDNEY*UK*11111111111111	***1*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***P1-SYDNEY*** is the trade item for the pallet. ***UK*** is the qualifier indicating that the following value is and GTIN. ***11111111111111*** is the pallet GTIN.
CTP*WH*UCP*1000*1*PL	***WH*** indicates that the price belongs to “wholesale” class of trade. ***UCP*** indicates that the price is a “unit cost” for the pallet. ***1000*** indicates that the price is $1000.00. ***1*** indicates the price applies to a quantity of one. ***PL*** indicates that the price applies to a pallet.
DTM*196*20000101	***196*** is the qualifier representing “start date.” ***20000101*** is the date when the price goes into effect January 1, 2000.
DTM*197*20000301	***197*** is the qualifier representing “end date.” ***20000301*** is the date when the price is no longer in effect March 1, 2000.
G36*PL1234520000101**	***PL12345*** is the price list reference number ***20000101*** is the date on the price list
CUR*SE*USD	***SE*** is the qualifier for “selling party.” ***USD*** indicates that the pallet cost is specified in U.S. dollars.
REF*YD*6000022233	***YD*** is the qualifier indicating that the reference number that follows is a retailer identification number. ***6000022233*** is the retailer identification number, indicating that the pallet cost in this line item applies only to the specified retailer (it is a “private cost”).

EDI TRANSMISSION DATA	EXPLANATION
G43*006	***006*** is the qualifier indicating that the pallet cost is applicable to all stores operated by the retailer.
SAC*A* F810**1*2.5*****02**	***A*** indicates that this is an allowance to be applied to the base pallet cost. ***F810*** is the qualifier indicating that the allowance is a promotional discount. ***1*** indicates that the percent discount is applied to unit list cost. ***2.5*** indicates that the promotional discount is 2.5%. ***02*** indicates that the method of handling is "off invoice."
LIN*2*VA*ABC123*UP*0222222222222	***2*** is the assigned identification number for this line item. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***ABC123*** is the trade item for the consumer unit item. ***UP*** is the qualifier indicating that the following value is a GTIN. ***022222222222*** is the consumer unit GTIN.
CTP*WH*MSR*25*1*EA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***MSR*** indicates that the price is the manufacturer's suggested retail price for the item. ***25*** indicates that the price is $25.00. ***1*** indicates the price applies to a quantity of one. ***EA*** indicates that the price applies to one item.
CUR*SE*USD	***SE*** is the qualifier for "selling party." ***USD*** indicates that the pallet cost is specified in U.S. dollars.
CTT*2	***2*** is the number of line items (LIN segments) present in this transaction set.
SE*17*0001	***17*** is the number of included segments in this transaction set, including the ST and SE segments. ***0001*** is the transaction set control number.

10.2.2. Third Party Example 2: Price and Product Information: Non-Bracketed Quantity Break Prices

This example relates to third party 832s price information along with regular product attributes and is contained in the 832 Transaction Set at initial item setup time. A case of crew-neck T-shirts that contains 12 consumer units and may be purchased in varying quantities is described.

Note that *the REF segment in the CTP loop is used* to indicate to the third party catalog service that the case costs pertain only to retailer A. Note also that the manufacturer's suggested retail price for the consumer units contained in the case apply to all the supplier's retailer trading partners (e.g., MSR is "public").

Business Case Description:

- The 832 is transmitted from the supplier to the third party catalog, and ultimately to the supplier's retailers
- Case costs apply only to retailer A, whose identification number to suppliers in the third party service is the UCC COMMID 6000022233
- Manufacturer suggested retail price for the consumer unit trade item is a "public" price that applies to all the supplier's retailer trading partners

LINE ITEM 1: CONSUMER UNIT

- Selection code: 100, description "Sydney 2000 Gear"
- Trade item: ABC123, description "Crew-Neck T"
- GTIN: 011111111111

- Color: White
- Size: XL
- Packaging material: each item is wrapped in plastic
- MSR: $25.00
- Currency: U.S. dollars

LINE ITEM 2: CASE

- Selection code: 100, description “Sydney 2000 Gear”
- Trade item: ABC123, description “Crew-Neck T”
- Case GTIN: 00033333333333
- Case unit costs: Qty: 1 Cost: $100/case
  Qty: 10 Cost: $75/case
  Qty: 20 Cost: $50/case
- Case dimensions: 2’x2’x2’, weight 10 lbs., corrugated carton
- Case components: 12 qty of GTIN 011111111111
- Price list ref # and date: PL12345, 1/1/2000
- Start and end date: 1/1/2000, 3/1/2000
- Currency: U.S. dollars
- Market area: All stores operated by the retailer
- Allowance: A promotional discount of 2.5 percent applies

832 Representation

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001	***832*** is the Transaction Set Identifier for the Price/Sales Catalog Transaction Set. ***0001*** is the transaction set control number.
BCT*RC*6000010000*100**** SYDNEY 2000 GEAR*02**	***RC*** is the catalog purpose code indicating that this is a price communication. ***6000010000*** is the supplier ID, which identifies the supplier catalog. ***100*** is the selection code ***Sydney 2000 Gear*** is the selection code description (optional) ***02*** is the action code, which means to add all product and price information contained in line items in this 832 to the supplier’s catalog.
DTM*043*19991215	***043*** is the code representing change date. ***19991215*** is the change date of December 15, 1999.
Setup Consumer Unit Item & MSR (public)	

EDI TRANSMISSION DATA	EXPLANATION
LIN*1*VA*ABC123*UP*011111111111*CM*100*SM*10980	***1*** is the assigned line item identification number. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***ABC123*** is the trade item. ***UP*** is the qualifier indicating that the next value is a consumer unit GTIN. ***011111111111*** is the consumer unit GTIN. ***CM*** is the qualifier indicating that the next value is an NRF color code. ***100*** is the NRF color code for "white." ***SM*** is the qualifier indicating that the next value is an NRF size code. ***10980*** is the NRF size code for "X large."
PID*F*08*CREW-NECK T****EN**	***F*** indicates that the description is free-form. ***08*** indicates that this is a style description. ***Crew-Neck T*** is the short free-form style description. ***EN*** is the language code for "English."
PID*F*73*WHITE****EN**	***F*** indicates that the description is free-form. ***73*** indicates that this is a color description. ***White*** is the short free-form color description. ***EN*** is the language code for "English."
PID*F*73*XL****EN**	***F*** indicates that the description is free-form. ***74*** indicates that this is a size description. ***XL*** is the short free-form size description ("X large"). ***EN*** is the language code for "English."
G55*UP*011111111111********1*** **WHITE CREW-NECK T XL**********WRP79**	***UP*** is the qualifier indicating that the following value is a GTIN. ***011111111111*** is the GTIN for the current trade item. ***1*** is the number of consumer units. ***White Crew-Neck T XL*** is the cash register description. ***WRP79*** indicates that the consumer unit is wrapped in plastic.
CTP*WH*MSR*25*1*EA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***MSR*** indicates that the price is a "manufacturer's suggested retail price." ***25*** indicates that the price is $25.00. ***1*** indicates the price applies to a quantity of one. ***EA*** indicates that the price applies to "each" item.
CUR*SE*USD	***SE*** is the qualifier for "selling party." ***USD*** indicates that the pallet cost is specified in U.S. dollars.
Setup Case & Quantity Break Costs (private)	
LIN*2*VA*ABC123*UA*033333333333	***2*** is the assigned line item identification. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***ABC123*** is the trade item. ***UA*** is the qualifier indicating that the next value is a Logistic Unit Identifier. ***033333333333*** is the Logistic Unit Identifier.
PID*F*08*CREW-NECK T****EN**	***F*** indicates that the description is free-form. ***08*** indicates that this is a style description. ***Crew-Neck T*** is the short free-form style description. ***EN*** is the language code for "English."

EDI TRANSMISSION DATA	EXPLANATION
CTP*WH*UCP*100*1*CA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***UCP*** indicates that the price is a "unit cost." ***100*** indicates that the price is $100.00. ***1*** indicates the price applies to a quantity of one. ***CA*** indicates that the price applies to the case.
DTM*196*20000101	***196*** is the qualifier representing "start date." ***20000101*** is the date when the price goes into effect January 1, 2000.
DTM*197*20000301	***197*** is the qualifier representing "end date." ***20000301*** is the date when the price is no longer in effect March 1, 2000.
G36*PL1234520000101**	***PL12345*** is the price list reference number ***20000101*** is the date on the price list
CUR*SE*USD	***SE*** is the qualifier for "selling party." ***USD*** indicates that the pallet cost is specified in U.S. dollars.
REF*YD*6000022233	***YD*** is the qualifier indicating that the reference number that follows is a retailer identification number. ***6000022233*** is the retailer identification number, indicating that the case cost in this line item applies only to the specified retailer (it is a "private cost").
G43*006	***006*** is the qualifier indicating that the pallet cost is applicable to all stores operated by the retailer.
SAC*A* F810**1*2.5*****02**	***A*** indicates that this is an allowance to be applied to the base pallet cost. ***F810*** is the qualifier indicating that the allowance is a promotional discount. ***1*** indicates that the percent discount is applied to unit list cost. ***2.5*** indicates that the promotional discount is 2.5%. ***02*** indicates that the method of handling is "off invoice."
CTP*WH*UCP*75*10*CA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***UCP*** indicates that the price is a "unit cost." ***75*** indicates that the price is $75.00. ***10*** indicates the price applies to a quantity of 10 cases. ***CA*** indicates that the price applies to the case.
DTM*196*20000101	***196*** is the qualifier representing "start date." ***20000101*** is the date when the price goes into effect January 1, 2000.
DTM*197*20000301	***197*** is the qualifier representing "end date." ***20000301*** is the date when the price is no longer in effect March 1, 2000.
G36*PL1234520000101**	***PL12345*** is the price list reference number ***20000101*** is the date on the price list
CUR*SE*USD	***SE*** is the qualifier for "selling party." ***USD*** indicates that the pallet cost is specified in U.S. dollars.
REF*YD*6000022233	***YD*** is the qualifier indicating that the reference number that follows is a retailer identification number. ***6000022233*** is the retailer identification number, indicating that the case cost in this line item applies only to the specified retailer (it is a "private cost").
G43*006	***006*** is the qualifier indicating that the pallet cost is applicable to all stores operated by the retailer.

EDI TRANSMISSION DATA	EXPLANATION
SAC*A* F810**1*2.5*****02**	***A*** indicates that this is an allowance to be applied to the base pallet cost. ***F810*** is the qualifier indicating that the allowance is a promotional discount. ***1*** indicates that the percent discount is applied to unit list cost. ***2.5*** indicates that the promotional discount is 2.5%. ***02*** indicates that the method of handling is "off invoice."
CTP*WH*UCP*50*20*CA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***UCP*** indicates that the price is a "unit cost." ***50*** indicates that the price is $50.00. ***20*** indicates the price applies to a quantity of 20 cases. ***CA*** indicates that the price applies to the case.
DTM*196*20000101	***196*** is the qualifier representing "start date." ***20000101*** is the date when the price goes into effect January 1, 2000.
DTM*197*20000301	***197*** is the qualifier representing "end date." ***20000301*** is the date when the price is no longer in effect March 1, 2000.
G36*PL1234520000101**	***PL12345*** is the price list reference number ***20000101*** is the date on the price list
CUR*SE*USD	***SE*** is the qualifier for "selling party." ***USD*** indicates that the pallet cost is specified in U.S. dollars.
REF*YD*6000022233	***YD*** is the qualifier indicating that the reference number that follows is a retailer identification number. ***6000022233*** is the retailer identification number, indicating that the case cost in this line item applies only to the specified retailer (it is a "private cost").
G43*006	***006*** is the qualifier indicating that the pallet cost is applicable to all stores operated by the retailer.
SAC*A* F810**1*2.5*****02**	***A*** indicates that this is an allowance to be applied to the base pallet cost. ***F810*** is the qualifier indicating that the allowance is a promotional discount. ***1*** indicates that the percent discount is applied to unit list cost. ***2.5*** indicates that the promotional discount is 2.5%. ***02*** indicates that the method of handling is "off invoice."

EDI TRANSMISSION DATA	EXPLANATION
G39*033333333333**10*G*L*2*FT*2*FT*2*FT*8*CF**12**********BOX25**	***033333333333*** is the Logistic Unit Identifier provided in the LIN segment. ***10*** is the case weight. ***G*** indicates it is a gross weight. ***L*** is the weight unit of measure representing "pounds." ***2*** is the case height. ***FT*** is the height unit of measure representing "feet." ***2*** is the case width. ***FT*** is the width unit of measure representing "feet." ***2*** is the case length. ***FT*** is the length unit of measure representing "feet." ***8*** is the case volume. ***CF*** is the volume unit of measure representing "cubic feet." ***12*** is the total number of units in the case (there are no inner packs in this case). ***BOX25*** indicates that the case material is a corrugated carton.
SLN*2*1*I*12*EA**UP*011111111111**	***2*** is the assigned identification number for this line item. ***1*** is the assigned identification number for this sub-line item component. ***I*** indicates that a GTIN is being defined. ***12*** is the quantity of GTINs contained in the case. ***EA*** is the unit of measure of the consumer unit item contained in the case. ***UP*** is the qualifier indicating that the following value is a 12-digit GTIN. ***011111111111*** is the GTIN contained in the case.
CTT*2	***2*** is the number of line items (LIN segments) present in this transaction set.
SE*40*0001	***40*** is the number of included segments in this transaction set, including the ST and SE segments. ***0001*** is the transaction set control number.

10.2.3. Third Party Example 3: Price and Product Information: Bracket Prices

This example relates to third party 832 transmissions where price information along with other product attributes is contained in the 832 Transaction Set at initial item setup time. A case of crew-neck T-shirts that containing 12 consumer units is bracket priced to a specific retailer. The manufacturer's suggested retail price for the consumer unit is a non-bracketed public price available to all the supplier's retailer trading partners.

The header area G93 segment is used to transmit the price brackets and related information:

- Price bracket ID
- Quantity
- Unit of measure
- Description
- Method of transportation

The Detail Area CTP loop G40 segment is used to transmit the bracket prices associated with the brackets established in the header area G93 segments:

- Price bracket ID
- Unit cost

Multiple bracket prices (e.g., multiple G40 segments) may be contained in one CTP loop.

Since the CTP segment itself is not meaningfully used to communicate bracket prices, and since the CTP segment is required to indicate the start of each CTP loop, a non-meaningful CTP segment should be used with bracket prices. Examples of possible types of CTP segments to use when communicating price brackets include, but are not limited to, the following:

CTP*XX

CTP*WH*UCP

Note that *the REF segment in the CTP loop is used* to indicate to the third party catalog service that the case cost information pertains only to retailer A.

Business Case Description:

- The 832 is transmitted from the supplier to the third party catalog and ultimately to the supplier's retailers
- Case costs apply only to retailer A, whose identification number to suppliers in the third party service is the UCC COMMID 6000022233
- The consumer unit trade item manufacturer's suggested retail price is transmitted and is non-bracketed.
- The case costs are bracket prices as specified below

LINE ITEM 1: CONSUMER UNIT

- Selection code: 100, description "Sydney 2000 Gear"
- Trade item: ABC123, description "Crew-Neck T"
- GTIN: 011111111111
- Color: White
- Size: XL
- Packaging material: each item is wrapped in plastic
- MSR: $25.00
- Currency: U.S. dollars

LIN ITEM 2: CASE

- Selection code: 100, description "Sydney 2000 Gear"
- Trade item: ABC123, description "Crew-Neck T"
- Case GTIN: 033333333333
- Price brackets:

Price Bracket ID	Qty	Unit of Meas, Description	Transp. Method
PB-1	1	CA Discount Qty 1	Motor, common carrier
PB-10	10	CA Discount Qty 10	Motor, common carrier
PB-20	20	CA Discount Qty 20	Motor, common carrier

- Bracket prices:

Price Bracket ID	Unit Cost
PB-1	$100
PB-10	$75
PB-20	$50

- Case dimensions: 2'x2'x2', weight 10 lbs., corrugated carton
- Case components: 12 qty of GTIN 011111111111

- Price list ref # and date: PL12345, 1/1/2000
- Start and end date: 1/1/2000, 3/1/2000
- Currency: U.S. dollars
- Market area: All stores operated by the retailer
- Allowance: A promotional discount of 2.5 percent applies

832 Representation

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001	***832*** is the Transaction Set Identifier for the Price/Sales Catalog Transaction Set. ***0001*** is the transaction set control number.
BCT*RC*6000010000*100****SYDNEY 2000 GEAR*02**	***RC*** is the catalog purpose code indicating that this is a price communication. ***6000010000*** is the supplier ID which identifies the supplier catalog. ***100*** is the selection code ***Sydney 2000 Gear*** is the selection code description (optional) ***02*** is the action code which means to add all product and price information contained in line items in this 832 to the supplier's catalog.
DTM*043*19991215	***043*** is the code representing change date. ***19991215*** is the change date of December 15, 1999.
Setup Price Brackets for Case	
G93*PB-1*1*CA*DISCOUNT QTY 1*M	***PB-1*** is the price bracket identifier ("price bracket ID"). ***1*** is the price bracket quantity. ***CA*** is the unit of measure for the quantity, "case." ***Discount Qty 1*** is the price bracket description. ***M*** indicates that the method of transportation is "motor, common carrier."
G93*PB-10*10*CA*DISCOUNT QTY 10*M	***PB-10*** is the price bracket identifier ("price bracket ID"). ***10*** is the price bracket quantity. ***CA*** is the unit of measure for the quantity, "case." ***Discount Qty 10*** is the price bracket description. ***M*** indicates that the method of transportation is "motor, common carrier."
G93*PB-20*20*CA*DISCOUNT QTY 20*M	***PB-20*** is the price bracket identifier ("price bracket ID"). ***20*** is the price bracket quantity. ***CA*** is the unit of measure for the quantity, "case." ***Discount Qty 20*** is the price bracket description. ***M*** indicates that the method of transportation is "motor, common carrier."
Setup Consumer Unit Item & MSR	

EDI TRANSMISSION DATA	EXPLANATION
LIN*1*Va*ABC123*UP*011111111111*CM*100*SM*10980	***1*** is the assigned line item identification. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***ABC123*** is the trade item. ***UP*** is the qualifier indicating that the next value is a GTIN. ***011111111111*** is the GTIN. ***CM*** is the qualifier indicating that the next value is an NRF color code. ***100*** is the NRF color code for "white." ***SM*** is the qualifier indicating that the next value is an NRF size code. ***10980*** is the NRF size code for "X large."
PID*F*08*CREW-NECK T****EN**	***F*** indicates that the description is free-form. ***08*** indicates that this is a style description. ***Crew-Neck T*** is the short free-form style description. ***EN*** is the language code for "English."
PID*F*73*WHITE****EN**	***F*** indicates that the description is free-form. ***73*** indicates that this is a color description. ***White*** is the short free-form color description. ***EN*** is the language code for "English."
PID*F*73*XL****EN**	***F*** indicates that the description is free-form. ***74*** indicates that this is a size description. ***XL*** is the short free-form size description ("X large"). ***EN*** is the language code for "English."
G55*UP*011111111111********1*** **WHITE CREW-NECK T XL**********WRP79**	***UP*** is the qualifier indicating that the following value is a GTIN. ***011111111111*** is the consumer unit GTIN for the current trade item. ***1*** is the number of consumer units. ***White Crew-Neck T XL*** is the cash register description. ***WRP79*** indicates that the consumer unit is wrapped in plastic.
CTP*WH*MSR*25*1*EA	***WH*** indicates that the price belongs to "wholesale" class of trade. ***MSR*** indicates that the price is a "manufacturer's suggested retail." ***25*** indicates that the price is $25.00. ***1*** indicates the price applies to a quantity of one. ***EA*** indicates that the price applies to "each" item.
CUR*SE*USD	***SE*** is the qualifier for "selling party." ***USD*** indicates that the pallet cost is specified in U.S. dollars.
Setup Case & Case Bracket Costs	
LIN*2*VA*ABC123*UA*033333333333	***2*** is the assigned line item identification. ***VA*** is the qualifier indicating that the following value is a vendor assigned product identifier. ***ABC123*** is the trade item. ***UA*** is the qualifier indicating that the next value is a Logistic Unit Identifier. ***033333333333*** is the Logistic Unit Identifier.
PID*F*08*CREW-NECK T****EN**	***F*** indicates that the description is free-form. ***08*** indicates that this is a style description. ***Crew-Neck T*** is the short free-form style description. ***EN*** is the language code for "English."

