Technical Guide for Manufacturers

Document ID: **Tatmeen_WKI-0060_Technical Guide for Manufacturers**

Version: **5.0**

1 Document Control

1.1 Version History

Version	Date	Description of Change
1.0	20-Aug-2021	Initial Release.
2.0	10-Feb-2022	INCO Terms: 3PL Import Role.
3.0	17-Mar-2022	Corrections and clarification.
4.0	07-July-2022	Adding the import permit samples EPCIS: Example Updates Service URL Update
5.0	20-Nov-2023	Updated content for: • Separating shipping event. • Message size limit to 10MB Added content for: • Batch Recall Initiate/Complete • Product Recall Initiate/Complete • Destruction Initiate/Complete • Additional logistics activities for MAH • Corrected the "Damaged" Event disposition to "damaged". • Additional minor documentation content errors corrected. • Shipping cancellation restrictions for initial commissioning, aggregation and shipping EPCIS message.

Table 1 Version History Pre-Approvals

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2 Introduction

The UAE's Governmental department for healthcare and prevention - MoHAP has published legislation that defines the Serialisation and Track and Trace (T&T) requirements for all participants involved in manufacturing, distributing and dispensing pharmaceutical products. This legislation:

- Defines the specific categories of products relevant to the legislation.

- Applies to the entirety of the UAE territory.

- It becomes effective:

    o Immediately prior to foreign product importation into the UAE.

    o Immediately prior to domestic manufacture release into the UAE.

- Concludes with dispensing to patients / consumers.

- Manages exceptions such as batch recalls.

This legislation is driven by the need to maintain and improve patient safety whilst at the same time reduce counterfeits within the UAE.

Tatmeen is the Information Technology (IT) regulatory system that will support the UAE T&T legislation to the pharmaceutical industry. All products placed on the UAE market need to display a serialised unique identifier on the product secondary packaging. Also aggregated packaging (aggregated homogenous products or logistics unit) must display a serialised unique identifier. The appropriate serialised identifiers must be used to record the operational and transactional movements of the products throughout the supply chain and during dispensing to the patient / consumer.

The information recorded by the participants must be transmitted to the Tatmeen traceability system where it is stored. The stored data is made available for regulatory purposes to the authorities of the UAE MoHAP departments.

2.1 Target Participants

The following stakeholders / participants for the Section 2.2 in-scope processes are responsible for collecting serialised product item traceability records during the manufacture of pharmaceutical products.

Participant	Description
3PL	The Third Party Logistics (3PL) participant is a logistics partner that is: • Physically located outside the UAE, and/or • Located in the UAE Free Trade Zone, and/or • Registered with GS1 as a 3PL partner. Similar to a Distributor, they may participate with handling and storing imported products immediately prior to the customs clearance process. This is based on the product delivery Incoterms.
Batch Releaser	Manufacturing organisation or organisation where the finished product release activity is taking place as approved by MoHAP. During product registration, each company submits to the MoHAP Team the identity of the Batch Releaser.
CMO	Contracted Manufacturing Organisation (CMO) is a manufacturing entity that produces pharmaceutical products on behalf of the MAH. A CMO is a specific case of a foreign manufacturer.
Distributor	The Distributor is a supply chain partner representing a location for storing medical product and can have a MoHAP license for medical product importation; distribution storage.
Domestic Manufacturer	A domestic manufacture is a manufacturing entity located in the UAE supplying goods to the UAE market. A domestic manufacturer may also be the MAH.
Foreign Manufacturer	A foreign manufacturer is a manufacturing entity outside the UAE that produces goods for importation into the UAE. A foreign manufacturer may also be the MAH.
Licensing Agent	Foreign international manufacturers are supported by UAE local agents who complete registration and customs declarations.
MAH	Marketing Authorisation Holder is the company or other legal entity that has the authorization granted by MoHAP to market a medicine in the UAE.

Table 2 Document Stakeholders

2.2 Scope of Document

The purpose of this document is to define the information that must be sent under the MoHAP regulations to the Tatmeen traceability system by supply chain participants for the following processes:

1. Importation to UAE.

    a. Registered drugs.

    b. Unregistered drugs.

2. Domestic Manufacturing for UAE.

3. Product Transfer between locations

4. Product Hierarchy change

5. Product Status update

6. Destruction processing

7. Batch/Product recall

2.3 Document Structure

The document follows the outline in Table 3.

Section	Content
Section 2	Introduction and Context.
Section 3	Message guidelines and specifications: • EPCIS message events. • OData message events
Section 4	Technical API Guidelines, providing usage guidelines for the technical API to submit data to the Tatmeen traceability system.
Section 5	EPCIS Message Format
Section 6	OData Message Format
Section 7	EPCIS Message Summary
Section 8	Glossary

Table 3 Document Structure

2.4 Prerequisites

Please refer to the Technical Onboarding Guide to ensure the following prerequisites are met:

- Product Registration (Registered Drugs):

  All products subject to the UAE MoHAP legislation are initially registered with MoHAP and the registration details completed. The entity responsible for registering these details are the MAH

  The Licensing Agent is the partner approved by MoHAP for importing medical products or licensing domestically manufactured medical products. In many cases, the Licensing Agent delegates the daily operations for product importation to a technical partner; however, it must still retain accountability and responsibility for registered product importation.