EDI TRANSMISSION DATA	EXPLANATION
CTP*XX	***XX*** is a place holder indicating the start of the CTP loop, since the CTP segment is not meaningfully used with price brackets but is still required to start the CTP loop.
DTM*196*20000101	***196*** is the qualifier representing "start date." ***20000101*** is the date when the price goes into effect, January 1, 2000.
DTM*197*20000301	***197*** is the qualifier representing "end date." ***20000301*** is the date when the price is no longer in effect, March 1, 2000.
G36*PL1234520000101**	***PL12345*** is the price list reference number ***20000101*** is the date on the price list
CUR*SE*USD	***SE*** is the qualifier for "selling party." ***USD*** indicates that the pallet cost is specified in U.S. dollars.
REF*YD*6000022233	***YD*** is the qualifier indicating that the reference number that follows is a retailer identification number. ***6000022233*** is the retailer identification number, indicating that the case bracketed costs in this line item applies only to the specified retailer (it is a "private cost").
G43*006	***006*** is the qualifier indicating that the pallet cost is applicable to all stores operated by the retailer.
SAC*A* F810**1*2.5*****02**	***A*** indicates that this is an allowance to be applied to the base pallet cost. ***F810*** is the qualifier indicating that the allowance is a promotional discount. ***1*** indicates that the percent discount is applied to unit list cost. ***2.5*** indicates that the promotional discount is 2.5%. ***02*** indicates that the method of handling is "off invoice."
G40*PB-1*100	***PB-1*** is the price bracket ID matching one of the header area G93 segments in this 832 Transaction Set. ***100*** is the unit cost of $100.00 for the specified price bracket ID (quantity of one case purchased).
G40*PB-10*75	***PB-10*** is the price bracket ID matching one of the header area G93 segments in this 832 Transaction Set. ***75*** is the unit cost of $75.00 for the specified price bracket ID (quantity of 10 cases purchased).
G40*PB-20*50	***PB-20*** is the price bracket ID matching one of the header area G93 segments in this 832 Transaction Set. ***50*** is the unit cost of $50.00 for the specified price bracket ID (quantity of 20 case purchased).

EDI TRANSMISSION DATA	EXPLANATION
G39*033333333333**10*G*L*2*FT*2*FT*2*FT*8*CF**12**********BOX25**	***033333333333*** is the Logistic Unit Identifier provided in the LIN segment. ***10*** is the case weight. ***G*** indicates it is a gross weight. ***L*** is the weight unit of measure representing “pounds.” ***2*** is the case height. ***FT*** is the height unit of measure representing “feet.” ***2*** is the case width. ***FT*** is the width unit of measure representing “feet.” ***2*** is the case length. ***FT*** is the length unit of measure representing “feet.” ***8*** is the case volume. ***CF*** is the volume unit of measure representing “cubic feet.” ***12*** is the total number of units in the case (there are no inner packs in this case). ***BOX25*** indicates that the case material is a corrugated carton.
SLN*2*1*I*12*EA**UP*011111111111**	***2*** is the assigned identification number for this line item. ***1*** is the assigned identification number for this sub-line item component. ***I*** indicates that a GTIN is being defined. ***12*** is the quantity of GTINs contained in the case. ***UP*** is the qualifier indicating that the following value is a GTIN. ***011111111111*** is the GTIN contained in the case.
CTT*2	***2*** is the number of line items (LIN segments) present in this transaction set.
SE*30*0001	***30*** is the number of included segments in this transaction set, including the ST and SE segments. ***0001*** is the transaction set control number.

11. Imaging and the Associated 102 Transaction Set

11.1. Imaging

Refer to the *GS1 US Best Practice Guideline for Product Image Exchange Between Trading Partners* for guidance on creating and naming images.

11.1.1. URL, FTP, and Local Media (CD) Identifiers

The Price/Sales Catalog Transaction Set (TS832) may be used on its own to identify the URL, FTP, or local media (e.g. – CD path and filename) locations where product images are accessible to trading partners.

11.1.2. Transmitting Image Information Using the 832 Transaction Set

The segments of TS 832 used to define this type of multi-media information are as follows:

- In the 832, the multimedia file is defined using the LM/LQ loop.
    - In the LQ segment, using a multiple part data element, the type of media, primary form or function, sub-form or function, and file format is defined.
    - The available codes are VICS maintained code lists, and codes may be added to these lists via a Change Request submitted to the GS1 US Standards Maintenance Process.

- Next, for Internet still images, a REF segment is used to communicate the level at which the image is applicable, which is one of the following:
    - Product ID/Style - The image applies to all UPCs associated with the Product ID specified in the LIN segment.
    - Product ID/Style + Color – The image applies to all UPCs associated with the Product ID + NRF Color Code specified in the LIN segment.
    - UPC – The image applies only to the one UPC specified in the LIN segment.

- Next, another REF segment is used to specify if the multimedia file will be sent using a location identifier, such as a URL or FTP site where the described multi-media file is accessible by the receiver.

- The EFI gives the actual location of the given file, if applicable, along with the file name and other technical information regarding the multi-media file.

- A PID/MEA/MTX Loop is used to add additional information about the file, such as pixel counts, DPI (dots per inch) and number of colors in the palette.

11.1.3. Imaging and the Associated 102 Transaction Set

This section provides high-level guidelines for the usage of the Price/Sales Catalog (TS832) and the Associated Data Transaction Set (TS102) to convey multimedia information.

The Price/Sales Catalog Transaction Set (TS832) may be used on its own or in conjunction with the Associated Data Transaction Set (TS102) to identify or send multimedia files and information regarding specific products. The TS102 unique ID number is referenced in the 832 Detail Area, in the LM-LQ Loop REF segment.

When using TS102 in conjunction with the TS832, only one image file can be sent per TS102. Multiple 102 documents can be referenced within one 832 transaction set, as it may contain multiple LIN loops where the image information is found.

11.2. Marketing Messages & Merchandise Classification

The Price/Sales Catalog Transaction Set (TS832) may be used on its own to specify the following marketing-related item-level attributes:

- Short Marketing Message
- Long Marketing Message
- Merchandise Classification

These item-level attributes are transmitted using the PID and MTX segments within the Detail Area LM-LQ Loop, as follows:

```
LM*VI~
LQ**MMADVFEA~        (MM=marketing message, ADV=advertising, FEA=feature/benefit)
PID*S**VI*SK~
MTX**shortmarketingmessage****EN~
PID*S**VI*LM~
MTX**longmarketingmessage*longmessagecontinued***EN~
PID*X**VI*MC*classificationcodeortext~
```

Note: Short and Long Marketing Messages and Merchandise Classification should be transmitted in the same LQ Loop if one or more are applicable to the item specified in the Detail Area LIN Loop. Merchandise Classification may consist of a code from one of the available standardized industry code lists, or alternatively, it may be a free-form text description of the product category.

11.3. 832 Versions

The VICS 832 guidelines for 004020VICS and higher versions support image-related attributes within the Detail Area LM-LQ Loops. When using a 3rd-party catalog service, you should send 004030 or 004030VICS.

11.4. Color Images

All still images will be in color only—not in black and white.

11.5. Direct vs. Indirect 832's

832 transaction sets containing image-related attributes may be transmitted from a vendor to a retailer either directly or indirectly via a 3rd-party catalog service, as follows:

- *Indirect*
    - Vendor sends image information to the Catalog Service, including the Image Application Level Indicator that indicates whether the image applies to the Product ID, Product ID + Color, or UPC level.
    - Catalog Service sends image information to retailer, including the Image Application Level Indicator.
    - Retailer associates image information at the appropriate levels in their item files.
- *Direct*
    - Vendor sends image information to the retailer, including the Image Application Level Indicator that indicates whether the image applies at the Product ID, Product ID + Color, or UPC level.
    - Retailer associates image information at the appropriate levels in their item files.

11.6. Image Application Level

Image-related information can be applicable as specified by the vendor at any of the following levels:

- Product ID/Style ("PID"): Image information applies to all UPC's associated with the Product ID specified in the LIN segment.
- Product ID/Style ("PID") + Color Code: Image information applies to all UPC's associated with the Product ID + Color Code specified in the LIN segment.
- UPC: Image information applies to one UPC code specified in the LIN segment.

11.7. Attribute Requirement Designators

The requirement designators for the image attributes are defined as follows:

- MANDATORY:
    - Vendor ID
    - Image application level indicator: one of PID, PID + Color, or U.P.C. is required.
    - Image product identifier: one of the following is required:
        - Product ID/Style
        - Product ID/Style + Color (NRF color code and/or color description)
        - Product ID/Style + Color (NRF color code and/or color description) + Size (NRF size code and/or size description)
        - U.P.C./EAN (GTIN)
    - Image location type (one of URL, FTP, LMI, or ACL)
    - Image location identifier (URL location, FTP pull location, CD directory/path)
    - Image File Name
    - Multi Media Object Type (SI = still image)
    - Image Form Function (INT = Internet)

- Image Facing (view-primary, front, back, top, etc.)
- Image File Type (jpg)

- OPTIONAL:
  - Vendor Name
  - Compressed File Size (in bytes)
  - Image Resolution (dpi/ppi)
  - Angle of Rotation and Plunge
  - Pixel Height
  - Pixel Width
  - Image Type (either PRO=Product, or CSW=Color Swatch)
  - Clipping Path
  - Image Description
  - Image Facing Indicator (GDSN)
  - Short Marketing Message
  - Long Marketing Message
  - Merchandise Classification
  - Product(s) Shown in Image

11.8. Image Attributes and 832 Mappings

This section defines the image-related attributes and their respective 832 Price/Sales Catalog transaction set mappings.

Image Attribute	Requirement Designator	Data Type Length	Example	VICS 832 Mapping	Mapping Explanation
Action	M	AN, 1-7	add replace delete	Header Area BCT segment - field BCT10 BCT*RC*1234567890123*100******Selection Code 200 Desc***02**~	BCT10 = 02 (add) BCT10 = 05 (replace) BCT10 = 03 (delete)
Vendor ID	M	AN, 1-15	Proprietary or GLN Examples: - 9-digit DUNS - 10-digit COMM ID - 12 concatenated with 10-digit phone number - 13-digit GLN - Other upon TP agreement	Header Area BCT segment - field BCT02 BCT*RC***1234567890123***100******Selection Code 200 Desc*02~	RC = resale catalog 1234567890123 = Vendor ID = 13-digit GLN 100 = selection code 100 Selection Code Desc = selection code description 02 = Action code ADD
Vendor Name	O	AN, 1-30	The Best Jean Company, Inc.	Header Area N1 Loop N1*MF*manufacturername~	MF = manufacturer/vendor manufacturername = free-form text name of manufacturer/vendor
Image Product Identifier One of the following combinations is required: Product/Style …or… Product/Style + Color …or… Product/Style + Color + Size …or… UPC/EAN	M	Product/Style: AN 1/20 NRF Color Code: N 3/3 Color Description: AN 1/20 NRF Size Code: N 5/5 Size Description: AN 1/10	The Identifier to which the image(s) apply. One of these is required in the LIN Segment: - Product ID/Style - Product ID/Style + (NRF Color Code and/or Color Desc) - Product ID/Style + (NRF Color Code and/or Color Desc) + (NRF Size Code and/or Size Desc) - UPC/EAN (the GTIN)	Product ID/Style: LIN qualifier VN Product ID/Style + Color: - LIN qualifiers VN and CM PID*F*73***colordesc~ Product ID/Style + Color + Size: - LIN qualifiers VN, CM, and SM - PID*F*73***colordesc~ - PID*F*74***sizedesc~ UPC/EAN: LIN qualifier UP or EN	This is the actual Product ID, Product ID + Color, Product ID + Color + Size, or UPC/EAN to which the image applies. Notes 1. Style, UPC, Color and Size, and their related descriptions) are mandatory when a UPC is first added, whether or not image-related attributes are also transmitted at that time. 2. Either UPC or Style or Style+Color is required when the UPC or Style already exists and a modify is being sent to store image-related attributes. 3. Style, Color, and Size Descriptions are mandatory when adding a UPC. They are optional when a UPC or Style already exists and a modify is being sent to store image-related attributes.

Image Attribute	Requirement Designator	Data Type Length	Example	VICS 832 Mapping	Mapping Explanation
Image Application Level Indicator	M	ID, 3/3	An indicator of the level at which the image(s) apply. One of these is required in the LM-LQ-REF segment: - PID = Product ID/Style - CLR = Product ID/Style + NRF Color Code - UPC = UPC/GTIN	LM-LQ Loop - REF segment: LM*VI~ LQ**SIINTVIKJPG~ REF*PG*xxx~ *Where "xxx" is one of these valid values:* • **PID** = Image applies to all UPCs under the specified Product ID/Style. • **CLR** = Image applies to UPCs under the specified Product ID/Style having the specified color. • **UPC** = Image applies to the specified UPC/GTIN.	This is an indicator of the level at which the image applies: PID = Product ID/Style and all associated UPCs. CLR = All UPCs matching the Product ID/Style + NRF Color Code. UPC = A specific UPC. PG = the value in REF02 will be the level to which the image is applicable
Image Location Type Image Location Identifier	M M	AN, 3/3 AN, 1/264	One of: URL, FTP, or LMI. URL: www.imagelocation.com FTP: http://ftppulllocation.myco.com LMI: C:/MyDocuments/Pictures	LM-LQ Loops: each ID Type requires a separate LQ Loop 1. URL LM*VI~ LQ**SIINTVF1JPG~ REF*URL*X~ EFI*00*http://uniformresourcelocator.com********* **0657718000121CAMMY-LSNAT**.jpg~	Image Location Type: URL, FTP, or LMI. Image Location Identifier: URL location, FTP pull location, local media identifier (CD). SI=still image, INT=Internet, VF1=vertical front facing, JPG = file type URL = Field EFI02 will contain the image URL. X = filler for syntax purposes 00 = company non-classified information http://uniformresourcelocator.com = URL of image
				2. FTP Pull Locator LM*VI~ LQ**SIINTVF1JPG~ REF*FTP*X~ EFI*00*http://ftpsitegoeshere.com********* **0657718000121CAMMY-LSNAT.jpg**~	FTP = Field EFI02 will contain the FTP pull location.
				3. LMI Local Media Identifier (ex: CD) LM*VI~ LQ**SIINTVF1JPG~ REF*LMI*X~ EFI*00*My Documents/Images/********* **0657718000121CAMMY-LSNAT.jpg**~	LMI = Field EI02 will contain the local media identifier (ex: CD directory path).

Image Attribute	Requirement Designator	Data Type Length	Example	VICS 832 Mapping	Mapping Explanation
Image File Name	M	AN, 1/64	File name (standard naming convention - GDTI) Example: 0657718000121CAMMY-LSNAT.jpg	Refer to sample EFI segments shown in Image Location Identifier 832 mappings above, in the EFI segment field **EFI11**.	Notes: 1. Image File Name in the EFI segment field EFI11 is required for REF01 values URL, FTP, and LMI. 2. Image File Name for REF01 = ACL is not specified, since the EFI segment is not used in this case.
Image - Type - Form/Function - Facing - File Type (e.g. - storage format)	M	 ID, 2/2 ID, 3/3 ID, 3/3 ID, 3/3	 Form/Function: Internet image Facing: Front / Back / Side / Left Side / Right Side / Top / Bottom File Type: .jpg	LQ Segment – Field LQ02 Breakdown *All 4 parts are mandatory.* **Part #1:** Char 1-2: Type Value: SI = still image **Part #2:** Char 3-5: Form/Function Value: INT = Internet **Part #3:** Char 6-8: Facing Values: PRI – Primary VF1 – Front VIK – Back VIS – Side SDL – Side Left SDR – Side Right VIB – Bottom VIT - Top **Part #4:** Char 9-11: File type Value: JPG = .jpg	
Image Facing Indicator (GDSN)	O	ID, 1/1	The face of the item captured by the image.	LM-LQ Loop: PID*X**VI*IF*1~ Valid PID05 Codes: 1 - Front 2 - Left 3 - Top 7 - Back 8 - Right 9 - Bottom	X = PID04 and PID05 contain the values. VI = hard-coded for 'VICS' IF = image facing identifier qualifier 1 = image facing identifier value (valid code from list)

Image Attribute	Requirement Designator	Data Type Length	Example	VICS 832 Mapping	Mapping Explanation
Image Description	O	AN, 1/1000	Freeform description <= 1000 characters. For example: - "Single shoe" - "Multiple shoes" - "Shoes of all colors in 1 image"	LM-LQ-PID Loop LM*VI~ LQ**SIINTSDRJPG~ PID*S**VI*IM~ MTX**imagedescription**NS**EN~	
Image Type	O	ID, 3/3	Indicator that the image is either a color swatch or an image of an actual product. Color Swatch …or… Product	LM-LQ-PID Loop PID*X**VI*TP*ccc~ Where 'ccc' is one of the following values: • CSW – Color Swatch • PRO - Product	X = PID04 and PID05 will be populated. VI = hard-coded for 'VICS' TP = content indicator ccc = 3-character value from valid codes list.
Image Angle of Rotation and Plunge	O	N, 1/1	Straight / Left / Right	LM-LQ-PID Loop PID*X**VI*PL*n~ Where 'n' is one of these valid values: 1 - Center; no plunge angle 2 - Left; no plunge angle 3 - Right; no plunge angle 7 - Center; plunge angle present 8 - Left; plunge angle present 9 - Right; plunge angle present	X = PID04 and PID05 are populated VI = hard-coded value for 'VICS' PL = Angle of Plunge/Rotation n = 1-digit numeric value representing the combination of plunge + rotation.
Image Resolution	O	N, 1/6	72 ppi	LM-LQ-PID Loop PID*S**VI*DP~ MEA**D9*300*EA~	DP = dots per inch (equivalent to pixels per inch) D9 = dpi (equivalent to ppi) 300 = # of dots/pixels per inch

Image Attribute	Requirement Designator	Data Type Length	Example	VICS 832 Mapping	Mapping Explanation
Image Compressed File Size	O	N, 1/20	128000 bytes	LM-LQ-PID Loop PID*S**VI*CF~ MEA**DO*128000*AD~	 CF = compressed file size DO = compressed file size 128000 = # of bytes in compressed file size AD = bytes
mage Pixel Height (vertical) Image Pixel Width (horizontal)	O O	N, 1/6 N, 1/6	 2400 x 2400 pixels	LM-LQ-PID Loop PID*S**VI*PC~ MEA**D6*2400*EA~ MEA**D8*2400*EA~	 PC = pixel count D6 = horizontal D8 = vertical
Image Clipping Path	O	AN, 1/80	"Path 1"	LM-LQ-PID Loop PID*X**VI*CL*Path 1~	 X = PID04 and PID05 will be populated. VI = hard-coded for 'VICS' CL = clipping path Path 1 = clipping path value specified in imaging guidelines.

Image Attribute	Requirement Designator	Data Type Length	Example	VICS 832 Mapping	Mapping Explanation
Short Product Marketing Message/Description	O	AN, 1/4096	Summary level: Free-form text that provides the "why buy" information, e.g. features & functions. Note: This is an item-level attribute that is not linked specifically to one image view.	LM-LQ Loop (does not contain image attributes): LM*VI~ LQ**MMADVFEA~ PID*S**VI*SK~ MTX**shortmarketingmessage****EN~ Note: Short and Long Marketing Messages and Merchandise Classification can be transmitted in the same LQ Loop.	VI = VICS MM=Marketing message, ADV=Advertising, FEA=Features S = description type is provided in PID04 SK = short marketing message shortmarketingmessage = the short marketing message EN = English (optional language code)
Extended Product Marketing Message/Description	O	AN, 1/8192	Detailed level: Free-form text that provide the "why buy" information, e.g. features & functions. Note: This is an item-level attribute that is not linked specifically to one image view.	LM-LQ Loop (does not contain image attributes): LM*VI~ LQ**MMADVFEA~ PID*S**VI*LM~ MTX**longmarketingmessage*longmessagecontinued***EN~ Note: Short and Long Marketing Messages and Merchandise Classification can be transmitted in the same LQ Loop.	VI = VICS MM=Marketing message, ADV=Advertising, FEA=FeaturesS = PID04 contains the value LM = long marketing message longmarketingmessage = 1st 4096 characters of msg messagecontinued = 2nd 4096 characters of message EN = English – optional language code
Merchandise Classification	O	AN, 1/80	Swimwear Note: This is an item-level attribute that is not linked specifically to one image view.	LM-LQ Loop (does not contain image attributes): LM*VI~ LQ**MMADVFEA~ PID*X**VI*MC*classificationcodeortext~ Note: Short and Long Marketing Messages and Merchandise Classification can be transmitted in the same LQ Loop.	VI = VICS MM=Marketing message, ADV=Advertising, FEA=Features, X = PID04 and PID05 contain the values VI = hard-coded for 'VICS' MC = merchandise classification is in PID05 classificationcodeortext = merchandise classification
Products Shown in Image	O	AN,1/1	1 or 2	LM-LQ Loop LM*VI~ LQ*SIINTVF1JPG~ PID*X**VI*PR*1~ Valid PID05 values: 1 = One product shown 2 = Multiple products shown	VI = VICS SI = Still image, INT = Internet, VF1 = Vertical front view, JPG = .jpeg format X = PID04 and PID05 contain the values VI = VICS PR = Product(s) shown in image 1 = One product shown in image.

12. Examples

832 examples are provided for the following use cases:

- Where only mandatory image attributes are shown.
- Where both mandatory and optional image attributes are shown.

12.1. Mandatory Image Attributes Only

The examples in this section contain only image attributes that are mandatory.

12.1.1. Example #1: Add new UPCs with Style-Level Images

Business Case

- The vendor manufactures footwear.
- Product ID's are assigned at the Style+Color level.
- All UPCs in this Style have the same color and different sizes.
- They want to add the new Product ID (and its 3 U.P.C.'s), including information about 2 still images (front and back views). The images apply to the Style "CAMMY-NAT3" (and all UPCs associated with it).

Product ID/Style #	UPC	Color	Size
CAMMY-NAT3	0657718000121	Natural	7.5 medium
CAMMY-NAT3	0657718000138	Natural	8 medium
CAMMY-NAT3	0657718000145	Natural	8.5 medium

- Image Characteristics: Still Internet images, front and back views, URL location specified.

832 Structure

- LIN Loop #1: 1st U.P.C.
  - LM Loop – Start of image information
    - LQ Loop – Image Information for still image front view
    - LQ Loop – Image information for still image back view
- LIN Loop #2: 2nd U.P.C.
- LIN Loop #3: 3rd U.P.C.

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001~	***832*** = transaction set type ***0001*** = transaction set control number
BCT*RC*6000010000*100****** Womens Leather Shoes*02~	***RC*** = resale catalog ***6000010000*** = Vendor ID to identify the vendor's catalog ***100*** = selection code ***Womens Leather Shoes*** = selection code description ***02*** = action type ADD
LIN*1*UP*0657718000121*VN*CAMMY-NAT3*CM*101*SM*50145 ~	***1*** = LIN sequence number; this is the 1st U.P.C. to add. ***UP*** = U.P.C. qualifier ***0657718000121*** GTIN ***VN*** = Product ID qualifier ***CAMMY-NAT3*** = Product ID/Style number Image Product Identifier is mandatory. ***CM*** = NRF color code qualifier **101** = NRF color code for "Natural" ***SM*** = NRF size code qualifier ***50145*** = NRF size code for footwear size 7.5

EDI TRANSMISSION DATA	EXPLANATION
PID*F*08***Cammy Leather Slingback****EN~	***F*** = Text Description is in PID05 ***08*** = Product ID Description qualifier ***Cammy Leather Slingback*** = Product ID Description ***EN*** = English (optional language code)
PID*F*73***Natural****EN~	***F*** = Text Description is in PID05 ***73*** = Color Description qualifier ***Natural*** = Color Description ***EN*** = English (optional language code)
PID*F*74***7.5 M****EN~	***F*** = Text Description is in PID05 ***74*** = Size Description qualifier ***7.5 M*** = Size Description ***EN*** = English (optional language code)
<other 832 segments for additional UPC-level attributes>	
LM*VI~	Starts the LM Loop within an LIN Loop for the current UPC. **VI** = VICS
LQ**SIINTPRIJPG~	Starts the LQ Loop within the LM Loop. The LQ Loop can repeat multiple times. One LQ Loop is required for each image. This LQ Loop is for a still image FRONT shot. ***SI*** = still image (Type) ***INT*** = Internet (Form/Function) ***PRI*** = primary view (Facing) ***JPG*** = file type is JPEG. (File Type) Multi Media Object Type, Image Form Function, Image Facing, and Image File Type are mandatory.
REF*PG*PID~	***PG*** = image application level indicator qualifier ***PID*** = the image applies to the Product ID/Style specified in the LIN segment (and all associated UPCs). Image Application Level Indicator is mandatory.
REF*URL*X~	***URL*** = the url location of the image is provided in the EFI segment. ***X*** = filler for syntax purposes Image Location Type is mandatory.
EFI*00*http://uniformresourcelocator1.com*********0657718000121CAMMY-NAT3-FT.jpg~	***00*** = company non-classified information ***http://uniformresourcelocator1.com*** = URL of image ***0657718000121CAMMY-NAT3-FT.jpg*** = name of file containing the image Image Location Identifier is mandatory. Image File Name is mandatory.
LQ**SIINTVIBJPG~	Starts the LQ Loop within the LM Loop. The LQ Loop can repeat multiple times. One LQ Loop is required for each image. This LQ Loop is for a still image FRONT shot. ***SI*** = still image (Type) ***INT*** = Internet (Form/Function) ***VIB*** = vertical back view (Facing) ***JPG*** = file type is JPEG. (File Type) Multi Media Object Type, Image Form Function, Image Facing, and Image File Type are mandatory.
REF*PG*PID~	***PG*** = image application level indicator qualifier ***PID*** = the image applies to the Product ID/Style specified in the LIN segment (and all associated UPCs). Image Application Level Indicator is mandatory.
REF*URL*X~	***URL*** = the url location of the image is provided in the EFI segment. ***X*** = filler for syntax purposes

EDI TRANSMISSION DATA	EXPLANATION
	Image Location Type is mandatory.
EFI*00*http://uniformresourcelocator2.com********0657718000121CAMMY-NAT3-BK.jpg~	***00*** = company non-classified information ***http://uniformresourcelocator2.com*** = URL of image ***0657718000121CAMMY-NAT3-BK.jpg*** = name of file containing the image Image Location Identifier is mandatory. Image File Name is mandatory.
LIN*2*UP*00657718000138*VN*CAMMY-NAT3*CM*101*SM*50435 ~	***2*** = LIN sequence number; this is the 2nd U.P.C. to add. ***UP*** = UPC qualifier ***0657718000138*** = GTIN ***VN*** = Product ID qualifier ***CAMMY-NAT3*** = Product ID/Style number ***CM*** = NRF color code qualifier **101** = NRF color code for "Natural" ***SM*** = NRF size code qualifier ***50435*** = NRF size code for footwear size 8.0
PID*F*08***Cammy Leather Slingback****EN~	***F*** = Text Description is in PID05 ***08*** = Product ID Description qualifier ***Cammy Leather Slingback*** = Product ID Description ***EN*** = English (optional language code)
PID*F*73***Natural****EN~	***F*** = Text Description is in PID05 ***73*** = Color Description qualifier ***Natural*** = Color Description ***EN*** = English (optional language code)
PID*F*74***8.0 M****EN~	***F*** = Text Description is in PID05 ***74*** = Size Description qualifier ***8.0 M*** = Size Description ***EN*** = English (optional language code)
<other 832 segments for additional UPC-level attributes>	
LIN*3*UP*00657718000145*VN*CAMMY-NAT3*CM*101*SM*50455 ~	***3*** = LIN sequence number; this is the 3rd UPC to add. ***UP*** = UPC qualifier ***0657718000145*** = U.P.C. code ***VN*** = Product ID qualifier ***CAMMY-NAT3*** = Product ID/Style number ***CM*** = NRF color code qualifier **101** = NRF color code for "Natural" ***SM*** = NRF size code qualifier ***50455*** = NRF size code for footwear size 8.5
PID*F*08***Cammy Leather Slingback****EN~	***F*** = Text Description is in PID05 ***08*** = Product ID Description qualifier ***Cammy Leather Slingback*** = Product ID Description ***EN*** = English (optional language code)
PID*F*73***Natural****EN~	***F*** = Text Description is in PID05 ***73*** = Color Description qualifier ***Natural*** = Color Description ***EN*** = English (optional language code)
PID*F*74***8.5 M****EN~	***F*** = Text Description is in PID05 ***74*** = Size Description qualifier ***8.5 M*** = Size Description ***EN*** = English (optional language code)
<other 832 segments for additional UPC-level attributes>	
CTT*3~	***1*** = number of LIN segments in the 832 transaction set
SE*25*0001~	***25***= number of segments between and including ST and SE ***0001*** = 832 transaction set control number

12.1.2. Example #2: Add new U.P.C.'s with Style+Color-Level Images

Business Case:

- The vendor manufactures footwear.
- Product IDs are assigned at the Style level.
- The 4 UPCs in this Style have 2 different colors—Natural and Charcoal.
- They add the new Style and its 4 associated UPCs, including information about 2 still images (front and back views) of the Style in its defined colors.
- Images apply to the Style+Color levels CAMMY-3 + Natural and CAMMY-3 + Charcoal and the 2 sets of 2 U.P.C.'s associated with each Style+Color combination.

Product ID/Style #	UPC	Color	Size
CAMMY-3	0657718000121	Natural	7.5 medium
CAMMY-3	0657718000138	Natural	8 medium
CAMMY-3	0657718000145	Charcoal	7.5 medium
CAMMY-3	0657718000152	Charcoal	8 medium

- Image Characteristics: Still Internet image, front and back views, URL locations specified.

832 Structure

- LIN Loop #1: 1st U.P.C. in color Natural.
  - LM Loop – Start of image information
    - LQ Loop – Image Information for still image front view
    - LQ Loop – Image information for still image back view
- LIN Loop #2: 2nd U.P.C. in color Natural.
- LIN Loop #3: 1st U.P.C. in color Charcoal.
  - LM Loop – Start of image information
    - LQ Loop – Image Information for still image front view
    - LQ Loop – Image information for still image back view
- LIN Loop #4: 2nd U.P.C. in color Charcoal.

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001~	***832*** = transaction set type ***0001*** = transaction set control number
BCT*RC*6000010000*100****** Womens Leather Shoes*02~	***RC*** = resale catalog ***6000010000*** = Vendor ID to identify the vendor's catalog ***100*** = selection code ***Womens Leather Shoes*** = selection code description ***02*** = action type ADD
LIN*1*UP*0657718000121*VN*CAMMY-3*CM*101*SM*50145 ~	***1*** = LIN sequence number; this is the 1st U.P.C. to add. ***UP*** = UPC qualifier ***0657718000121*** = GTIN ***VN*** = Product ID qualifier ***CAMMY-3*** = Product ID/Style number Image Product Identifier is mandatory. ***CM*** = NRF color code qualifier **101** = NRF color code ("Natural") Image Product Identifier is mandatory. ***SM*** = NRF size code qualifier ***50145*** = NRF size code
PID*F*08***Cammy Leather Slingback****EN~	***F*** = Text Description is in PID05 ***08*** = Product ID Description qualifier ***Cammy Leather Slingback*** = Product ID Description

EDI TRANSMISSION DATA	EXPLANATION
	EN = English (optional language code)
PID*F*73***Natural****EN~	***F*** = Text Description is in PID05 ***73*** = Color Description qualifier ***Natural*** = Color Description ***EN*** = English (optional language code)
PID*F*74***7.5 M****EN~	***F*** = Text Description is in PID05 ***74*** = Size Description qualifier ***7.5 M*** = Size Description ***EN*** = English (optional language code)
<other 832 segments for additional UPC-level attributes>	
LM*VI~	Starts the LM Loop within an LIN Loop for the current UPC. **VI** = VICS
LQ**SIINTPRIJPG~	Starts the LQ Loop within the LM Loop. The LQ Loop can repeat multiple times. One LQ Loop is required for each image. This LQ Loop is for a still image FRONT shot. ***SI*** = still image (Type) ***INT*** = Internet (Form/Function) ***PRI*** = primary view (Facing) ***JPG*** = file type is JPEG. (File Type) Multi Media Object Type, Image Form Function, Image Facing, and Image File Type are mandatory.
REF*PG*CLR~	***PG*** = image application level indicator qualifier ***CLR*** = the image applies to the Product ID + Color Code specified in the LIN segment (and all associated UPCs). Image Application Level Indicator is mandatory.
REF*URL*X~	***URL*** = the url location of the image is provided in the EFI segment. ***X*** = filler for syntax purposes Image Location Type is mandatory.
EFI*00*http://uniformresourcelocator1.com********0657718000121CAMMY-3-FT.jpg~	***00*** = company non-classified information ***http://uniformresourcelocator1.com*** = URL of image ***0657718000121CAMMY-3-FT.jpg*** = name of file containing the image Image Location Identifier is mandatory. Image File Name is mandatory.
LQ**SIINTVIBJPG~	Starts the LQ Loop within the LM Loop. The LQ Loop can repeat multiple times. One LQ Loop is required for each image. This LQ Loop is for a still image BACK shot. ***SI*** = still image ***INT*** = Internet ***VIB*** = vertical back view ***JPG*** = file type is JPEG. Multi Media Object Type, Image Form Function, Image Facing, and Image File Type are mandatory.
REF*PG*CLR~	***PG*** = image application level indicator qualifier ***CLR*** = the image applies to the Product ID + Color Code specified in the LIN segment (and all associated UPCs). Image Application Level Indicator is mandatory.
REF*URL*X~	***URL*** = the url location of the image is provided in the EFI segment. ***X*** = filler for syntax purposes Image Location Type is mandatory.
EFI*00*http://uniformresourcelocator2.com********0657718000206CAMMY-3-BK.jpg~	***00*** = company non-classified information ***http://uniformresourcelocator2.com*** = URL of image

EDI TRANSMISSION DATA	EXPLANATION
	0657718000206CAMMY-3-BK.jpg = name of file containing the image Image Location Identifier is mandatory. Image File Name is mandatory.
LIN*2*UP*00657718000138*VN*CAMMY-3*CM*101*SM*50435 ~	***2*** = LIN sequence number; this is the 2nd U.P.C. to add. ***UP*** = UPC qualifier ***0657718000138*** =GTIN ***VN*** = Product ID qualifier ***CAMMY-3*** = Product ID/Style number ***CM*** = NRF color code qualifier **101** = NRF color code (“Natural”) ***SM*** = NRF size code qualifier ***50435*** = NRF size code
PID*F*08***Cammy Leather Slingback****EN~	***F*** = Text Description is in PID05 ***08*** = Product ID Description qualifier ***Cammy Leather Slingback*** = Product ID Description ***EN*** = English (optional language code)
PID*F*73***Natural****EN~	***F*** = Text Description is in PID05 ***73*** = Color Description qualifier ***Natural*** = Color Description ***EN*** = English (optional language code)
PID*F*74***8.0 M****EN~	***F*** = Text Description is in PID05 ***74*** = Size Description qualifier ***8.0 M*** = Size Description ***EN*** = English (optional language code)
<other 832 segments for additional UPC-level attributes>	
LIN*3*UP*0657718000145*VN*CAMMY-3*CM*010*SM*50145 ~	***3*** = LIN sequence number; this is the 3rd U.P.C. to add. ***UP*** = UPC qualifier ***0657718000145*** = GTIN ***VN*** = Product ID qualifier ***CAMMY-3*** = Product ID/Style number Image Product Identifier is mandatory. ***CM*** = NRF color code qualifier **010** = NRF color code (“Charcoal”) Image Product Identifier is mandatory. ***SM*** = NRF size code qualifier ***50145*** = NRF size code
PID*F*08***Cammy Leather Slingback****EN~	***F*** = Text Description is in PID05 ***08*** = Product ID Description qualifier ***Cammy Leather Slingback*** = Product ID Description ***EN*** = English (optional language code)
PID*F*73***Charcoal****EN~	***F*** = Text Description is in PID05 ***73*** = Color Description qualifier ***Charcoal***= Color Description ***EN*** = English (optional language code)
PID*F*74***7.5 M****EN~	***F*** = Text Description is in PID05 ***74*** = Size Description qualifier ***7.5 M*** = Size Description ***EN*** = English (optional language code)
<other 832 segments for additional UPC-level attributes>	
LM*VI~	Starts the LM Loop within an LIN Loop for the current UPC. **VI** = VICS
LQ**SIINTVF1JPG~	Starts the LQ Loop within the LM Loop. The LQ Loop can repeat multiple times. One LQ Loop is required for each image. This LQ Loop is for a still image FRONT shot. ***SI*** = still image ***INT*** = Internet (Form/Function) ***VF1*** = vertical front view (Facing) ***JPG*** = file type is JPEG. (File Type)