  - Each product master is always associated with a single MAH. In some cases this may be recorded as the Scientific Office for the organisation.

  - Each product master is always assigned a single Licensing Agent.
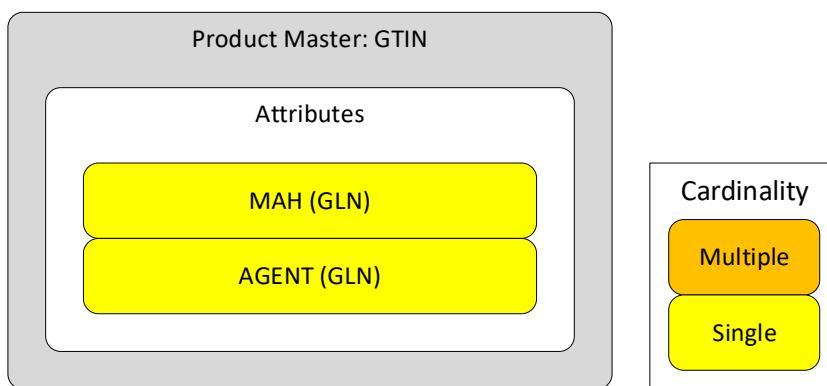
Figure 1 Product Master Partners

- Product Registration (Unregistered Drugs):

For unregistered drugs, the permit issued by MoHAP to the 3PL for the unregistered drugs initiates the master data definition processes. These processes are outside the scope of this document. The permit defines:
  1. The GTIN for the unregistered drug.
  2. The quantity for which the permit is valid.
  3. The GLN of the 3PL to whom a valid permit is issued. This 3PL becomes the licensing agent for the unregistered drugs items on the permit.
  4. Unregistered products master data should be registered in BrandSync prior to arrival into the UAE market, using the GS1-UAE BrandSync solution.

5. Once the master data is fully maintained in GS1-UAE BrandSync then the unregistered product master records should be synchronised with the Tatmeen solution.

   o Each unregistered product master may be associated with a single MAH. Similar to registered products, the MAH may be recorded as the Scientific Office for the organisation. Where both the MAH and Scientific Office are unknown for the unregistered product the MAH can be omitted.

   o The 3PL GLN from the permit is assigned as the Licensing Agent for the product master and remains accountable and responsible for unregistered product importation.
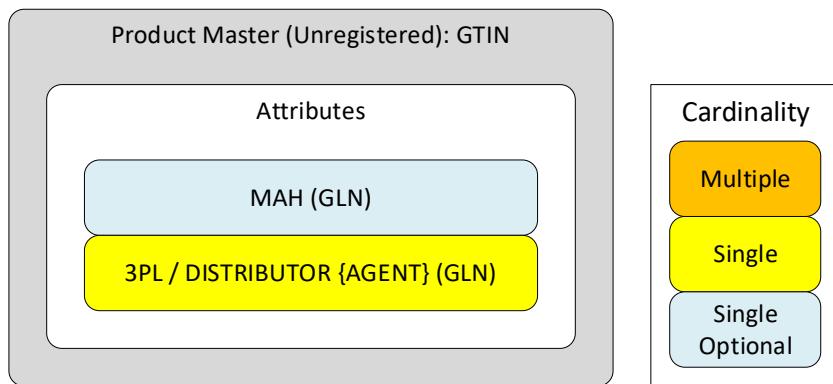
Figure 2: Unregistered Product Master Partners

- Entity Registration:

   o All domestic manufacturers are registered with the relevant MoHAP department and should be allocated a GS1 Global Location Number (GLN). There is no need for any foreign manufacturers (i.e., "Batch Releaser") to register as they are not reporting directly to the Tatmeen solution.

   o All MAH / Scientific Office and Licensing Agents should be registered and allocated a GS1 Global Location Number (GLN).

   o All Distributors (and relevant 3PLs) involved in the importation of goods should be registered as supply chain partners and allocated a GS1 Global Location Number (GLN).

3 Message Guidelines

This section describes the messaging responsibilities of the participants for the processes in Section 2.1:

- Importation of foreign manufactured product items into the UAE:

    o Importation of foreign manufactured registered drugs.

    o Importation of foreign manufactured unregistered drugs.

- Domestic or local manufacture within the UAE.

The following general principles for stakeholders in Section 2.1 reporting to the Tatmeen solution to meet the MoHAP legislation are:

- Foreign manufacture of serialised products and physical movement of serialised products outside the UAE do not require submitting messages at the time of the event. However, the foreign entities (Batch Releaser and 3PL) must keep adequate records to support this technical guide.