EDI TRANSMISSION DATA	EXPLANATION
	Multi Media Object Type, Image Form Function, Image Facing, and Image File Type are mandatory.
REF*PG*CLR~	***PG*** = image application level indicator qualifier ***CLR*** = the image applies to the Product ID + Color Code specified in the LIN segment (and all associated UPCs). Image Application Level Indicator is mandatory.
REF*URL*X~	***URL*** = the url location of the image is provided in the EFI segment. ***X*** = filler for syntax purposes Image Location Type is mandatory.
EFI*00*http://uniformresourcelocator3.com*********0657718000145CAMMY-3-FT.jpg~	***00*** = company non-classified information ***http://uniformresourcelocator3.com*** = URL of image ***0657718000121CAMMY-3-FT.jpg*** = name of file containing the image Image Location Identifier is mandatory. Image File Name is mandatory.
LQ**SIINTVIBJPG~	Starts the LQ Loop within the LM Loop. The LQ Loop can repeat multiple times. One LQ Loop is required for each image. This LQ Loop is for a still image BACK shot. ***SI*** = still image ***INT*** = Internet ***VIB*** = vertical back view ***JPG*** = file type is JPEG. Multi Media Object Type, Image Form Function, Image Facing, and Image File Type are mandatory.
REF*PG*CLR~	***PG*** = image application level indicator qualifier ***CLR*** = the image applies to the Product ID + Color Code specified in the LIN segment (and all associated UPCs). Image Application Level Indicator is mandatory.
REF*URL*X~	***URL*** = the url location of the image is provided in the EFI segment. ***X*** = filler for syntax purposes Image Location Type is mandatory.
EFI*00*http://uniformresourcelocator4.com*********0657718000206CAMMY-3-BK.jpg~	***00*** = company non-classified information ***http://uniformresourcelocator4.com*** = URL of image ***0657718000206CAMMY-3-BK.jpg*** = name of file containing the image Image Location Identifier is mandatory. Image File Name is mandatory.
LIN*4*UP*00657718000152*VN*CAMMY-3*CM*010*SM*50435 ~	***4*** = LIN sequence number; this is the 2nd U.P.C. to add. ***UP*** = GTIN ***0657718000152*** = GTIN-12 ***VN*** = Product ID qualifier ***CAMMY-3*** = Product ID/Style number ***CM*** = NRF color code qualifier **101** = NRF color code (“Charcoal”) ***SM*** = NRF size code qualifier ***50435*** = NRF size code
PID*F*08***Cammy Leather Slingback****EN~	***F*** = Text Description is in PID05 ***08*** = Product ID Description qualifier ***Cammy Leather Slingback*** = Product ID Description ***EN*** = English (optional language code)
PID*F*73***Charcoal****EN~	***F*** = Text Description is in PID05 ***73*** = Color Description qualifier ***Charcoal*** = Color Description ***EN*** = English (optional language code)

EDI TRANSMISSION DATA	EXPLANATION
PID*F*74***8.0 M****EN~	***F*** = Text Description is in PID05 ***74*** = Size Description qualifier ***8.0 M*** = Size Description ***EN*** = English (optional language code)
<other 832 segments for additional UPC-level attributes>	
CTT*4~	***4*** = number of LIN segments in the 832 transaction set
SE*38*0001~	***38*** = number of segments between and including ST & SE ***0001*** = 832 transaction set control number

12.1.3. Example #3: Add a new U.P.C. with a U.P.C.-Level Image

Business Case

- The vendor manufactures sterling silver jewelry.
- Each Product ID is associated with 1 U.P.C., since all the designs are one-of-a-kind.
- The U.P.C. identifies a 7-inch sterling silver link bracelet with a 5ct amethyst mounted at its center.
- There is 1 image to be associated with this bracelet (top view). It will be logically associated with just 1 UPC.

Product ID/Style #	U.P.C.	Color	Size
SLVR-BRAC-1	123456000032	Silver	7 inches

- Image Characteristics: Still image, FTP pull location specified.

832 Structure

- LIN Loop #1: UPC
  - LM Loop – Start of image information
    - LQ Loop – Image Information for still image top view

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001~	***832*** = transaction set type ***0001*** = transaction set control number
BCT*RC*6000040000*500******Silver Jewelry*02~	***RC*** = resale catalog (hard-coded value) ***6000040000*** = Vendor ID to identify the vendor's catalog ***500*** = selection code ***Silver Jewelry*** = selection code description ***02*** = action type ADD
LIN*1*UP*123456000032*VN*SLVR-BRAC-1*CM*040*SM*73209~	***UP*** = GTIN-12 qualifier ***123456000032*** =GTIN Image Product Identifier is mandatory. ***VN*** = Product ID qualifier ***SLVR_BRAC-1*** = Product ID ***CM*** = NRF Color Code qualifier ***040*** = NRF Color Code ***SM*** = NRF Size Code qualifier ***73209*** = NRF Size Code
PID*F*08***Silver Bracelet with Amethyst~	***F*** = Description in PID05 ***08*** = Product ID Description qualifier ***Silver Bracelet with Amethyst*** = Product ID Description
PID*F*73***Silver~	***F*** = Description in PID05 ***73*** = Color Description qualifier ***Silver*** = Color Description
PID*F*74***7 inch~	***F*** = Description in PID05 ***74*** = Size Description qualifier ***7 inch*** = Size Description
<other 832 segments for additional UPC-level attributes>	
LM*VI~	Starts the LM Loop within an LIN Loop for the current UPC. **VI** = VICS
LQ**SIINTVITJPG~	Starts the LQ Loop within the LM Loop. The LQ Loop can repeat multiple times. One LQ Loop is required for each image. This LQ Loop is for a still image LEFT SIDE shot. ***SI*** = still image ***INT*** = Internet ***VIT*** = vertical top view ***JPG*** = file type is JPEG. Multi Media Object Type, Image Form Function, Image

EDI TRANSMISSION DATA	EXPLANATION
	Facing, and Image File Format are mandatory,
REF*PG*UPC~	***PG*** = image application level indicator qualifier ***UPC*** = the image applies to the UPC specified in the LIN segment. Image Application Level Indicator is mandatory,
REF*FTP*X~	***FTP*** = the ftp pull location of the image is provided in the EFI segment. ***X*** = filler for syntax purposes Image Location Type is mandatory.
EFI*00*http://ftppulllocation.myco.com********1234560000326SLVR-BRAC-1.jpg~	***00*** = company non-classified information ***http://ftppulllocation.myco.com*** = ftp location where image can be accessed ***1234560000326SLVR-BRAC-1.jpg*** = name of file containing the image Image Location Identifier is mandatory. Image File Name is mandatory.
CTT*1~	***1*** = number of LIN segments in this 832 transaction set
SE*13*0001~	***13***= number of segments between and including ST and SE ***0001*** = 832 transaction set control number

12.1.4. Example #4: Modify an existing Product ID to add a new Style-Level Image

Business Case

- The vendor manufactures footwear.
- Product ID's are assigned at the Style+Color level. All U.P.C.'s in this Style have the same color and different sizes.
- They want to modify the existing Style to add an image's URL location that will apply to all U.P.C.'s associated with the Style. The U.P.C.'s for this Style are shown below.

Product ID/Style #	U.P.C.	Color	Size
CAMMY-NAT3	0657718000121	Natural	7.5 medium
CAMMY-NAT3	0657718000138	Natural	8 medium
CAMMY-NAT3	0657718000145	Natural	8.5 medium

- Image Characteristics: Front view, URL location specified.

832 Structure

- LIN Loop #1: Product ID/Style
  - LM Loop – Start of image information
    - LQ Loop – Image Information for still image front view

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001~	***832*** = transaction set type ***0001*** = transaction set control number
BCT*RC*6000010000*100****** Womens Leather Shoes*04~	***RC*** = resale catalog ***6000010000*** = Vendor ID to identify the vendor's catalog ***100*** = selection code ***Womens Leather Shoes*** = selection code description ***04*** = action type MODIFY
LIN*1* VN*CAMMY-NAT3~	***1*** = LIN sequence number; this is the 1st U.P.C. to add. ***VN*** = Product ID qualifier ***CAMMY-NAT3*** = Product ID/Style number Image Product Identifier is mandatory.
LM*VI~	Starts the LM Loop within an LIN Loop for the current UPC. **VI** = VICS
LQ**SIINTVF1JPG~	Starts the LQ Loop within the LM Loop. The LQ Loop can repeat multiple times. One LQ Loop is required for each image. This LQ Loop is for a still image FRONT shot. ***SI*** = still image ***INT*** = Internet (Form/Function) ***VF1*** = vertical front view (Facing) ***JPG*** = file type is JPEG. (File Type) Multi Media Object Type, Image Form Function, Image Facing, and Image File Type are mandatory.
REF*PG*PID~	***PG*** = image application level indicator qualifier ***PID*** = the image applies to the Product ID/Style specified in the LIN segment (and all associated UPCs). Image Application Level Indicator is mandatory.
REF*URL*X~	***URL*** = the url location of the image is provided in the EFI segment. ***X*** = filler for syntax purposes Image Location Type is mandatory.
EFI*00*http://uniformresourcelocator1.com*********0657718000121CAM	***00*** = company non-classified information

EDI TRANSMISSION DATA	EXPLANATION
MY-NAT3.jpg~	***http://uniformresourcelocator1.com*** = URL of image ***0657718000121CAMMY-NAT3.jpg*** = name of file containing the image Image Location Identifier is mandatory. Image File Name is mandatory.
CTT*1~	***1*** = number of LIN segments in the 832 transaction set
SE*10*0001~	***10*** = number of segments between and including ST and SE ***0001*** = 832 transaction set control number

12.1.5. Example #5: Modify an existing Product ID to add new Style+Color-Level Images

Business Case

- The vendor manufactures footwear.
- Product IDs are assigned at the Style level.
- The 4 UPCs in this Style have 2 different colors—Natural and Charcoal.
- For an existing Product ID, they want to include 2 new images (left side views) at the Style+Color level for the 4 associated UPCs. The U.P.C.'s are described below.

Product ID/Style #	U.P.C.	Color	Size
CAMMY-3	0657718000121	Natural	7.5 medium
CAMMY-3	0657718000138	Natural	8 medium
CAMMY-3	0657718000145	Charcoal	7.5 medium
CAMMY-3	0657718000152	Charcoal	8 medium

- Image Characteristics
  - Left side view, FTP pull location specified.
  - The 1st image applies to the Product ID "CAMMY-3" for the 2 U.P.C.'s having "Natural" color. The 2nd image applies to the Product ID "CAMMY-3" for the 2 U.P.C.'s having "Charcoal" color.

832 Structure

- LIN Loop #1: 1st Style+Color (CAMMY-3 + Natural)
  - LM Loop – Start of image information
    - LQ Loop – Image Information for still image left side view
- LIN Loop #2: 2nd Style+Color (CAMMY3 + Charcoal)
  - LM Loop – Start of image information
    - LQ Loop – Image Information for still image left side view

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001~	***832*** = transaction set type ***0001*** = transaction set control number
BCT*RC*6000010000*100****** Womens Leather Shoes*04~	***RC*** = resale catalog ***6000010000*** = Vendor ID to identify the vendor's catalog ***100*** = selection code ***Womens Leather Shoes*** = selection code description ***04*** = action type MODIFY
LIN*1*VN*CAMMY-3*CM*101~	***1*** = LIN sequence number; this is the 1st U.P.C. to add. ***VN*** = Product ID qualifier ***CAMMY-3*** = Product ID/Style number Image Product Identifier is mandatory. ***CM*** = NRF color code qualifier **101** = NRF color code ("Natural") Image Product Identifier is mandatory.
LM*VI~	Starts the LM Loop within an LIN Loop for the current UPC. **VI** = VICS
LQ**SIINTSDLJPG~	Starts the LQ Loop within the LM Loop. The LQ Loop can repeat multiple times. One LQ Loop is required for each image. This LQ Loop is for a still image FRONT shot. ***SI*** = still image ***INT*** = Internet (Form/Function) ***SDL*** = vertical left side view (Facing)

EDI TRANSMISSION DATA	EXPLANATION
	JPG = file type is JPEG. (File Type) Multi Media Object Type, Image Form Function, Image Facing, and Image File Type are mandatory.
REF*PG*CLR~	***PG*** = image application level indicator qualifier ***CLR*** = the image applies to the Product ID + Color Code specified in the LIN segment (and all associated UPCs). Image Application Level Indicator is mandatory.
REF*FTP*X~	***FTP*** = the ftp pull location of the image is provided in the EFI segment. ***X*** = filler for syntax purposes Image Location Type is mandatory.
EFI*00*http://ftppulllocation.myco.com********0657718000121CAMMY-3.jpg~	***00*** = company non-classified information ***http://ftppulllocation.myco.com*** = FTP pull location of image ***0657718000121CAMMY-3.jpg*** = name of file containing the image Image Location Identifier is mandatory. Image File Name is mandatory.
LIN*2*VN*CAMMY-3*CM*010~	***2*** = LIN sequence number; this is the 3rd U.P.C. to add. ***VN*** = Product ID qualifier ***CAMMY-3*** = Product ID/Style number Image Product Identifier is mandatory. ***CM*** = NRF color code qualifier **010** = NRF color code (“Charcoal”) Image Product Identifier is mandatory.
LM*VI~	Starts the LM Loop within an LIN Loop for the current UPC. **VI** = VICS
LQ**SIINTSDLJPG~	Starts the LQ Loop within the LM Loop. The LQ Loop can repeat multiple times. One LQ Loop is required for each image. This LQ Loop is for a still image FRONT shot. ***SI*** = still image ***INT*** = Internet (Form/Function) ***SDL*** = vertical front view (Facing) ***JPG*** = file type is JPEG. (File Type) Multi Media Object Type, Image Form Function, Image Facing, and Image File Type are mandatory.
REF*PG*CLR~	***PG*** = image application level indicator qualifier ***CLR*** = the image applies to the Product ID + Color Code specified in the LIN segment (and all associated UPCs). Image Application Level Indicator is mandatory.
REF*FTP*X~	***FTP*** = the url location of the image is provided in the EFI segment. ***X*** = filler for syntax purposes Image Location Type is mandatory.
EFI*00*http://ftppulllocation.myco.com********0657718000145CAMMY-3.jpg~	***00*** = company non-classified information ***http://ftppulllocation.myco.com*** = URL of image ***0657718000121CAMMY-3.jpg*** = name of file containing the image Image Location Identifier is mandatory. Image File Name is mandatory.
CTT*2~	***2*** = number of LIN segments in the 832 transaction set
SE*16*0001~	***16*** = number of segments between and including ST & SE ***0001*** = 832 transaction set control number

12.1.6. Example #6: Modify an existing U.P.C. to add a new U.P.C.-Level Image

Business Case

- The vendor manufactures sterling silver jewelry.
- Each Product ID is associated with 1 U.P.C., since all the designs are one-of-a-kind.
- The existing U.P.C. identifies a 7-inch sterling silver link bracelet with a 5ct amethyst mounted at its center.
- They want to include the FTP Pull Location and filename for 1 image (top view) for this existing UPC. The U.P.C. is described below.

Product ID/Style #	U.P.C.	Color	Size
SLVR-BRAC-1	123456000032	Silver	7 inches

832 Structure

- LIN Loop #1: U.P.C.
  - LM Loop – Start of image information
    - LQ Loop – Image Information for still image top view

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001~	***832*** = transaction set type ***0001*** = transaction set control number
BCT*RC*6000040000*500******Silver Jewelry*04~	***RC*** = resale catalog (hard-coded value) ***6000040000*** = Vendor ID to identify the vendor's catalog ***500*** = selection code ***Silver Jewelry*** = selection code description ***04*** = action type MODIFY
LIN*1*UP*123456000032~	***UP*** = GTIN-12 qualifier ***123456000032*** = GTIN Image Product Identifier is mandatory.
LM*VI~	Starts the LM Loop within an LIN Loop for the current U.P.C.. **VI** = VICS
LQ**SIINTVITJPG~	Starts the LQ Loop within the LM Loop. The LQ Loop can repeat multiple times. One LQ Loop is required for each image. This LQ Loop is for a still image LEFT SIDE shot. ***SI*** = still image ***INT*** = Internet ***VIT*** = vertical top view ***JPG*** = file type is JPEG. Multi Media Object Type, Image Form Function, Image Facing, and Image File Format are mandatory,
REF*PG*UPC~	***PG*** = image application level indicator qualifier ***UPC*** = the image applies to the UPC specified in the LIN segment. Image Application Level Indicator is mandatory,
REF*FTP*X~	***FTP*** = the ftp pull location of the image is provided in the EFI segment. ***X*** = filler for syntax purposes Image Location Type is mandatory.
EFI*00*http://ftppulllocation.myco.com*********1234560000326SLVR-BRAC-1.jpg~	***00*** = company non-classified information ***http://ftppulllocation.myco.com*** = ftp location where image can be accessed ***1234560000326SLVR-BRAC-1.jpg*** = name of file containing the image

EDI TRANSMISSION DATA	EXPLANATION
	Image Location Identifier is mandatory. Image File Name is mandatory.
CTT*1~	***1*** = number of LIN segments in this 832 transaction set
SE*10*0001~	***10*** = number of segments between and including ST and SE ***0001*** = 832 transaction set control number

12.2. Mandatory and Optional Image Attributes

The examples in this section contain all available image attributes, including those that are mandatory and optional.

12.2.1. Example #1: Add new U.P.C.'s with Style-Level Images

Business Case

- The vendor manufactures footwear.
- Product ID's are assigned at the Style+Color level. All U.P.C.'s in this Style have the same color and different sizes.
- They want to add the new Product ID and its 3 UPCs, including information about 2 still images (front and back views). The Image applies to the Style "CAMMY-NAT3" (and all UPCs associated with it).

Product ID/Style #	U.P.C.	Color	Size
CAMMY-NAT3	0657718000121	Natural	7.5 medium
CAMMY-NAT3	0657718000138	Natural	8 medium
CAMMY-NAT3	0657718000145	Natural	8.5 medium

  - Image Characteristics: Still Internet images. Front and back views, center angle with no rotation.

832 Structure

- LIN Loop #1: 1st UPC
  - LM Loop – Start of image information
    - LQ Loop – Image Information for still image front view
    - LQ Loop – Image information for still image back view
- LIN Loop #2: 2nd U.P.C.
- LIN Loop #3: 3rd U.P.C.