- Messages that are sent to the Tatmeen platform must be constructed according to the GS1 EPCIS standards defined in this technical guide.

- Messaging between foreign partners is not defined in this technical guide and remains the responsibility of the partner entities to mutually define.

3.1 Importation of Registered Drugs

This section describes the reporting scenario for importation of foreign manufactured registered products into the UAE market. Arrival of medical products into the UAE Free-Trade Zone territory does not constitute importation until the importation is specifically initiated into the UAE market.

The MAH/Scientific Office or the Licensing Agent are the partner entities that are responsible to report the importation of manufactured pharmaceutical products against a valid Shipping Import Permit. There should be an agreement between the MAH and the Licensing Agent regarding which entity is responsible for submitting the messaging. The responsible entity may designate a delegated technical partner to conduct the technical level reporting. The responsibility for this reporting remains with the MAH / Licensing Agent. This importation reporting registers the serialised objects that will be imported before initiating the import clearance and customs release processes. All serialised pharmaceutical products subject to MoHAP legislation must not enter the UAE market without having completed this reporting.

There are two supply chain routes described in the diagrams below:

- Importation using 3PL partners (Figure 3).
- Importation directly to Distributor (Figure 4).
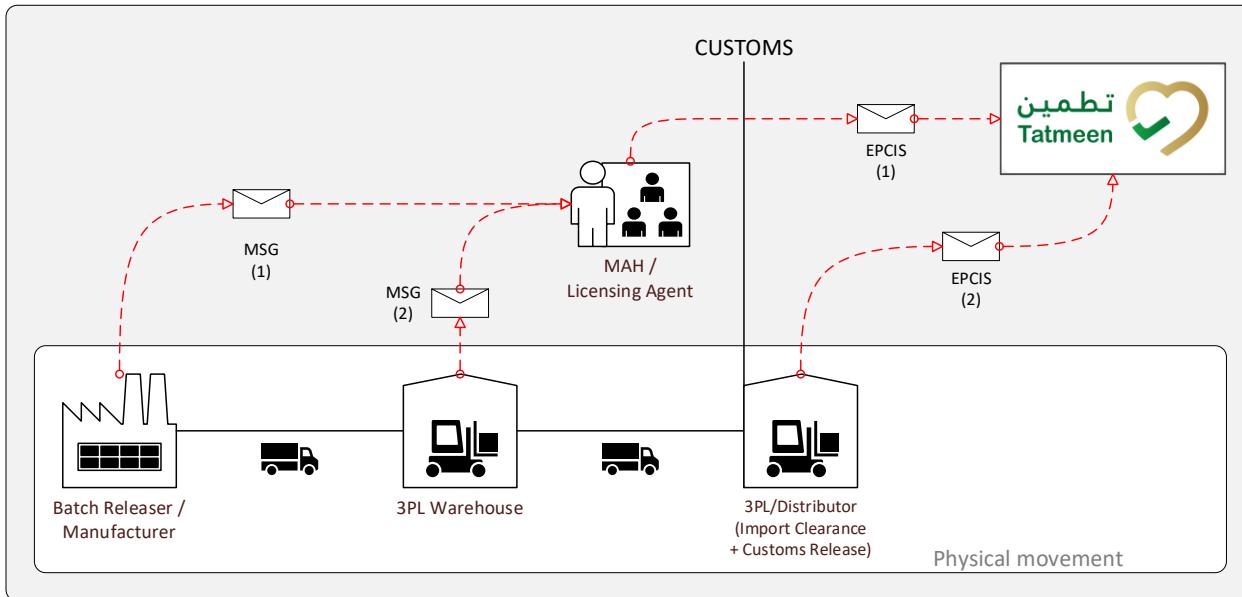
Figure 3 Importing Registered Drugs from International Manufacturers Using 3PL
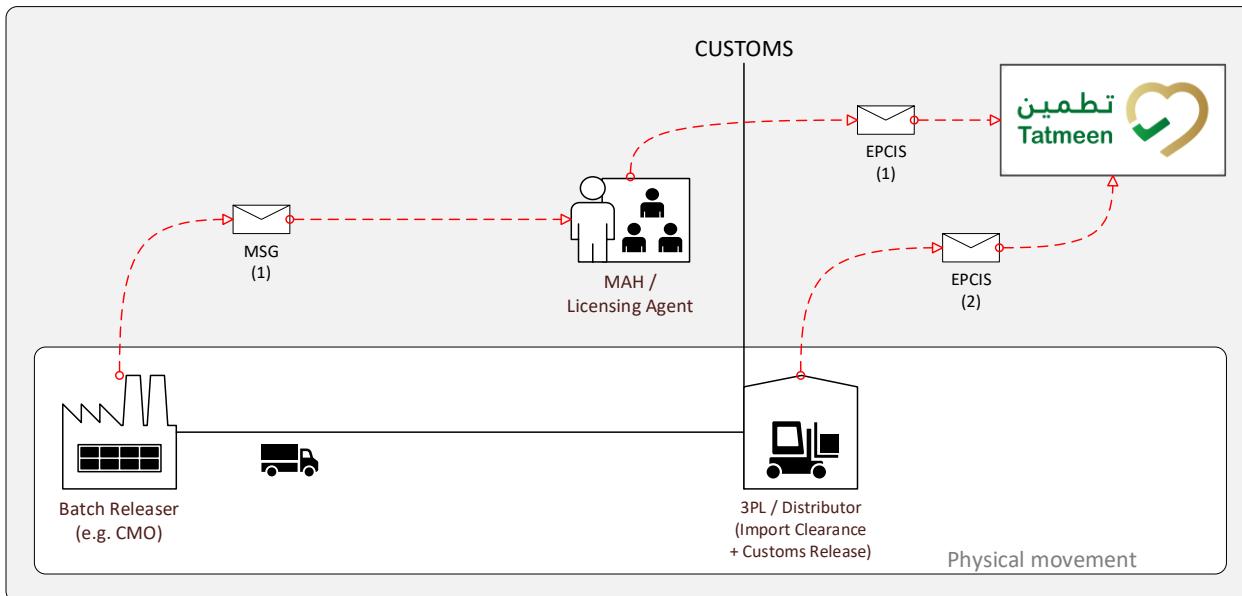
Figure 4 Importing Registered Drugs from International Manufacturers Directly to UAE Distributor

3.1.1 Business Process Outline

This outline refers to both Figure 3 and Figure 4, above.

1. The Licensing Agent / MAH / Scientific Office must obtain the Shipping Import Permit for the serialised products identified for importation into the UAE. Where use is made of the Licensing Agent to obtain the Shipping Import Permit, they are responsible for sharing those details with the MAH / Scientific Office.

   a. The Shipping Import Permit contains the product GTIN identifiers for products that are intended to be imported.

   b. Each product GTIN item on the Shipping Import Permit is valid for a maximum quantity.

   c. Partial shipment of products listed on the Shipping Import Permit is permitted. However, the total accumulated quantity of GTIN identified product that is published on the Shipping Import Permit must not be exceeded.

2. The Batch Releaser manufactures serialised products and maintains their own records regarding serialised product items, the parent / child relationships of any aggregated product hierarchies, and shipping of those items to another entity. These record details are required to meet the message specifications in Section 4. The foreign manufacturer must also share these records with their relevant Licensing Agent / MAH prior to importation of those product items into the UAE (see "*MSG (1)*" in Figure 3 / Figure 4).

3. Any foreign supply chain partner involved with physical storage or movement of serialised product items prior to importation must maintain their own records regarding serialised product items, the parent / child relationships of any aggregated product hierarchies, and shipping of those items to another entity. These record details are required to meet the message specifications in Section 4. The foreign manufacturer must also share these records with the relevant Licensing Agent / MAH prior to importation of those product items into the UAE (see "*MSG (2)*" in Figure 3).

4. Once the Licensing Agent / MAH receives:

   a. The Shipping Import Permit.

   b. Suitable records from Batch Releasers / Manufacturers.

   c. Suitable records from 3PL partners, where used, to transport goods from factory to the UAE.

The Licensing Agent / MAH must send a single EPCIS message ("*EPCIS (1)"* in Figure 3 / Figure 4), each containing the Shipping Import Permit reference; commissioning, aggregation and shipping event for the full / partial shipment.

Please be aware that since commissioning is not allowed to be cancelled in Tatmeen, user will not be able to cancel shipping if it was reported part of the initial commissioning, aggregation and shipping EPCIS message.

5. Where the MAH / Licensing Agent delegates the technical level data collection and/or Tatmeen reporting to a technical partner, then that partner must conduct the steps 2; 3; and 4 as appropriate, on behalf of the MAH / Licensing Agent.

6. The MAH / Licensing Agent must notify the Distributor (or where Incoterms dictate, the 3PL) once the importation EPCIS message is successfully sent to the Tatmeen solution. The Distributor (or where Incoterms dictate, the 3PL) must then send an EPCIS message ("*EPCIS (2)"* in Figure 3 / Figure 4) to the Tatmeen solution to receive the goods into the UAE for customs clearance and federal release. This EPCIS message (*"EPCIS(2)"* in Figure 3 / Figure 4) is described in the Tatmeen Technical Guide for Logistics and is not described in this document.

7. Once the importation is successfully receipted into the Distributor (or 3PL as appropriate) and reported to the Tatmeen solution, then the goods are sampled and inspected as appropriate at the Distributor / 3PL location in conjunction with MoHAP and Federal Customs.