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001~	***832*** = transaction set type ***0001*** = transaction set control number
BCT*RC*6000010000*100****** Womens Leather Shoes*02~	***RC*** = resale catalog ***6000010000*** = Vendor ID to identify the vendor's catalog ***100*** = selection code ***Womens Leather Shoes*** = selection code description ***02*** = action type ADD Note: When adding a new UPC, the following attributes are always required: • Action code (BCT10) • Vendor ID (BCT02) • Selection Code & Description (BCT03, BCT09) • Product ID & Description (LIN qualifier VN) • UPC/EAN & Type (LIN qualifier UP/EN) • NRF Color Code & Description (LIN qualifier CM) • NRF Size Code & Description (LIN qualifier SM)
LIN*1*UP*0657718000121*VN*CAMMY-NAT3*CM*101*SM*50145 ~	***1*** = LIN sequence number; this is the 1st U.P.C. to add. ***UP*** = GTIN qualifier ***0657718000121*** = GTIN ***VN*** = Product ID qualifier ***CAMMY-NAT3*** = Product ID/Style number

EDI TRANSMISSION DATA	EXPLANATION
	Image Product Identifier is mandatory. ***CM*** = NRF color code qualifier **101** = NRF color code for "Natural" ***SM*** = NRF size code qualifier ***50145*** = NRF size code for footwear size 7.5
PID*F*08***Cammy Leather Slingback****EN~	***F*** = Text Description is in PID05 ***08*** = Product ID Description qualifier ***Cammy Leather Slingback*** = Product ID Description ***EN*** = English (optional language code)
PID*F*73***Natural****EN~	***F*** = Text Description is in PID05 ***73*** = Color Description qualifier ***Natural*** = Color Description ***EN*** = English (optional language code)
PID*F*74***7.5 M****EN~	***F*** = Text Description is in PID05 ***74*** = Size Description qualifier ***7.5 M*** = Size Description ***EN*** = English (optional language code)
<other 832 segments for additional UPC-level attributes>	
LM*VI~	**LM Loop within the LIN Loop Starts Here**
LQ**MMADVFEA~	***LQ Loop for Item-Level Marketing Messages & Merchandise Classification***
PID*S**VI*SK~	***S*** = PID04 contains the marketing message type ***VI*** = VICS ***SK*** = short marketing message appears in the MTX segment
MTX**This is the best shoe ever!!!****EN~	***This is the best shoe ever!!!*** = short marketing message ***EN*** = English (optional language code)
PID*S**VI*LM~	***S*** = PID04 contains the marketing message type ***VI*** = VICS ***LM*** = long marketing message
MTX**It is quite comfortable and easy to wear. *It has the softest cushioning ever.***EN~	***It is quite comfortable and easy to wear.*** = Part 1 of long marketing message ***It has the softest cushioning ever.*** = Part 2 of long marketing message ***EN*** = English (optional language code)
PID*X**VI*MC*Summer Dress Shoe~	***X*** = PID04 and PID05 contain the image attribute type and value ***VI*** = VICS ***MC*** = merchandise classification ***Summer Dress Shoe*** = the merchandise classification according to the vendor
	LQ Loops for Image Attributes Start Here
LQ**SIINTVF1JPG~	Starts the LQ Loop within the LM Loop. The LQ Loop can repeat multiple times. One LQ Loop is required for each image. This LQ Loop is for a still image FRONT shot. ***SI*** = still image ***INT*** = Internet (Form/Function) ***VF1*** = vertical front view (Facing) ***JPG*** = file type is JPEG. (File Type) Multi Media Object Type, Image Form Function, Image Facing, and Image File Type are mandatory.
REF*PG*PID~	***PG*** = image application level indicator qualifier ***PID*** = the image applies to the Product ID/Style specified in the LIN segment (and all associated UPCs). Image Application Level Indicator is mandatory.
REF*URL*X~	***URL*** = the url location of the image is provided in the EFI segment. ***X*** = filler for syntax purposes Image Location Type is mandatory.
EFI*00*http://uniformresourcelocator1.com*********0657718000121CAM	***00*** = company non-classified information

EDI TRANSMISSION DATA	EXPLANATION
MY-NAT3.jpg~	***http://uniformresourcelocator1.com*** = URL of image ***0657718000121CAMMY-NAT3.jpg*** = name of file containing the image Image Location Identifier is mandatory. Image File Name is mandatory.
PID*X**VI*IF*1~	***X*** = PID04 contains the image facing indicator qualifier, and PID05 contains the GDSN image facing indicator. **VI** = hard-coded for 'VICS' **IF** = the GDSN image facing indicator is in PID05 **1** = the GDSN image facing indicator (front)
PID*S**VI*CF~	***S*** = PID04 contains the measurement type ***CF*** = compressed file size
MEA**DO*128000*AD~	***DO*** = compressed file size ***128000*** = number of characters in file size ***AD*** = bytes
PID*S**VI*DP~	***S*** = PID04 contains the measurement type ***VI*** = VICS ***DP*** = dots per inch (image weight)
MEA**D9*300*EA~	***D9*** = dots per inch (equivalent to pixels per inch) ***300*** = number o dots per inch ***EA*** = each
PID*X**VI*PL*1~	**X** = PID04 and PID05 contain the image attribute type and value. ***VI*** = VICS ***PL*** = angle of rotation and plunge. ***1*** = center; no plunge angle.
PID*S**VI*PC~	***S*** = PID04 contains the measurement type ***VI*** = VICS ***PC*** = pixel count
PID*X**VI*TP*PRO~	***X*** = PID04 and PID05 contain the image attribute type and value. ***VI*** = VICS ***TP*** = Image Type Indicator ***PRO*** = Product (the image is a shot of an actual product).
MEA**D8*2400*EA~	***D8*** = vertical ***2400*** = number of vertical pixels in the image ***EA*** = each
PID*X**VI*CL*Path 1~	***X*** = PID04 and PID05 contain the image attribute type and value ***VI*** = VICS ***CL*** = clipping path ***Path 1*** = clipping path value
PID*S**VI*IM~	***S*** = PID04 contains the image attribute type ***VI*** = VICS ***IM*** = image description
MTX**Vertical front view of one left shoe****EN~	***Vertical front view of one left shoe*** = image description ***EN*** = English (optional language code)
PID*X**VI*PR*1~	**X** = PID04 and PID05 contain the image attribute type and value **VI** = VICS **PR** = Product(s) shown in image **1** = One product shown in image
LQ**SIINTVIBJPG~	Starts the LQ Loop within the LM Loop. The LQ Loop can repeat multiple times. One LQ Loop is required for each image. This LQ Loop is for a still image BACK shot. ***SI*** = still image ***INT*** = Internet ***VIB*** = vertical back view ***JPG*** = file type is JPEG. Multi Media Object Type, Image Form Function, Image Facing, and Image File Type are mandatory.

EDI TRANSMISSION DATA	EXPLANATION
REF*PG*PID~	***PG*** = image application level indicator qualifier ***PID*** = the image applies to the Product ID/Style specified in the LIN segment (and all associated UPCs). Image Application Level Indicator is mandatory.
REF*URL*X~	***URL*** = the url location of the image is provided in the EFI segment. ***X*** = filler for syntax purposes Image Location Type is mandatory.
EFI*00*http://uniformresourcelocator2.com********0657718000206CAMMY-NAT3.jpg~	***00*** = company non-classified information ***http://uniformresourcelocator2.com*** = URL of image ***0657718000206CAMMY-NAT3.jpg*** = name of file containing the image Image Location Identifier is mandatory. Image File Name is mandatory.
PID*X**VI*IF*7~	***X*** = PID04 contains the image facing indicator qualifier, and PID05 contains the GDSN image facing indicator. **VI** = hard-coded for 'VICS' **IF** = the GDSN image facing indicator is in PID05 **1** = the GDSN image facing indicator (back)
PID*S**VI*CF~	***S*** = PID04 contains the measurement type ***CF*** = compressed file size
MEA**DO*256000*AD~	***DO*** = compressed file size ***256000*** = number of characters in file size ***AD*** = bytes
PID*S**VI*DP~	***S*** = PID04 contains the measurement type ***VI*** = VICS ***DP*** = dots per inch (image weight)
MEA**D9*600*EA~	***D9*** = dots per inch (equivalent to pixels per inch) ***600*** = number o dots per inch ***EA*** = each
PID*X**VI*PL*2~	**X** = PID04 and PID05 contain the image attribute type and value. ***VI*** = VICS ***PL*** = angle of rotation and plunge. ***2*** = left; no plunge angle.
PID*S**VI*PC~	***S*** = PID04 contains the measurement type ***VI*** = VICS ***PC*** = pixel count
PID*X**VI*TP*PRO~	***X*** = PID04 and PID05 contain the image attribute type and value. ***VI*** = VICS ***TP*** = Image Type Indicator ***PRO*** = Product (the image is a shot of an actual product).
MEA**D6*2400*EA~	***D6*** = horizontal ***2400*** = number of horizontal pixels in the image ***EA*** = each
MEA**D8*2400*EA~	***D8*** = vertical ***2400*** = number of vertical pixels in the image ***EA*** = each
PID*X**VI*CL*Path 1~	***X*** = PID04 and PID05 contain the image attribute type and value ***VI*** = VICS ***CL*** = clipping path ***Path 1*** = clipping path value
PID*S**VI*IM~	***S*** = PID04 contains the image attribute type ***VI*** = VICS ***IM*** = image description
MTX**Vertical back view of one left shoe****EN~	***Vertical back view of one left shoe*** = image description ***EN*** = English (optional language code)
PID*X**VI*PR*1~	**X** = PID04 and PID05 contain the image attribute type and value **VI** = VICS

EDI TRANSMISSION DATA	EXPLANATION
	PR = Product(s) shown in image **1** = One product shown in image
LIN*2*UP*00657718000138*VN*CAMMY-NAT3*CM*101*SM*50435 ~	***2*** = LIN sequence number; this is the 2nd UPC to add. ***UP*** = UPC qualifier ***0657718000138*** = UPC code ***VN*** = Product ID qualifier ***CAMMY-NAT3*** = Product ID/Style number ***CM*** = NRF color code qualifier **101** = NRF color code for "Natural" ***SM*** = NRF size code qualifier ***50435*** = NRF size code for footwear size 8.0
PID*F*08***Cammy Leather Slingback****EN~	***F*** = Text Description is in PID05 ***08*** = Product ID Description qualifier ***Cammy Leather Slingback*** = Product ID Description ***EN*** = English (optional language code)
PID*F*73***Natural****EN~	***F*** = Text Description is in PID05 ***73*** = Color Description qualifier ***Natural*** = Color Description ***EN*** = English (optional language code)
PID*F*74***8.0 M****EN~	***F*** = Text Description is in PID05 ***74*** = Size Description qualifier ***8.0 M*** = Size Description ***EN*** = English (optional language code)
<other 832 segments for additional UPC-level attributes>	
LIN*3*UP*00657718000145*VN*CAMMY-NAT3*CM*101*SM*50455 ~	***3*** = LIN sequence number; this is the 3rd UPC to add. ***UP*** = UPC qualifier ***0657718000145*** = UPC code ***VN*** = Product ID qualifier ***CAMMY-NAT3*** = Product ID/Style number ***CM*** = NRF color code qualifier **101** = NRF color code for "Natural" ***SM*** = NRF size code qualifier ***50455*** = NRF size code for footwear size 8.5
PID*F*08***Cammy Leather Slingback****EN~	***F*** = Text Description is in PID05 ***08*** = Product ID Description qualifier ***Cammy Leather Slingback*** = Product ID Description ***EN*** = English (optional language code)
PID*F*73***Natural****EN~	***F*** = Text Description is in PID05 ***73*** = Color Description qualifier ***Natural*** = Color Description ***EN*** = English (optional language code)
PID*F*74***8.5 M****EN~	***F*** = Text Description is in PID05 ***74*** = Size Description qualifier ***8.5 M*** = Size Description ***EN*** = English (optional language code)
<other 832 segments for additional UPC-level attributes>	
CTT*3~	***1*** = number of LIN segments in the 832 transaction set
SE*58*0001~	***58***= number of segments between and including ST and SE ***0001*** = 832 transaction set control number

12.2.2. Example #2: Add new U.P.C.'s with Style+Color-Level Images

Business Case

- The vendor manufactures footwear.
- Product IDs are assigned at the Style level.
- The 4 UPCs in this Style have 2 different colors—Natural and Charcoal.
- They add the new Style and its 4 associated U.P.C.'s, including information about 2 still images (front and back views) of the Style in its defined colors.
- Images apply to the Style+Color levels "CAMMY-3 + Natural" and "CAMMY-3 + Charcoal" and the 2 sets of 2 UPCs associated with each Style+Color combination.

Product ID/Style #	U.P.C.	Color	Size
CAMMY-3	0657718000121	Natural	7.5 medium
CAMMY-3	0657718000138	Natural	8 medium
CAMMY-3	0657718000145	Charcoal	7.5 medium
CAMMY-3	0657718000152	Charcoal	8 medium

- Image Characteristics: Still Internet image, front and back views, center angle with no rotation, URL locations specified.

832 Structure

- LIN Loop #1: 1st UPC in color Natural.
  - LM Loop – Start of image information
    - LQ Loop – Image Information for still image front view
    - LQ Loop – Image information for still image back view
- LIN Loop #2: 2nd UPC in color Natural.
- LIN Loop #3: 1st UPC in color Charcoal.
  - LM Loop – Start of image information
    - LQ Loop – Image Information for still image front view
    - LQ Loop – Image information for still image back view
- LIN Loop #4: 2nd UPC in color Charcoal.

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001~	***832*** = transaction set type ***0001*** = transaction set control number
BCT*RC*6000010000*100****** Womens Leather Shoes*02~	***RC*** = resale catalog ***6000010000*** = Vendor ID to identify the vendor's catalog ***100*** = selection code ***Womens Leather Shoes*** = selection code description ***02*** = action type ADD
LIN*1*UP*0657718000121*VN*CAMMY-3*CM*101*SM*50145 ~	***1*** = LIN sequence number; this is the 1st U.P.C. to add. ***UP*** = GTIN-12 qualifier ***0657718000121*** = GTIN ***VN*** = Product ID qualifier ***CAMMY-3*** = Product ID/Style number Image Product Identifier is mandatory. ***CM*** = NRF color code qualifier **101** = NRF color code ("Natural") Image Product Identifier is mandatory. ***SM*** = NRF size code qualifier ***50145*** = NRF size code
PID*F*08***Cammy Leather Slingback****EN~	***F*** = Text Description is in PID05

EDI TRANSMISSION DATA	EXPLANATION
	08 = Product ID Description qualifier ***Cammy Leather Slingback*** = Product ID Description ***EN*** = English (optional language code)
PID*F*73***Natural****EN~	***F*** = Text Description is in PID05 ***73*** = Color Description qualifier ***Natural*** = Color Description ***EN*** = English (optional language code)
PID*F*74***7.5 M****EN~	***F*** = Text Description is in PID05 ***74*** = Size Description qualifier ***7.5 M*** = Size Description ***EN*** = English (optional language code)
<other 832 segments for additional UPC-level attributes>	
LM*VI~	**LM Loop within the LIN Loop Starts Here**
LQ**MMADVFEA~	***LQ Loop for Item-Level Marketing Messages & Merchandise Classification***
PID*S**VI*SK~	***S*** = PID04 contains the marketing message type ***VI*** = VICS ***SK*** = short marketing message appears in the MTX segment
MTX**This is the best shoe ever!!!****EN~	***This is the best shoe ever!!!*** = short marketing message ***EN*** = English (optional language code)
PID*S**VI*LM~	***S*** = PID04 contains the marketing message type ***VI*** = VICS ***LM*** = long marketing message
MTX**It is quite comfortable and easy to wear. *It has the softest cushioning ever.***EN~	***It is quite comfortable and easy to wear.*** = Part 1 of long marketing message ***It has the softest cushioning ever.*** = Part 2 of long marketing message ***EN*** = English (optional language code)
PID*X**VI*MC*Summer Dress Shoe~	***X*** = PID04 and PID05 contain the image attribute type and value ***VI*** = VICS ***MC*** = merchandise classification ***Summer Dress Shoe*** = the merchandise classification according to the vendor
	LQ Loops for Image Attributes Start Here
LQ**SIINTVF1JPG~	Starts the LQ Loop within the LM Loop. The LQ Loop can repeat multiple times. One LQ Loop is required for each image. This LQ Loop is for a still image FRONT shot. ***SI*** = still image ***INT*** = Internet (Form/Function) ***VF1*** = vertical front view (Facing) ***JPG*** = file type is JPEG. (File Type) Multi Media Object Type, Image Form Function, Image Facing, and Image File Type are mandatory.
REF*PG*CLR~	***PG*** = image application level indicator qualifier ***CLR*** = the image applies to the Product ID + Color Code specified in the LIN segment (and all associated UPCs). Image Application Level Indicator is mandatory.
REF*URL*X~	***URL*** = the url location of the image is provided in the EFI segment. ***X*** = filler for syntax purposes Image Location Type is mandatory.
EFI*00*http://uniformresourcelocator1.com********0657718000121CAMMY-3-FT.jpg~	***00*** = company non-classified information ***http://uniformresourcelocator1.com*** = URL of image ***0657718000121CAMMY-3-FT.jpg*** = name of file containing the image Image Location Identifier is mandatory. Image File Name is mandatory.
PID*X**VI*IF*1~	***X*** = PID04 contains the image facing indicator qualifier, and

EDI TRANSMISSION DATA	EXPLANATION
	PID05 contains the GDSN image facing indicator. **VI** = hard-coded for 'VICS' **IF** = the GDSN image facing indicator is in PID05 **1** = the GDSN image facing indicator (front)
PID*S**VI*CF~	***S*** = PID04 contains the measurement type ***CF*** = compressed file size
MEA**DO*256000*AD~	***DO*** = compressed file size ***256000*** = number of characters in file size ***AD*** = bytes
PID*S**VI*DP~	***S*** = PID04 contains the measurement type ***VI*** = VICS ***DP*** = dots per inch (image weight)
MEA**D9*600*EA~	***D9*** = dots per inch (equivalent to pixels per inch) ***600*** = number o dots per inch ***EA*** = each
PID*X**VI*PL*1~	**X** = PID04 and PID05 contain the image attribute type and value. ***VI*** = VICS ***PL*** = angle of rotation and plunge. ***1*** = center; no plunge angle.
PID*S**VI*PC~	***S*** = PID04 contains the measurement type ***VI*** = VICS ***PC*** = pixel count
PID*X**VI*TP*PRO~	***X*** = PID04 and PID05 contain the image attribute type and value. ***VI*** = VICS ***TP*** = Image Type Indicator ***PRO*** = Product (the image is a shot of an actual product).
MEA**D6*2400*EA~	***D6*** = horizontal ***2400*** = number of horizontal pixels in the image ***EA*** = each
MEA**D8*2400*EA~	***D8*** = vertical ***2400*** = number of vertical pixels in the image ***EA*** = each
PID*X**VI*CL*Path 1~	***X*** = PID04 and PID05 contain the image attribute type and value ***VI*** = VICS ***CL*** = clipping path ***Path 1*** = clipping path value
PID*S**VI*IM~	***S*** = PID04 contains the image attribute type ***VI*** = VICS ***IM*** = image description
MTX**Vertical front view of one left shoe****EN~	***Vertical front view of one left shoe*** = image description ***EN*** = English (optional language code)
PID*X**VI*PR*2~	**X** = PID04 and PID05 contain the image attribute type and value **VI** = VICS **PR** = Product(s) shown in image **2** = Multiple products shown in image
LQ**SIINTVIBJPG~	Starts the LQ Loop within the LM Loop. The LQ Loop can repeat multiple times. One LQ Loop is required for each image. This LQ Loop is for a still image BACK shot. ***SI*** = still image ***INT*** = Internet ***VIB*** = vertical back view ***JPG*** = file type is JPEG. Multi Media Object Type, Image Form Function, Image Facing, and Image File Type are mandatory.
REF*PG*CLR~	***PG*** = image application level indicator qualifier ***CLR*** = the image applies to the Product ID + Color Code specified in the LIN segment (and all associated UPCs).

EDI TRANSMISSION DATA	EXPLANATION
	Image Application Level Indicator is mandatory.
REF*URL*X~	***URL*** = the url location of the image is provided in the EFI segment. ***X*** = filler for syntax purposes Image Location Type is mandatory.
EFI*00*http://uniformresourcelocator2.com********0657718000206CAMMY-3-BK.jpg~	***00*** = company non-classified information ***http://uniformresourcelocator2.com*** = URL of image ***0657718000206CAMMY-3-BK.jpg*** = name of file containing the image Image Location Identifier is mandatory. Image File Name is mandatory.
PID*X**VI*IF*7~	***X*** = PID04 contains the image facing indicator qualifier, and PID05 contains the GDSN image facing indicator. **VI** = hard-coded for 'VICS' **IF** = the GDSN image facing indicator is in PID05 **1** = the GDSN image facing indicator (back)
PID*S**VI*CF~	***S*** = PID04 contains the measurement type ***CF*** = compressed file size
MEA**DO*156000*AD~	***DO*** = compressed file size ***156000*** = number of characters in file size ***AD*** = bytes
PID*S**VI*DP~	***S*** = PID04 contains the measurement type ***VI*** = VICS ***DP*** = dots per inch (image weight)
MEA**D9*300*EA~	***D9*** = dots per inch (equivalent to pixels per inch) ***300*** = number o dots per inch ***EA*** = each
PID*X**VI*PL*1~	**X** = PID04 and PID05 contain the image attribute type and value. ***VI*** = VICS ***PL*** = angle of rotation and plunge. ***1*** = center; no plunge angle.
PID*S**VI*PC~	***S*** = PID04 contains the measurement type ***VI*** = VICS ***PC*** = pixel count
PID*X**VI*TP*PRO~	***X*** = PID04 and PID05 contain the image attribute type and value. ***VI*** = VICS ***TP*** = Image Type Indicator ***PRO*** = Product (the image is a shot of an actual product).
MEA**D6*2400*EA~	***D6*** = horizontal ***2400*** = number of horizontal pixels in the image ***EA*** = each
MEA**D8*2400*EA~	***D8*** = vertical ***2400*** = number of vertical pixels in the image ***EA*** = each
PID*X**VI*CL*Path 1~	***X*** = PID04 and PID05 contain the image attribute type and value ***VI*** = VICS ***CL*** = clipping path ***Path 1*** = clipping path value
PID*S**VI*IM~	***S*** = PID04 contains the image attribute type ***VI*** = VICS ***IM*** = image description
MTX**Vertical back view of one left shoe****EN~	***Vertical back view of one left shoe*** = image description ***EN*** = English (optional language code)
PID*X**VI*PR*2~	**X** = PID04 and PID05 contain the image attribute type and value **VI** = VICS **PR** = Product(s) shown in image **2** = Multiple products shown in image

EDI TRANSMISSION DATA	EXPLANATION
LIN*2*UP*00657718000138*VN*CAMMY-3*CM*101*SM*50435 ~	***2*** = LIN sequence number; this is the 2nd U.P.C. to add. ***UP*** = GTIN-12 qualifier ***0657718000138*** = GTIN ***VN*** = Product ID qualifier ***CAMMY-3*** = Product ID/Style number ***CM*** = NRF color code qualifier **101** = NRF color code (“Natural”) ***SM*** = NRF size code qualifier ***50435*** = NRF size code
PID*F*08***Cammy Leather Slingback****EN~	***F*** = Text Description is in PID05 ***08*** = Product ID Description qualifier ***Cammy Leather Slingback*** = Product ID Description ***EN*** = English (optional language code)
PID*F*73***Natural****EN~	***F*** = Text Description is in PID05 ***73*** = Color Description qualifier ***Natural*** = Color Description ***EN*** = English (optional language code)
PID*F*74***8.0 M****EN~	***F*** = Text Description is in PID05 ***74*** = Size Description qualifier ***8.0 M*** = Size Description ***EN*** = English (optional language code)
<other 832 segments for additional U.P.C.-level attributes>	
LIN*3*UP*0657718000145*VN*CAMMY-3*CM*010*SM*50145 ~	***3*** = LIN sequence number; this is the 3rd U.P.C. to add. ***UP*** = GTIN-12 qualifier ***0657718000145*** = GTIN ***VN*** = Product ID qualifier ***CAMMY-3*** = Product ID/Style number Image Product Identifier is mandatory. ***CM*** = NRF color code qualifier **010** = NRF color code (“Charcoal”) Image Product Identifier is mandatory. ***SM*** = NRF size code qualifier ***50145*** = NRF size code
PID*F*08***Cammy Leather Slingback****EN~	***F*** = Text Description is in PID05 ***08*** = Product ID Description qualifier ***Cammy Leather Slingback*** = Product ID Description ***EN*** = English (optional language code)
PID*F*73***Charcoal****EN~	***F*** = Text Description is in PID05 ***73*** = Color Description qualifier ***Charcoal***= Color Description ***EN*** = English (optional language code)
PID*F*74***7.5 M****EN~	***F*** = Text Description is in PID05 ***74*** = Size Description qualifier ***7.5 M*** = Size Description ***EN*** = English (optional language code)
<other 832 segments for additional UPC-level attributes>	
LM*VI~	**LM Loop within the LIN Loop Starts Here**
LQ**MMADVFEA~	***LQ Loop for Item-Level Marketing Messages & Merchandise Classification***
PID*S**VI*SK~	***S*** = PID04 contains the marketing message type ***VI*** = VICS ***SK*** = short marketing message appears in the MTX segment
MTX**This is the best shoe ever!!!****EN~	***This is the best shoe ever!!!*** = short marketing message ***EN*** = English (optional language code)
PID*S**VI*LM~	***S*** = PID04 contains the marketing message type ***VI*** = VICS ***LM*** = long marketing message
MTX**It is quite comfortable and easy to wear. *It has the softest cushioning ever.***EN~	***It is quite comfortable and easy to wear.*** = Part 1 of long marketing message ***It has the softest cushioning ever.*** = Part 2 of long marketing message ***EN*** = English (optional language code)
PID*X**VI*MC*Summer Dress Shoe~	***X*** = PID04 and PID05 contain the image attribute type and value ***VI*** = VICS

EDI TRANSMISSION DATA	EXPLANATION
	MC = merchandise classification ***Summer Dress Shoe*** = the merchandise classification according to the vendor
	LQ Loops for Image Attributes Start Here
LQ**SIINTVF1JPG~	Starts the LQ Loop within the LM Loop. The LQ Loop can repeat multiple times. One LQ Loop is required for each image. This LQ Loop is for a still image FRONT shot. ***SI*** = still image ***INT*** = Internet (Form/Function) ***VF1*** = vertical front view (Facing) ***JPG*** = file type is JPEG. (File Type) Multi Media Object Type, Image Form Function, Image Facing, and Image File Type are mandatory.
REF*PG*CLR~	***PG*** = image application level indicator qualifier ***CLR*** = the image applies to the Product ID + Color Code specified in the LIN segment (and all associated UPCs). Image Application Level Indicator is mandatory.
REF*URL*X~	***URL*** = the url location of the image is provided in the EFI segment. ***X*** = filler for syntax purposes Image Location Type is mandatory.
EFI*00*http://uniformresourcelocator3.com********0657718000145CAMMY-3-FT.jpg~	***00*** = company non-classified information ***http://uniformresourcelocator3.com*** = URL of image ***0657718000121CAMMY-3-FT.jpg*** = name of file containing the image Image Location Identifier is mandatory. Image File Name is mandatory.
PID*X**VI*IF*1~	***X*** = PID04 contains the image facing indicator qualifier, and PID05 contains the GDSN image facing indicator. **VI** = hard-coded for 'VICS' **IF** = the GDSN image facing indicator is in PID05 **1** = the GDSN image facing indicator (front)
PID*S**VI*CF~	***S*** = PID04 contains the measurement type ***CF*** = compressed file size
MEA**DO*128000*AD~	***DO*** = compressed file size ***128000*** = number of characters in file size ***AD*** = bytes
PID*S**VI*DP~	***S*** = PID04 contains the measurement type ***VI*** = VICS ***DP*** = dots per inch (image weight)
MEA**D9*300*EA~	***D9*** = dots per inch (equivalent to pixels per inch) ***300*** = number o dots per inch ***EA*** = each
PID*X**VI*PL*1~	**X** = PID04 and PID05 contain the image attribute type and value. ***VI*** = VICS ***PL*** = angle of rotation and plunge. ***1*** = center; no plunge angle.
PID*S**VI*PC~	***S*** = PID04 contains the measurement type ***VI*** = VICS ***PC*** = pixel count
PID*X**VI*TP*PRO~	***X*** = PID04 and PID05 contain the image attribute type and value. ***VI*** = VICS ***TP*** = Image Type Indicator ***PRO*** = Product (the image is a shot of an actual product).
MEA**D6*2400*EA~	***D6*** = horizontal ***2400*** = number of horizontal pixels in the image ***EA*** = each

EDI TRANSMISSION DATA	EXPLANATION
MEA**D8*2400*EA~	***D8*** = vertical ***2400*** = number of vertical pixels in the image ***EA*** = each
PID*X**VI*CL*Path 1~	***X*** = PID04 and PID05 contain the image attribute type and value ***VI*** = VICS ***CL*** = clipping path ***Path 1*** = clipping path value
PID*S**VI*IM~	***S*** = PID04 contains the image attribute type ***VI*** = VICS ***IM*** = image description
MTX**Vertical front view of one left shoe****EN~	***Vertical front view of one left shoe*** = image description ***EN*** = English (optional language code)
LQ**SIINTVIBJPG~	Starts the LQ Loop within the LM Loop. The LQ Loop can repeat multiple times. One LQ Loop is required for each image. This LQ Loop is for a still image BACK shot. ***SI*** = still image ***INT*** = Internet ***VIB*** = vertical back view ***JPG*** = file type is JPEG. Multi Media Object Type, Image Form Function, Image Facing, and Image File Type are mandatory.
REF*PG*CLR~	***PG*** = image application level indicator qualifier ***CLR*** = the image applies to the Product ID + Color Code specified in the LIN segment (and all associated UPCs). Image Application Level Indicator is mandatory.
REF*URL*X~	***URL*** = the url location of the image is provided in the EFI segment. ***X*** = filler for syntax purposes Image Location Type is mandatory.
EFI*00*http://uniformresourcelocator4.com*********0657718000206CAMMY-3-BK.jpg~	***00*** = company non-classified information ***http://uniformresourcelocator4.com*** = URL of image ***0657718000206CAMMY-3-BK.jpg*** = name of file containing the image Image Location Identifier is mandatory. Image File Name is mandatory.
PID*X**VI*IF*7~	***X*** = PID04 contains the image facing indicator qualifier, and PID05 contains the GDSN image facing indicator. **VI** = hard-coded for 'VICS' **IF** = the GDSN image facing indicator is in PID05 **1** = the GDSN image facing indicator (back)
PID*S**VI*CF~	***S*** = PID04 contains the measurement type ***CF*** = compressed file size
MEA**DO*156000*AD~	***DO*** = compressed file size ***156000*** = number of characters in file size ***AD*** = bytes
PID*S**VI*DP~	***S*** = PID04 contains the measurement type ***VI*** = VICS ***DP*** = dots per inch (image weight)
MEA**D9*300*EA~	***D9*** = dots per inch (equivalent to pixels per inch) ***300*** = number o dots per inch ***EA*** = each
PID*X**VI*PL*1~	**X** = PID04 and PID05 contain the image attribute type and value. ***VI*** = VICS ***PL*** = angle of rotation and plunge. ***1*** = center; no plunge angle.
PID*S**VI*PC~	***S*** = PID04 contains the measurement type ***VI*** = VICS

EDI TRANSMISSION DATA	EXPLANATION
	PC = pixel count
PID*X**VI*TP*PRO~	***X*** = PID04 and PID05 contain the image attribute type and value. ***VI*** = VICS ***TP*** = Image Type Indicator ***PRO*** = Product (the image is a shot of an actual product).
MEA**D6*2400*EA~	***D6*** = horizontal ***2400*** = number of horizontal pixels in the image ***EA*** = each
MEA**D8*2400*EA~	***D8*** = vertical ***2400*** = number of vertical pixels in the image ***EA*** = each
PID*X**VI*CL*Path 1~	***X*** = PID04 and PID05 contain the image attribute type and value ***VI*** = VICS ***CL*** = clipping path ***Path 1*** = clipping path value
PID*S**VI*IM~	***S*** = PID04 contains the image attribute type ***VI*** = VICS ***IM*** = image description
MTX**Vertical back view of one left shoe****EN~	***Vertical back view of one left shoe*** = image description ***EN*** = English (optional language code)
LIN*4*UP*00657718000152*VN*CAMMY-3*CM*010*SM*50435 ~	***4*** = LIN sequence number; this is the 2nd U.P.C. to add. ***UP*** = GTIN qualifier ***0657718000152*** = GTIN ***VN*** = Product ID qualifier ***CAMMY-3*** = Product ID/Style number ***CM*** = NRF color code qualifier **101** = NRF color code (“Charcoal”) ***SM*** = NRF size code qualifier ***50435*** = NRF size code
PID*F*08***Cammy Leather Slingback****EN~	***F*** = Text Description is in PID05 ***08*** = Product ID Description qualifier ***Cammy Leather Slingback*** = Product ID Description ***EN*** = English (optional language code)
PID*F*73***Charcoal****EN~	***F*** = Text Description is in PID05 ***73*** = Color Description qualifier ***Charcoal*** = Color Description ***EN*** = English (optional language code)
PID*F*74***8.0 M****EN~	***F*** = Text Description is in PID05 ***74*** = Size Description qualifier ***8.0 M*** = Size Description ***EN*** = English (optional language code)
<other 832 segments for additional UPC-level attributes>	
CTT*4~	***4*** = number of LIN segments in the 832 transaction set
SE*104*0001~	***104*** = number of segments between and including ST & SE ***0001*** = 832 transaction set control number

12.2.3. Example #3: Add a new UPC with a UPC-Level Image

Business Case

- The vendor manufactures sterling silver jewelry.
- Each Product ID is associated with 1 UPC, since all the designs are one-of-a-kind.
- The UPC identifies a 7-inch sterling silver link bracelet with a 5ct amethyst mounted at its center.
- There is 1 image to be associated with this bracelet (top view). It will be logically associated with just 1 UPC.

Product ID/Style #	U.P.C.	Color	Size
SLVR-BRAC-1	123456000032	Silver	7 inches

- Image Characteristics: Still image, FTP pull location specified.

832 Structure

- LIN Loop #1: U.P.C.
  - LM Loop – Start of image information
    - LQ Loop – Image Information for still image top view

EDI TRANSMISSION DATA	EXPLANATION
ST*832*0001~	***832*** = transaction set type ***0001*** = transaction set control number
BCT*RC*6000040000*500******Silver Jewelry*02~	***RC*** = resale catalog (hard-coded value) ***6000040000*** = Vendor ID to identify the vendor's catalog ***500*** = selection code ***Silver Jewelry*** = selection code description ***02*** = action type ADD
LIN*1*UP*123456000032*VN*SLVR-BRAC-1*CM*040*SM*73209~	***UP*** = GTIN qualifier ***123456000032*** = GTIN Image Product Identifier is mandatory. ***VN*** = Product ID qualifier ***SLVR_BRAC-1*** = Product ID ***CM*** = NRF Color Code qualifier ***040*** = NRF Color Code ***SM*** = NRF Size Code qualifier ***73209*** = NRF Size Code
PID*F*08***Silver Bracelet with Amethyst~	***F*** = Description in PID05 ***08*** = Product ID Description qualifier ***Silver Bracelet with Amethyst*** = Product ID Description
PID*F*73***Silver~	***F*** = Description in PID05 ***73*** = Color Description qualifier ***Silver*** = Color Description
PID*F*74***7 inch~	***F*** = Description in PID05 ***74*** = Size Description qualifier ***7 inch*** = Size Description
<other 832 segments for additional UPC-level attributes>	
LM*VI~	**The LM Loop within the LIN Loop Starts Here**
LQ**MMADVFEA~	***LQ Loop for Item-Level Marketing Messages & Merchandise Classification***
PID*S**VI*SK~	***S*** = PID04 contains the marketing message type ***VI*** = VICS ***SK*** = short marketing message appears in the MTX segment
MTX**This is the best shoe ever!!!****EN~	***This is the best shoe ever!!!*** = short marketing message ***EN*** = English (optional language code)
PID*S**VI*LM~	***S*** = PID04 contains the marketing message type ***VI*** = VICS ***LM*** = long marketing message
MTX**It is quite comfortable and easy to wear. *It has the softest	***It is quite comfortable and easy to wear.*** = Part 1 of long