3.1.2 Constraints and Validations

Since this importation initiates the first registration of these serialised product items, the content and sequencing of the multiple events associated must be strictly managed. In order to achieve this without unnecessary messaging failures, the Tatmeen solution expects to receive from the MAH (or their delegated technical partner):

1. There are two scenarios that apply for full / partial shipments.

   a. Scenario 1 is the case where the commissioning; packing and shipping message are all submitted in a single EPCIS message for a full / partial delivery that defines the product items for importation. This scenario manages the dependencies of these events as a single entity and is best suited for smaller shipments.

   Please be aware that since commissioning is not allowed to be cancelled in Tatmeen, user will not be able to cancel shipping if it was reported part of the initial commissioning, aggregation and shipping EPCIS message.

b. Scenario 2 allows for the commissioning and packing messages to be submitted ahead of a separate shipping message. In this scenario, the sender is responsible to manage the submission of the shipping message after the successful completion of the commissioning and packing messages. This scenario is best suited for large shipments.

2. Each EPCIS message must contain an EPCIS Header, that specifies:

   a. A unique message identifier that is generated by the MAH (or their delegated technical partner) and is used to identify each EPCIS message.

   b. The message creation date and time.

   c. The message sender information, i.e., the MAH or Licensing Agent GLN.

   d. The identifier for the relevant Tatmeen system that will receive the EPCIS message.

3. Each EPCIS message must consist of a series of GS1 EPCIS events recorded in an event list and must follow the structure below according to the adopted scenario.
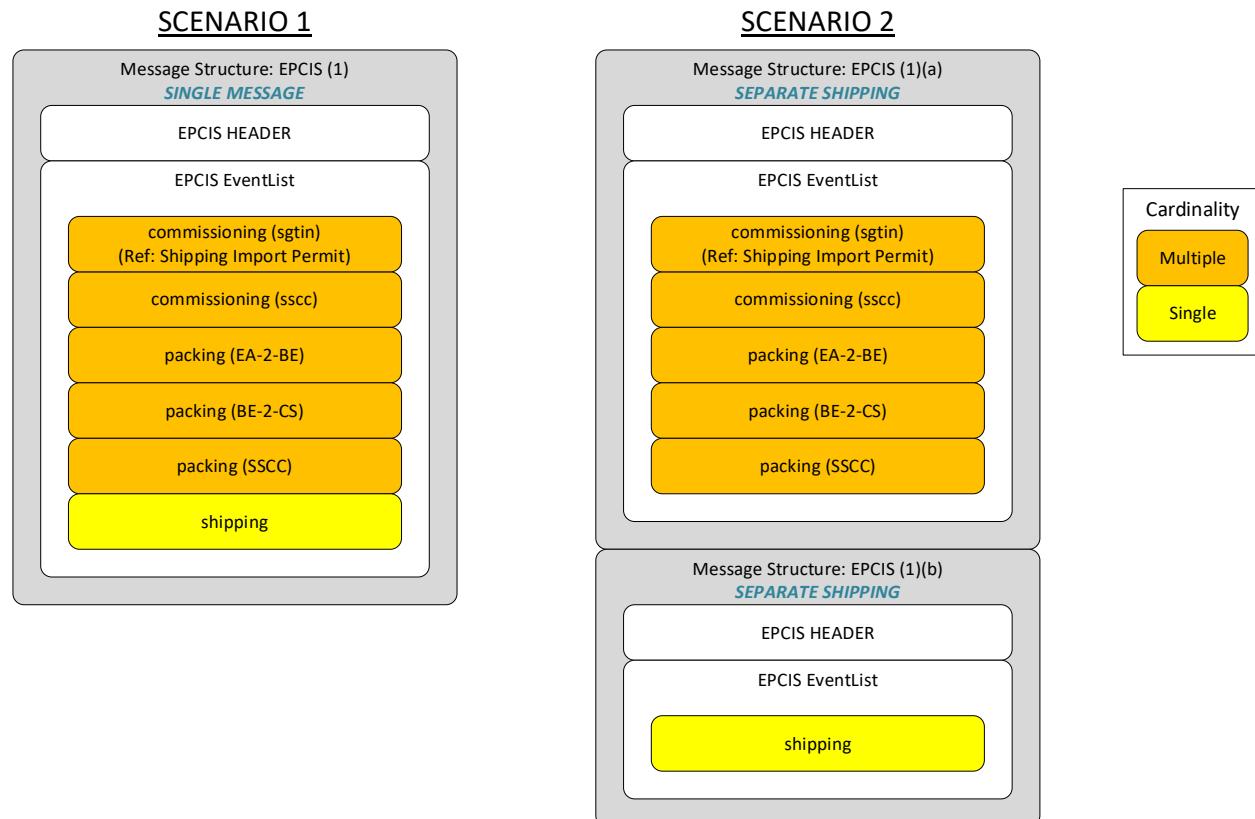
Figure 5 Importation EPCIS Message Structure

4. The Shipping Import Permit reference must be the same reference specified in each commissioning event in the event list.

5. Each of the EPCIS event components of each importation message event list is described in Section 5. The following constraints must apply to any EPCIS message for imported goods.

   a. The accumulated number of separate product serialised IDs list in all commissioning events within the message must not exceed 50 000.

   b. Each aggregation (packing) message defines the parent / child relationship of the products according to the following general structure. This structure is typical of products and this structure is used for illustration of the principle. Variations in product structure must still follow this principle, including the principle that there is always only one parent ID in each event.

      i. EA-2-BE: A fixed quantity of secondary packaged serialised product items is packaged into a bundle.

      ii. BE-2-CS: A fixed quantity of bundles may be packaged into a product specific case (CS).

      iii. SSCC: Any of the previously mentioned hierarchy levels may be packaged into a logistics unit (e.g., pallet) for ease of warehouse operation and ease of transportation.

   The order of the aggregation events must follow the top to bottom sequence shown in Figure 5.

   c. For Scenario 1, a single shipping event only with top-level hierarchy products (typically pallets).

6. All events in EPCIS message must be sorted in chronological order and this chronological order must follow the top to bottom sequence of the events in the event list shown in Figure 5. The earliest event time must be the *commissioning* events.

7. The total EPCIS message size must not exceed 10 MB.

3.2 Importation of Unregistered Drugs

The importation of Unregistered Drugs follows the same process as for Registered Drugs where the permit holder is recorded as the Licensing Agent for the product. The Licensing Agent then manages the messaging in the same manner as described for registered drugs in Section 3.1.

At the time of issuing shipment import permit, unregistered drugs product master data is sent from the MoHAP import permit system to BrandSync where additional data fields are maintained by the licensed agents/importer or MAH. Then unregistered drugs master data is shared with Tatmeen via BrandSync. Product master data must exist in Tatmeen prior to transacting any operational activities in the system. If a product is coming from supplier/MAH then there can be a scenario where one GTIN is imported by multiple licensed agents. That is why for unregistered drugs, same product master allows multiple licensed agents to import and maintain the master data.

3.3 Manufacturing Within the UAE

This section describes the reporting scenario for Manufacturers who operate inside of the UAE, manufacturing and shipping pharmaceutical products that are then released into the UAE market.
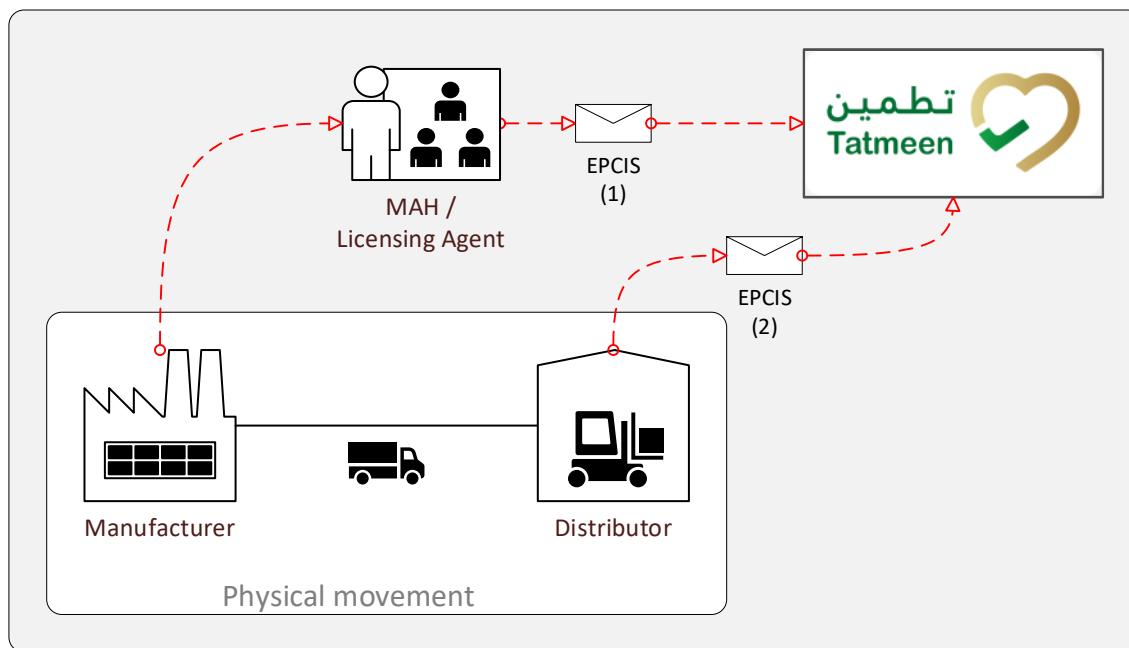
Figure 6 Processing Drugs from Local (Domestic) Manufacturers

3.3.1 Business Process Outline

This outline refers to Figure 6, above, noting that the Manufacturer / MAH / Licensing Agent could be the same entity.