EDI TRANSMISSION DATA	EXPLANATION
cushioning ever.***EN~	marketing message ***It has the softest cushioning ever.*** = Part 2 of long marketing message ***EN*** = English (optional language code)
PID*X**VI*MC*Summer Dress Shoe~	***X*** = PID04 and PID05 contain the image attribute type and value ***VI*** = VICS ***MC*** = merchandise classification ***Summer Dress Shoe*** = the merchandise classification according to the vendor
	LQ Loops for Image Attributes Start Here
LQ**SIINTVITJPG~	Starts the LQ Loop within the LM Loop. The LQ Loop can repeat multiple times. One LQ Loop is required for each image. This LQ Loop is for a still image LEFT SIDE shot. ***SI*** = still image ***INT*** = Internet ***VIT*** = vertical top view ***JPG*** = file type is JPEG. Multi Media Object Type, Image Form Function, Image Facing, and Image File Format are mandatory,
REF*PG*UPC~	***PG*** = image application level indicator qualifier ***UPC*** = the image applies to the UPC specified in the LIN segment. Image Application Level Indicator is mandatory,
REF*FTP*X~	***FTP*** = the ftp pull location of the image is provided in the EFI segment. ***X*** = filler for syntax purposes Image Location Type is mandatory.
EFI*00*http://ftppulllocation.myco.com*********1234560000326SLVR-BRAC-1.jpg~	***00*** = company non-classified information ***http://ftppulllocation.myco.com*** = ftp location where image can be accessed ***1234560000326SLVR-BRAC-1.jpg*** = name of file containing the image Image Location Identifier is mandatory. Image File Name is mandatory.
PID*X**VI*IF*3~	***X*** = PID04 contains the image facing indicator qualifier, and PID05 contains the GDSN image facing indicator. **VI** = hard-coded for 'VICS' **IF** = the GDSN image facing indicator is in PID05 **1** = the GDSN image facing indicator (top)
PID*S**VI*CF~	***S*** = PID04 contains the measurement type ***CF*** = compressed file size
MEA**DO*64000*AD~	***DO*** = compressed file size ***64000*** = number of characters in file size ***AD*** = bytes
PID*S**VI*DP~	***S*** = PID04 contains the measurement type ***VI*** = VICS ***DP*** = dots per inch (image weight)
MEA**D9*300*EA~	***D9*** = dots per inch (equivalent to pixels per inch) ***300*** = number o dots per inch ***EA*** = each
PID*X**VI*PL*1~	**X** = PID04 and PID05 contain the image attribute type and value. ***VI*** = VICS ***PL*** = angle of rotation and plunge. ***1*** = center; no plunge angle.
PID*S**VI*PC~	***S*** = PID04 contains the measurement type ***VI*** = VICS ***PC*** = pixel count

EDI TRANSMISSION DATA	EXPLANATION
PID*X**VI*TP*PRO~	***X*** = PID04 and PID05 contain the image attribute type and value. ***VI*** = VICS ***TP*** = Image Type Indicator ***PRO*** = Product (the image is a shot of an actual product).
MEA**D6*3600*EA~	***D6*** = horizontal ***3600*** = number of horizontal pixels in the image ***EA*** = each
MEA**D8*3600*EA~	***D8*** = vertical ***3600*** = number of vertical pixels in the image ***EA*** = each
PID*X**VI*CL*Path 1~	***X*** = PID04 and PID05 contain the image attribute type and value ***VI*** = VICS ***CL*** = clipping path ***Path 1*** = clipping path value
PID*S**VI*IM~	***S*** = PID04 contains the image attribute type ***VI*** = VICS ***IM*** = image description
MTX**Top view end-to-end in straight line****EN~	***Top view end-to-end in straight line*** = image description ***EN*** = English (optional language code)
PID*X**VI*PR*1~	**X** = PID04 and PID05 contain the image attribute type and value **VI** = VICS **PR** = Product(s) shown in image **1** = One product shown in image
CTT*1~	***1*** = number of LIN segments in this 832 transaction set
SE*33*0001~	***33***= number of segments between and including ST and SE ***0001*** = 832 transaction set control number

13. GS1 Apparel Extended Attributes

13.1 Extended Attributes for eCommerce and EDI Guidance

GS1 US Apparel & General Merchandise (GM) Committee, comprised of vendors, retailers and solution providers, have agreed to extended product attributes that are recommended for exchange between trading partners in support of internet-based commerce (e-Commerce, mobile commerce) initiatives.

This data extends beyond the traditional supply chain information already exchanged between buyers and sellers and includes the essential product information that end-consumers will need throughout the purchase cycle. This information is central to those organizations that intend to serve consumers with a consistent selling experience across all distribution (bricks and mortar and on-line) retail channels.

Refer to the GS1 US EDI 7010 CD and the GS1 Apparel & General Merchandise Voluntary Guidelines for Exchanging Extended Attributes for eCommerce for additional information.

13.1.1. PID Product /Item Description Codes

The attributes for which codes have been identified follow. The codes are used in the detail PID segment (position 2/0700) for Advertised Origin, Collar/Neck Type, Closure type, Fur Animal Name, Lining Material, Sleeve Type and Sole Type.

Extended Product Information Exchange - EDI PID04 Code List	General Merchandise (GM)
Advertised Origin (ADVO)	
Imported	GM03ADVOIM
Made in Canada	GM03ADVOMC
Made in USA	GM03ADVOMU
Made in USA and Imported	GM03ADVOUI
Made in USA or Imported	GM03ADVOUO
Made in another country*	GM04ADVO99
Collar/Neck Type (CLNT)	
Ballet	GM03CLNTBL
Banded	GM03CLNTBC
Boat or bateau	GM03CLNTBE
Button-Down	GM03CLNTBD
Cowl	GM03CLNTCW
Crew	GM03CLNTCR
Drape	GM03CLNTDP
Funnel	GM03CLNTFU
Halter	GM03CLNTHA

Henley	GM03CLNTHN
Henley Faux	GM03CLNTHF
Henley Functional	GM03CLNTHU
Jewel	GM03CLNTJE
Johnny	GM03CLNTJO
Keyhole	GM03CLNTKE
Mandarin	GM03CLNTMB
Marilyn	GM03CLNTMI
Mockneck	GM03CLNTMO
Necklace	GM03CLNTNE
Notch	GM03CLNTNO
Off the Shoulder	GM03CLNTOR
One Shoulder	GM03CLNTOS
Ottoman	GM03CLNTOT
Peter Pan	GM03CLNTPA
Platter	GM03CLNTPE
Plunge	GM03CLNTPJ
Point	GM03CLNTPO
Polo	GM03CLNTPU
Portrait Collar	GM03CLNTPR
1/4 Zip Mock	GM03CLNTQZ
Racer Back	GM03CLNTRB
Rolled	GM03CLNTRO
Round	GM03CLNTRU
Sailor	GM03CLNTSD
Scoop	GM03CLNTSC
Shawl	GM03CLNTSH
Slider Halter	GM03CLNTSL
Spread	GM03CLNTSO
Square	GM03CLNTSQ
Stand	GM03CLNTSV
Surplice	GM03CLNTSU
Sweetheart	GM03CLNTSX
Tab	GM03CLNTTA
Tie	GM03CLNTTI
Turtle	GM03CLNTTU
V-Neck	GM03CLNTVN
Wing	GM03CLNTWI
Y-Neck	GM03CLNTYN
Other Collar*	GM04CLNT99
Closure (CLOS)	
Adjustable/Pull	GM03CLOSAP
Back Button/Zip	GM03CLOSBB

Back Hook/Zip	GM03CLOSBH
Barrel	GM03CLOSBA
Box Tab Insert	GM03CLOSBT
Buckle	GM03CLOSBU
Button	GM03CLOSBN
Button Back	GM03CLOSBK
Button Front	GM03CLOSBF
Button Front Partial	GM03CLOSBP
Button Shoulder	GM03CLOSBS
Clasp	GM03CLOSCL
Click Top	GM03CLOSCT
Clip On	GM03CLOSCO
Drawstring	GM03CLOSDS
Drawstring Front	GM03CLOSDF
Drawstring Elastic	GM03CLOSDE
D Ring	GM03CLOSDR
O Ring	GM03CLOSDO
Fishhook	GM03CLOSFS
Flap	GM03CLOSFP
Foldover	GM03CLOSFO
French Wire	GM03CLOSFW
Frog/Button Loop	GM03CLOSFA
Front Button/Zip	GM03CLOSFZ
Front Hook/Zip	GM03CLOSFH
Hidden Button Front	GM03CLOSHB
Hidden Snap Front	GM03CLOSHS
Hidden Zip Front	GM03CLOSHZ
Hinged	GM03CLOSHI
Hinged/Foldover	GM03CLOSHE
Hook	GM03CLOSHO
Hook and loop	GM03CLOSHL
Hook and eye front	GM03CLOSHC
Hook and eye back	GM03CLOSHD
Keyhole button	GM03CLOSKB
Kiss-Lock	GM03CLOSKL
Knot	GM03CLOSKN
Lace Up	GM03CLOSLU
Lace-up Front	GM03CLOSLF
Leverback	GM03CLOSLB
Lift-Lock	GM03CLOSLL
Link/Clasp	GM03CLOSLC
Lobster Claw	GM03CLOSLW

Magnetic	GM03CLOSMG
Pierced Post	GM03CLOSPP
Push-Lock	GM03CLOSPL
Side Button/Zip	GM03CLOSSB
Side Hook/Zip	GM03CLOSSZ
Snap	GM03CLOSSN
Snap Back	GM03CLOSSM
Snap Front	GM03CLOSSF
Snap Front Partial	GM03CLOSS2
Snap Legs	GM03CLOSSE
Snap Shoulder	GM03CLOSSS
Snap Post	GM03CLOSSA
String	GM03CLOSSR
Swivel	GM03CLOSSW
Tab	GM03CLOSTB
Tie	GM03CLOSTI
Tie Back/Halter	GM03CLOSTH
Tie Front	GM03CLOSTF
Tie Side	GM03CLOSTS
Toggle	GM03CLOSTO
Toggle Front	GM03CLOSTN
Top Zip	GM03CLOSTZ
Tunnel Side Tie	GM03CLOSTQ
Turn Lock	GM03CLOSTL
Wrap	GM03CLOSWR
Zipper	GM03CLOSZI
Zipper Back	GM03CLOSZB
Zipper Back Partial	GM03CLOSZP
Zipper Front	GM03CLOSZF
Zipper Front Partial	GM03CLOSZR
Zipper Side	GM03CLOSZS
Zipper Around	GM03CLOSZA
1/4 Zip	GM03CLOSZQ
1/2 Zip	GM03CLOSZH
Other Closure*	GM04CLOS99
Fur Animal Name (FANM)	
Australian Brushtail Possum	GM03FANMAP
Beaver	GM03FANMBV
Calf Hair	GM03FANMCH
Fox	GM03FANMFX
Golden Jackal	GM03FANMGJ
Grey Wolf	GM03FANMGW

Marten	GM03FANMMA
Mink	GM03FANMMK
Otter	GM03FANMOU
Pony Hair	GM03FANMPH
Rabbit	GM03FANMRI
Raccoon	GM03FANMRC
Sable	GM03FANMSG
Skunk	GM03FANMSK
Other Fur Animal*	GM04FANM99
Fur Treatment (FTMT)	
Artificially Colored	GM03FTMTAC
Bleached	GM03FTMTBM
Dyed	GM03FTMTDY
Natural (untreated)	GM03FTMTNA
Painted	GM03FTMTPT
Other Fur Treatment*	GM04FTMT99
Lining Material (LIMT)	
Antimicrobial	GM03LIMTAN
Fabric	GM03LIMTFD
Faux Fur	GM03LIMTFB
Faux Leather	GM03LIMTFL
Faux Shearling	GM03LIMTFS
Fleece	GM03LIMTFC
Gel	GM03LIMTGE
Leather	GM03LIMTLE
Memory Foam	GM03LIMTMF
Organic Material	GM03LIMTOM
Quilted	GM03LIMTQT
Shearling lined	GM03LIMTSL
Sherpa	GM03LIMTSP
Synthetic	GM03LIMTSY
Other Lining*	GM04LIMT99
Sleeve Type (SLVT)	
1/2 Sleeve	GM03SLVTHT
1/4 sleeve	GM03SLVTQS
3/4 Sleeve	GM03SLVTTT
Cap	GM03SLVTCS
Elbow	GM03SLVTES
Long	GM03SLVTLO

Roll-Tab (3/4 to short)	GM03SLVTTR
Roll-Tab (Long to elbow/short)	GM03SLVTRT
Short	GM03SLVTST
Sleeveless	GM03SLVTS4
Spaghetti Strap	GM03SLVTSI
Other Sleeve Type*	GM04SLVT99
Sole Type (SOLT)	
Leather	GM03SOLTLS
Rubber	GM03SOLTRS
Synthetic	GM03SOLTSJ
Recycled	GM03SOLTRE
Natural Fiber	GM03SOLTNS
Other Sole Type*	GM04SOLT99
* Requires use of PID05	

Guidance on the EDI mapping using the PID segment follows:

Ten character PID04 data structure is comprised of 4 parts
PART 1 - a 2 character Product Category Code
GM - General Merchandise
PART 2 - a 2 character Format Option Code; codes used are '03' and '04'.
If value '03', PID05 is not used
If value '04', PID05 is required and carries a text description.
PART 3 - a 4 character Description Code
PART 4 - a 2 character Locator Placement Code
Example from list on MASTER worksheet:
Code GM03CLNTBL means General Merchandise, Collar-Neck Type is Ballet. PID05 is not used.
Code GM04CLNT99 means General Merchandise, Collar-Neck Type is 'Other'; PID05 is required and carries descriptive information about the collar type since the code does not provide sufficient information.
Structure of PID segment when PID05 is not used
PID01 - value of 'S'; denotes structured data follows
PID02 - value of '84'; denotes special specification
PID03 - value of 'FD' - denotes GS1 US
PID04 - code from Master table
Structure of PID segment when PID05 is used
PID01 - value of 'X'; denotes semi-structured data follows, includes PID05
PID02 - value of '84'; denotes special specification
PID03 - value of 'FD' - denotes GS1 US
PID04 - code from table
PID05 - descriptive text

13.1.2. EDI – Using the MEA Measurements Segment for Selective Attributes

The following provides guidance on mapping selective extended product attributes using the MEA segment at detail position 2/0800.

- Boot Leg Circumference MEA*PD*LS*measurement value*unit of measure~
- Boot Shaft Height MEA*PD*TS*measurement value*unit of measure~
- Dress Length, Skirt Length MEA*PD*LN*measurement value*unit of measure~
- Shoe/Boot Heel Height MEA*PD*5F*measurement value*unit of measure~
- Pant Inseam MEA*PD*LG*measurement value*unit of measure~
- Shoe Platform Height MEA*PD*LO*measurement value*unit of measure~
- Sleeve Measurement (Length) MEA*PD*TR*measurement value*unit of measure~
- Pants Waist MEA*PD*DI*measurement value*unit of measure~
- Watch
    - Watch Band Length/Circumference MEA*PD*LN*measurement value*unit of measure~
    - Watch Band Width MEA*PD*WD*measurement value*unit of measure~
    - Watch Case Width/Diameter MEA*PD*DI*measurement value*unit of measure~
    - Watch Case Depth MEA*PD*DP*measurement value*unit of measure~

- Handbag Shoulder Drop MEA*PS*F6*measurement value*unit of measure~
- Strap Length MEA*PS*LN*measurement value*unit of measure~
- Tops – Chest Measurement MEA*PD*D6*measurement value*unit of measure~
- Tops – Neck Measurement MEA*PD*ZZZ*measurement value*unit of measure~
- Tops – Torso Measurement MEA*PD*LN*measurement value*unit of measure~

The following pertain to any consumer product's dimensions (out of package):

- Height dimension MEA*PD*HT*measurement value*unit of measure~
- Width dimension MEA*PD*WD*measurement value*unit of measure~
- Depth dimension MEA*PD*DP*measurement value*unit of measure~
- Length dimension MEA*PD*LN*measurement value*unit of measure~

Appendix A: Global Trade Item Number (GTIN)

1. Definition of the GTIN

Trade items are defined in the *General EAN.UCC Specifications Glossary* as *"Any item (product or service) upon which there is a need to retrieve pre-defined information and that may be priced, ordered, or invoiced at any point in any supply chain."* All ID numbers that identify products or services belong to a classification of EAN.UCC System ID Numbers generically called Global Trade Item Numbers or GTINs.

There are four numbering structures for GTINs called GTIN-8, GTIN-12, GTIN-13, and GTIN-14. While any ID number identifying a product or service is a GTIN, it is important to refer to them individually in certain contexts. For example, if you were commenting about all the cars in the parking lot being wet, you would say, "The cars are wet", but if you were asking someone to help you find your car, you would say, "Can you help me find my olive-green Edsel?" In the sub-sections that follow, the term GTIN will be used whenever specificity is not required and the individual GTIN numbering structures will be referred to when it is necessary.

2. GTINs Processed at the POS Inside North America: GTIN-12 (U.P.C.) Identification Numbers

GTINs that are processed at the Point-of-Sale (POS) inside North America typically use the GTIN-12 (U.P.C.) Identification Number. This is because many scanning/database systems in North America are not equipped to handle the GTIN-13 Numbers and the EAN-13 symbols used outside North America. Some North American systems cannot store 13-digits and this presents a problem for the scanner operators who have to key enter symbols that will not scan. With the 12-digit GTIN-12 ID Number beneath the UPC-A Bar Code Symbol, the scanner operators know exactly what numbers to key, but if they are presented the GTIN-13 ID Number beneath the EAN-13 Bar Code Symbol, they will generally type the first twelve digits of the 13-digit number. This will result in an "item not on file" error message for the database systems designed to process 12-digit numbers.

However, GS1 US has recommended since 2005 that retailers modify their POS systems to accommodate 12 and 13 digit GTINs. GS1 US, at some point in the future, will issue company prefixes for a 13 digit GTIN.

The structure of GTIN-12 ID Numbers combines an GS1 Prefix, a Company Number, an Item Reference, and a Check Digit (see Table 1). For detailed information on building the GTIN-12 ID Numbers scanned at the Point-of-sale in North America, refer to *Guidelines for Supply Chain Identification.*

GTIN-12 (U.P.C.) ID Number Structure

Position 1	*Positions 2 - 11*	*Position 12*	*Approved Symbols*
GS1 US Prefix [1]	**Company Number + Item Reference**	**Check Digit [2]**	*UPC-A* *UPC-E [3]*

[1] For GTIN-12 ID Numbers, the GS1 Prefix is referred to as the GS1 US Prefix. GS1 Prefixes used for all other ID numbers are two or more digits long, but GS1-US Prefixes used inside GTIN-12 ID Numbers are one digit long. Uniqueness for all the prefixes is maintained because GS1 US Prefixes are a subset of GS1 Prefixes.

[2] Based on the table above, the GTIN-12's Check Digit is calculated from the values placed in Positions 1 -11. Refer to *Guidelines for Supply Chain Identification Appendix F.1.2* for more details.

[3] The UPC-E is a smaller bar code symbol that carries the UCC-12 by suppressing zeroes in the GTIN-12 before being encoded in the UPC-E Symbol and then when the symbol is scanned the rules are applied in

reverse to fill the zeroes back in. For the specific rules and limitations, see *Guidelines for Supply Chain Identification, Appendix D*.

3. GTINs Processed at the POS Outside North America: GTIN-13 Identification Numbers

There are actually three GTIN numbering structures that can be processed at the Point-of-Sale outside North America. They include GTIN-8, GTIN-12 (U.P.C.), and GTIN-13. The eight-digit GTIN-8 and 12- digit GTIN-12 (U.P.C.) ID Numbers and their associated symbols do not present a problem for scanner/database systems outside North America because these systems were designed to scan/process eight, twelve, and thirteen digit ID numbers and symbols. The processing works by shifting the 8- and 12-digit ID numbers to the right in a field that is large enough for 13-digits and using zeroes to fill empty positions. The following table lists the relationship between the ID numbers and the different symbols that are specified by the GS1 System to carry them. It also illustrates how the ID numbers are stored in a 13-digit database field (right shift, zero fill process).