1. The MAH / Licensing Agent representing the Manufacturer must obtain the Local Sales Permit for the products that will be manufactured for the UAE domestic market.

a. The Local Sales Permit contains the product GTIN identifiers for products that are intended to be distributed to the UAE domestic market.

b. Each product GTIN item on the Local Sales Permit is valid for a maximum quantity.

c. Partial shipment of products listed on the Local Sales Permit, is permitted. However, the total accumulated quantity of GTIN identified products that is published on the Local Sales Permit must not be exceeded.

2. Once the MAH / Licensing Agent receives the Local Sales Permit and has identified the top-level hierarchy items scheduled for UAE market release, then they must send a single EPCIS message ("EPCIS (1)" in Figure 6) containing the Local Sales Permit reference; commissioning, aggregation and shipping event for the full / partial shipment.

   Please be aware that since commissioning is not allowed to be cancelled in Tatmeen, user will not be able to cancel shipping if it was reported part of the initial commissioning, aggregation and shipping EPCIS message.

3. Once the local manufacturing EPCIS message is successfully sent to the Tatmeen solution, the products may be shipped from the manufacturer to the local UAE supply chain partner. Note that the EPCIS message (*"EPCIS(2)"* in Figure 6) is described in the Tatmeen Technical Guide for Logistics and is not described in this document.

3.3.2 Constraints and Validations

Since this local manufacturing initiates the first registration of these serialised product items, the content and sequencing of the multiple events associated must be strictly managed.

1. There are two scenarios that apply for full / partial delivery of the product items for release to the local UAE market.

   a. Scenario 1 is the case where the commissioning; packing and shipping message are all submitted in a single EPCIS message for a full / partial delivery that defines the product items for importation. This scenario manages the dependencies of these events as a single entity and is best suited for smaller shipments.

      Please be aware that since commissioning is not allowed to be cancelled in Tatmeen, user will not be able to cancel shipping if it was reported part of the initial commissioning, aggregation and shipping EPCIS message.

    b. Scenario 2 allows for the commissioning and packing messages to be submitted ahead of a separate shipping message. In this scenario, the sender is responsible to manage the submission of the shipping message after the successful completion of the commissioning and packing messages. This scenario is best suited for large shipments.

2. Each EPCIS message must contain an EPCIS Header, that specifies:

    a. A unique message identifier that is generated by the Local Manufacturer and is used to identify each EPCIS message.

    b. The message creation date and time.

    c. The message sender information, i.e., the MAH or Licensing Agent GLN representing the Domestic Manufacturer.

    d. The identifier for the relevant Tatmeen system that will receive the EPCIS message.

3. Each EPCIS message must consist of a series of GS1 EPCIS events recorded in an event list and must follow the structure described in the diagram below.
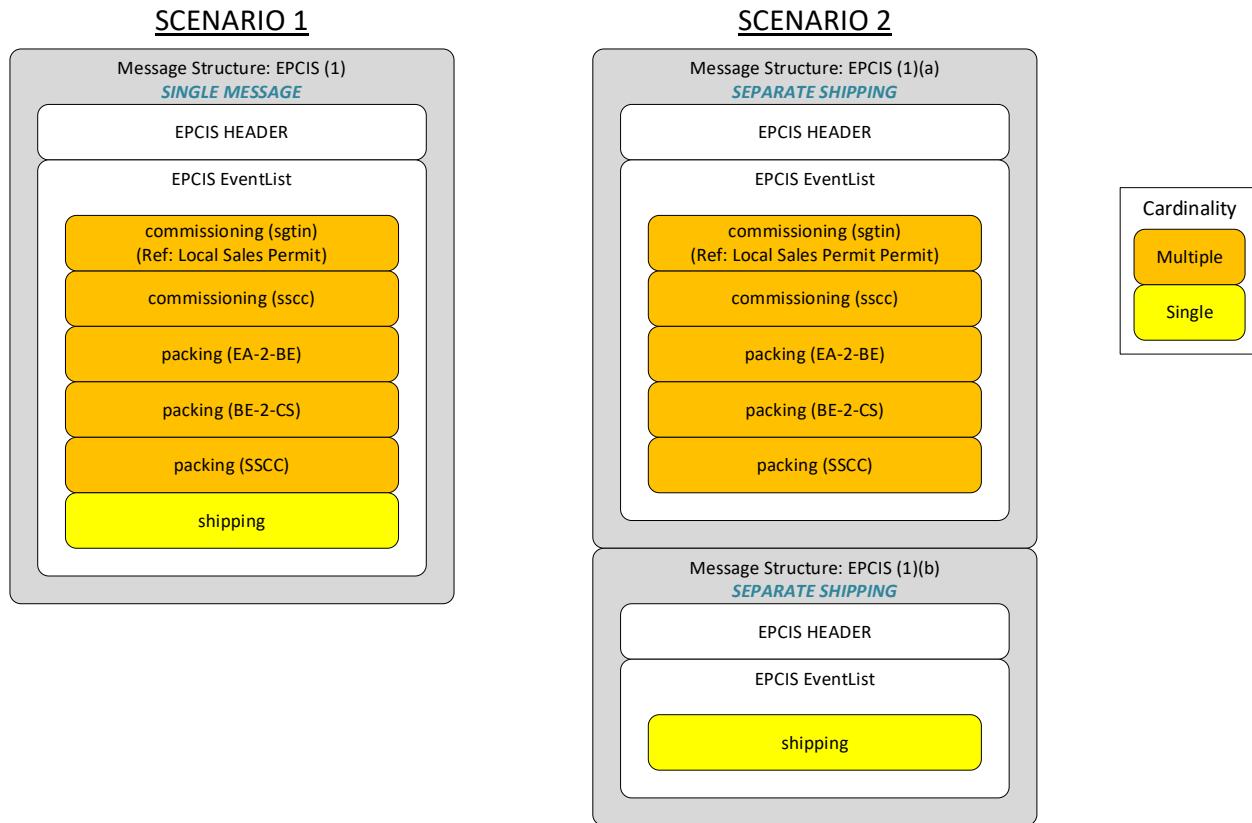
Figure 7 Local Manufacture EPCIS Message Structure