Note for Symbol Designers or Printers: At some point in the future the UCC will begin releasing GTIN-8 and GTIN-13 ID Numbers in North America. Because these ID numbers require EAN-8 and EAN-13 Symbols, it is important for symbol designers and printers to remember these symbologies the next time they invest in bar code design software. This does not mean that the UPC-A or UPC-E Symbols currently in use will no longer be appropriate. They will continue to be appropriate for use, anywhere in the world.

Processing GTINs at POS Outside North America

Positions	1	2	3	4	5	6	7	8	9	10	11	12	13	Approved Symbols
GTIN-8 ID Numbers	0	0	0	0	0	0	GS1 Prefix + Company Number + Item Reference						Check Digit[1]	EAN-8
GTIN-12 ID Numbers	0	GS1 US Prefix + Company Number + Item Reference											Check Digit	UPC-A UPC-E
GTIN-13 ID Numbers	GS1 Prefix + Company Number + Item Reference												Check Digit [2]	EAN-13

[1] Based on the table above, the GTIN-8's Check Digit is calculated from the values placed in Positions 7 - 12. Refer to *Guidelines for Supply Chain Identification, Appendix F.1.1* for more details.

[2] Based on the table above, the GTIN-13's Check Digit is calculated from the values placed in Positions 1 -12. Refer to *Guidelines for Supply Chain Identification, Appendix F.1.3* for more details.

4. Non-Retail Environments (GTINs Not Processed at the POS) GTIN-14 Identification Numbers

When GTINs move outside POS system requirements, their uniqueness can be managed in two ways, a new 14-digit numbering/scanning/processing structure is often encountered, and two bar code symbols that carry 14-digits are commonly used by trading partners. The new 14-digit capability is important because there are new higher levels of packaging for the product (e.g., cases, pallets) that must be uniquely identified as well.

This section explains the two methods for uniqueness management, explores the relationships between the different ID numbers, and uncovers how each of the ID numbers relate to a world of 14-digit databases and symbologies.

The first method used to maintain unique GTINs is easy to explain because it repeats the POS model. Simply put, every product at every level of packaging gets a new GTIN-8, GTIN-12, or GTIN-13 ID Number assigned to it just like the ID numbers used at the POS (see the following table).

Base ID Number Uniqueness Method for GTINs Not Processed at the POS

			Approved Symbols
GTIN-8 ID Numbers	**GS1 Prefix + Company Number + Item Reference**	**Check Digit**	*EAN-8*
GTIN-12 ID Numbers	**GS1US Prefix + Company Number + Item Reference**	**Check Digit**	*UPC-A* *UPC-E*
GTIN-13 ID Numbers	**GS1 Prefix + Company Number + Item Reference**	**Check Digit**	*EAN-13*

The second, more contemporary, approach to GTIN uniqueness management utilizes a 14-digit ID number called GTIN-14. This ID number creates a relationship between the base 8-, 12-, or 13-digit ID numbers and an Indicator stored in the leftmost position of the GTIN-14 ID Number (see the following table).

Indicator Uniqueness Method for GTINs Not Processed at the POS

Position 1	*Positions 2 - 14*	Approved Symbols
Indicator	**GTIN-8 with 6 leading zeroes, GTIN-12 with 1 leading zero, or GTIN-13 ID Number (including the Check Digit [1])**	*ITF-14* *GTIN-128*

[1] The GTIN-14's Check Digit is calculated from the values placed in Positions 1 -13. Refer to *Guidelines for Supply Chain Identification Appendix F.1.4* for more details.

With this Indicator available, three new capacities are created (see the following table).

Expanded GTIN Capability Utilizing GTIN-14 Indicators

Indicator	Indicator Capability
0	By using an Indicator of 0 (zero), 8-, 12-, and 13-digit ID numbers can be carried by bar code ITF-14 and GS1-128 Symbols and stored in database fields that require 14 digits. For more information, refer to *Guidelines for Supply Chain Identification, Section 3.11.1*.
1 through 8	By placing a 1, 2, 3, 4, 5, 6, 7, or 8 to the left of the base ID number, eight new levels of identification are opened up. For example, a 1 might be used to refer to a 3-pack, a 2 might be used to refer to a 4-pack, a 3 might be used to refer to a case of 24, and a 4 might be used to refer to a pallet of 48. The important thing to consider when using Indicators of 1 through 8 is that they can only be used when you are identifying fixed content packages. For more information, refer to *Guidelines for Supply Chain Identification, Section 3.11.2*.
9	The Indicator 9 is used when a trade item's quantity or measure varies from unit to unit. For example, a side of beef identified with a GTIN would have an Indicator of 9. All trade items of variable measure or quantity that are not scanned at the POS must carry additional information about the measure or quantity. For more information, refer to *Guidelines for Supply Chain Identification, Section 3.13*.

Appendix B: Data Element Definitions

This appendix contains implementation specifications for the minimum data elements of the U.P.C. Data Communications Guidelines with a cross-reference to the currently supported versions of the VICS EDI Price/Sales Catalog (832) Transaction Set standard.

This document should be used in conjunction with the 832 Price/Sales Catalog section of the currently supported versions of the *VICS EDI Standards Manual*.

Minimum Data Elements

The following data elements are the minimum required to adequately identify a vendor's product to a retailer. This does not attempt to include all data that could be helpful in establishing a trade item in a purchase order management system.

The data elements are:

Name/Description:	GS1 System ID number		
Type:	Numeric		
Length:	12-13		
Required:	Yes		
VICS EDI 832:	**SEG/Field**	**Data Element**	**Qualifier**
	LIN02,04..	235	UP/EN
	LIN03,05..	234	

Description: This field will contain the ID number assigned to the product. It does include the Check Digit.

Name/Description:	Vendor ID		
Type:	Numeric		
Length:	9 = DUNS		
	10 = Communication identifier		
	11 = Telephone number with "1" preceding area code		
Required:	Yes		
VICS EDI 832:	**SEG/Field**	**Data Element**	**Qualifier**
	BCT02	684	

Description: The 10-digit UCC Communications ID is strongly recommended as the vendor's identification number. If the manufacturer chooses to use DUNS and has multiple DUNS numbers for different locations, one should be selected to use for all GTINs.

Name/Description:	Selection code		
Type:	Numeric		
Length:	3		
Required:	Yes		
VICS EDI 832:	**SEG/Field**	**Data Element**	**Qualifier**
	BCT03	685	

Description: Selection code is a number assigned by the vendor to facilitate selection of a portion of the vendor's catalog. This could be used for selection of a brand name for vendors who have many brands, to differentiate product groups (boys', men's, etc.) within a brand, or any other product differentiation scheme. All trade items that could reasonably be substituted for an ordered item should have the same selection code. Selection codes provide additional information to assist in managing a U.P.C. Catalog, but they do not make one trade item different from another. Therefore, two different trade items may never have the same trade item/color ID/ size ID identifier in a single catalog, even if they are assigned different selection codes. Refer to Section 3.3.4, "Selection Codes" for detailed direction on selection code assignment and management.

Name/Description:	Selection code description		
Type:	Alpha/Numeric		
Length:	1-30		
Required:	No		
VICS EDI 832:	**SEG/Field**	**Data Element**	**Qualifier**
	BCT09	352	

Description: Text expression of the selection code. Examples of selection codes could be: Men's wear,

Women's wear, Tops, Bottoms, etc.

Name/Description: Trade item

Type: Alpha/Numeric

Length: 1-20

Required: Yes

VICS EDI 832:

SEG/Field	Data Element	Qualifier
LIN02,04..	235	VA
LIN03,05..	234	

Description: This is the vendor's primary identification of a product and is therefore usually the meaningful link to the GTIN. The trade item must be represented consistently across all media, including tickets, U.P.C. Catalogs, glossy catalogs, line/price listings, etc., to ensure that automated matches can be made with product information supplied to the retail buyers. Although spaces and special characters* should be included when they appear in other media that contain the trade item, care should be taken to limit their use to those that can be read, printed, and communicated easily. For example, spaces should be limited to one occurrence between alpha/ numeric characters since the number of multiple occurrences cannot be easily identified. The spaces and special characters may be removed by computer programs to facilitate automated matching. Therefore, spaces and special characters must not be used to make a trade item unique. For example, trade items '0012-34,' '0012/34,'and '00 1234' will be interpreted as trade item 001234 when special characters are removed.

* NOTE: The (*) and '>' have been identified as possible control characters for use in the retail industry and, if utilized as such, may not be used as data within the transmission.

Name/Description: Primary product description

Type: Alpha/Numeric

Length: 1-20

Required: Yes

VICS EDI 832:

SEG/Field	Data Element	Qualifier
PID02	750	08
PID05	352	

Description: A meaningful description of the product represented by the vendor product identifier. Product descriptions are used extensively by retailers for both product selection and error resolution and should be detailed enough to aid in this process. Product descriptions should be present unless the product identifier itself is synonymous with the product description.

Name/Description: Extended product description
Type: Alpha/Numeric
Length: 1-40
Required: No

VICS EDI 832:

SEG/Field	Data Element	Qualifier
PID02	750	08
PID03	559	VI
PID04	751	ED
PID05	352	

Description: Longer, more robust description than the primary description. This field may used to spell out abbreviations that exist in the primary description or provide additional detail. This description should fully describe product and not be used as “add-on” description to the primary product description.

Name/Description:	Size ID		
Type:	Numeric		
Length:	5		
Required:	Yes, if the product has size, for product categories covered by the NRF guidelines.		
VICS EDI 832:	**SEG/Field**	**Data Element**	**Qualifier**
	LIN02,04..	235	SM
	LIN03,05..	234	

Description: This field contains the NRF size table (one digit) plus the size code (four digits). This field is required if the product is sized. If a vendor has a product whose size is not included in the NRF tables, contact NRF to have size added to the tables. In the interim, it should be indicated with a table number of 0 and a unique four-digit code for each different size being described and used *consistently* within the company.

Name/Description:	Primary size description		
Type:	Alpha/Numeric		
Length:	1-10		
Required:	Yes, if item has size.		
VICS EDI 832:	**SEG/Field**	**Data Element**	**Qualifier**
	PID02	750	74
	PID05	352	

Description: Text expression of the size. Whenever possible, this should be the size that is displayed on the product label.

Name/Description: Extended size description
Type: Alpha/Numeric
Length: 1-25
Required: No

VICS EDI 832:

SEG/Field	Data Element	Qualifier
PID02	750	74
PID03	559	VI
PID04	751	ED
PID05	352	

Descriptions: A longer more robust description of the product size. This description should fully describe product size and not be used as “add-on” description to the primary size description.

Name/Description: Color ID

Type: Numeric

Length: 3

Required: Yes, if the product has color.

VICS EDI 832:

SEG/Field	Data Element	Qualifier
LIN02,04..	235	CM
LIN03,05..	234	

Description: Vendor assigned color ID from the list of valid NRF color codes. This field is required if the product has color.

Name/Description: Primary color description

Type: Alpha/Numeric

Length: 1-10

Required: Yes, if the product has color.

VICS EDI 832:

SEG/Field	Data Element	Qualifier
PID02	750	73
PID05	352	

Description: Text expression of the color. Whenever possible, this should be the color that is displayed on the product label. If color code is present, then the color description is required.

Name/Description: Extended color description
Type: Alpha/Numeric
Length: 1-25
Required: No

VICS EDI 832:

SEG/Field	Data Element	Qualifier
PID02	750	73
PID03	559	VI
PID04	751	ED
PID05	352	

Descriptions: A longer more robust description of the product color. This description should fully describe product color and not be used as “add-on” description to the primary color description.

Name/Description: Date of change

Type: Date

Length: 6

Required: Yes

VICS EDI 832:

SEG/Field	Data Element	Qualifier
DTM01	374	043

DTM02	373	
DTM05	624 (Century)	

Description: The effective date (YYMMDD) when the item was added to the vendor's catalog or when a change was made to any of the descriptive fields by the vendor.

Name/Description: Discontinue date

Type: Date

Length: 6

Required: No

VICS EDI 832:	**SEG/Field**	**Data Element**	**Qualifier**
	DTM01	374	036
	DTM02	373	
	DTM05	624 (Century)	

Description: The date (YYMMDD) the item was no longer available for ordering. This field can be used by retailers to indicate that orders should be discontinued for this item.

Name/Description: Cancellation date

Type: Date

Length: 6

Required: No

VICS EDI 832:	**SEG/Field**	**Data Element**	**Qualifier**
	DTM01	374	177
	DTM02	373	
	DTM05	624 (Century)	

Description: The date (YYMMDD) the item was cancelled. This field can be used by retailers to indicate that the GTIN may be removed from their system as the item was never produced or shipped by the vendor.

Name/Description: Reinstatement date

Type: Date

Length: 6

Required: No

VICS EDI 832:	**SEG/Field**	**Data Element**	**Qualifier**
	DTM01	374	584
	DTM02	373	
	DTM05	624 (Century)	

Description: The date (YYMMDD) that a previously discontinued trade item was reinstated as a valid orderable item. When adding a reinstatement date to an item, the discontinue date must be eliminated.

1. Extended Data Elements

There are data elements that go beyond the minimum required to identify a product and are intended to be used in establishing a trade item in a purchase order management system.

These extended data elements, formerly defined in this document, are now defined in the VICS EDI 832 Price/Sales Catalog Transaction Set and are noted by the prefix “U.P.C. Catalog.”

2. Action Codes

Name/Description:	Action code
Type:	Numeric
Length:	2
Required:	No

VICS EDI 832:

SEG/Field	Data Element	Qualifier
BCT10	353	01 - Cancel
		02 - Add
		03 - Delete
		04 - Change
		05 - Replace
		11 - Response
		13 - Request
		18 - Reissue

Description:

Cancel: To remove a GTIN from the catalog when the item was NEVER manufactured. This is functionally a delete to the catalog, but it also notifies the retailer that the item was never made or shipped.

Add: To add new GTINs

Delete: To remove a GTIN from the catalog due to normal product expiration.

Caution must be exercised when deleting a GTIN from the catalog. Due to ordering and shipping cycle times, a GTIN should reside on the catalog as discontinued for at least one year after the last of the product has been shipped. Deleting the GTIN from the catalog does not alter the minimum retention period required before reassignment as defined in these guidelines.

Change: To change non-key fields only (all fields except for GTIN, trade item, color ID and size ID). "Replace" must be used to blank out data fields.

Replace: To replace non-key fields only. Assumes full replacement of GTIN information so all relevant GTIN data must be included. This is the only way to blank out a data element.

Response: Vendor **--** to respond to a retailer in answer to a retailer's request.

Request: Retailer -- to request specific catalog information from a vendor.

Reissue: To correct errors in key fields (GTIN, Product ID color ID, size ID). This action cannot be used to create a new product for a previously issued GTIN.

Appendix C: NRF Color/Size Code Summary

1. National Retail Federation

The national Retail Federation (NRF) is the world's largest retail trade association, with membership that comprises all formats and channels of distribution, including department, specialty, discount, catalog, Internet, and independent stores. In its role as the retail industry's umbrella group, NRF also represents 32 national and 50 state associations in the U.S. as well as 36 international associations representing retailers abroad.

2. NRF Color Code System

Introduction

The U.P.C. Data Communications Committee of GMAIC recommended a revision of the NRF Color Coding System from two digits to three, utilizing the original first digit to identify color family. By providing more room and broad groupings within each basic color, it is expected that there will be fewer situations where color overflow results in code assignments having no color identity and thus no use for summary reporting. Based on this recommendation, the NRF has implemented a major revision of its color code system. The *Standard Color and Size Code Handbook* provides effective guidelines for the assignment and control of color codes, including their use in the U.P.C. Catalog. For more information about NRF, see Appendix D.

Color Code Assignment

The color codes will be selected by the vendor from the color codes table as needed. They should be used to uniquely identify the colors within each vendor's trade item. Vendors must include the assigned color codes and related color names in the "color ID" and "color description" fields in the U.P.C. Catalog. Retailers should use the same color coding scheme when assigning colors to merchandise for their in-house reporting and analysis.

Numbers from 000-999 will be used to identify the basic color groups. Each basic group is assigned a number range of 50 to 100 numbers, broken into sub-groups of 10 numbers. In addition, there are at least 10 open numbers to handle the overflow from any sub-group or a shade that does not fit into a sub-group. Trade items that have more than one color (e.g., plaids, stripes) should be assigned to the group appropriate for the predominant color.

The color names assigned to the color codes should relate directly to the available numbers for each color shade group. For instance, the color "Coffee" or "Chocolate" should be assigned numbers from the 201-209 "Dark Brown" shade group. The system allows ten dark brown shades for a single trade item. If there are more than ten dark brown shades for a single trade item, numbers 240-249 (Open Brown) can be assigned. If there are more than fifty brown shades for a single trade item, the numbers from the 900-919 (Brown Overflow) or 960-998 (Open Miscellaneous) groups can be used. **The guidelines for assigning color codes as shown in the *Standard Color and Size Handbook* should be followed explicitly to assure their accuracy in U.P.C. Catalogs.**

3. NRF Size Code Table

The NRF size code Tables are 5 digits. The codes and the procedures for their use are contained in the *Standard Color and Size Handbook* published by the NRF. Under no circumstances should a user of this coding select an unused number for a size not listed in the tables. To maintain standardization of the size codes, only the NRF is authorized to add codes to these tables.

Appendix D: Reference Documents and Websites

The following documents are referenced in this publication:

1. GS1-12 (U.P.C.) Guidelines

GS1 US, Inc.
7887 Washington Village Drive
Dayton, Ohio 45459
(937) 435-3870

2. Apparel Guidelines: Format and Symbol Placement

GS1 US, Inc.
7887 Washington Village Drive
Dayton, Ohio 45459
(937) 435-3870

3. VICS EDI Retail Industry Conventions and Implementation Guidelines for EDI

GS1 US, Inc.
7887 Washington Village Drive
Dayton, Ohio 45459
(937) 435-3870

4. NRF Standard Color and Size Code Handbook

National Retail Federation
Liberty Place
325 7th Street, NW Suite 1000
Washington, D.C. 20004
(202) 626-8186

5. Codes for Representation of Names of Countries (ISO 3166-1974 (E))

American National Standards Institute (ANSI)
11 West 42nd Street
New York, NY 10036
(212) 642-4900

6. VICS Architecture Guide/GS1 US Business Processes Guideline

GS1 US, Inc.
7887 Washington Village Drive
Dayton, Ohio 45459
(937) 435-3870

Websites

Electronic Commerce Council of Canada at **www.gs1ca.org**
GS1 Canada at **www.gs1ca.org**
National Retail Federation at **www.nrf.com**
1WorldSync at **www.1worldsync.org**
GS1 US at **www.gs1us.org**

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