4. The Local Sales Permit reference must be the same reference specified in each commissioning event in the event list.

5. Each of the EPCIS event components of each Domestic Manufacturer message event list is described in Section 5. The following constraints must apply to any EPCIS message for domestically manufactured goods.

    a. The accumulated number of separate product serialised IDs list in all commissioning events within the message must not exceed 50 000.

    b. Each aggregation (packing) message defines the parent / child relationship of the products according to the following general structure. There is only one parent ID:

        i. EA-2-BE: A fixed quantity of secondary packaged serialised product items is packaged into a bundle.

      ii. BE-2-CS: A fixed quantity of bundles may be packaged into a product specific case (CS).

      iii. SSCC: Any of the previously mentioned hierarchy levels may be packaged into a logistics unit (e.g., pallet) for ease of warehouse operation and ease of transportation.

    The order of the aggregation events must follow the top to bottom sequence shown in Figure 7.

    c. A single shipping event only with top-level hierarchy products (typically pallets).

6. All events in EPCIS message must be sorted in chronological order and this chronological order must follow the top to bottom sequence of the events in the event list shown in Figure 7. The earliest event time must be the *commissioning* events.

7. The total EPCIS message size must not exceed 10 MB.

3.4 Product Transfer Between Locations

Product transfers between locations registers the fundamental shipment and receipt of serialised products between those locations including any change of ownership. This transfer registration of the top level serialised product items or logistics unit must be reported to the Tatmeen system by both the sending and receiving parties.

Product Transfer process covers the following processes:

- Shipment
- Goods Receipt
- Receipt of Returned Goods - when a shipment is rejected by the receiver, the receiver should receive the shipment and then use Return to ship back.

3.4.1 Business Process Outline

The following steps outline the process for transfer between locations in the UAE.

1. The Manufacturer; Licensing Agent or Distributor initiating the product transfer (SENDER) must capture the individual unique top level serialised tracking identifiers for the pharmaceutical product items to be transferred.

    a. Item SGTIN

    b. Serial Shipping Container Codes (SSCCs)

2. The SENDER must send an EPCIS document to the Tatmeen solution containing the serialised identifiers captured in the previous step. This document contains the single EPCIS event that then registers the specific items as shipped items so they are no longer located at the SENDER location.

3. When the physical product items arrive at the intended destination, the receiving Manufacturer; Licensing Agent or Distributor (RECEIVER) must capture the same top level tracking identifiers.

4. The RECEIVER must send an EPCIS document to the Tatmeen solution containing the serialised identifiers captured in the previous step. This document contains the single EPCIS event that then registers the specific items as received into stock at the RECEIVER location.

3.4.2 Constraints and Validations

The Tatmeen solution expects to receive a message firstly from the SENDER Manufacturer; Licensing Agent or Distributor and then at some later time the corresponding RECEIVER message. Failure to receive both messages will block the product items from being dispensed.

1. A single EPCIS message for a full / partial shipment that defines the serialised product items for transfer to another location.

2. A single EPCIS message for a full / partial receipt that defines the arrival of the serialised product items at the destination location.

3. Each EPCIS message must contain an EPCIS Header, that specifies:

    a. A unique message identifier that is generated by the Manufacturer; Licensing Agent or Distributor and is used to identify each EPCIS message.

    b. The message creation date and time.

    c. The message sender information, i.e., the SENDER/RECEIVER GLN.

    d. The identifier for the relevant Tatmeen system that will receive the EPCIS message.

4. Each EPCIS message must consist of either:

    a. A single GS1 "shipping" EPCIS event recorded in the message and follows the structure below.
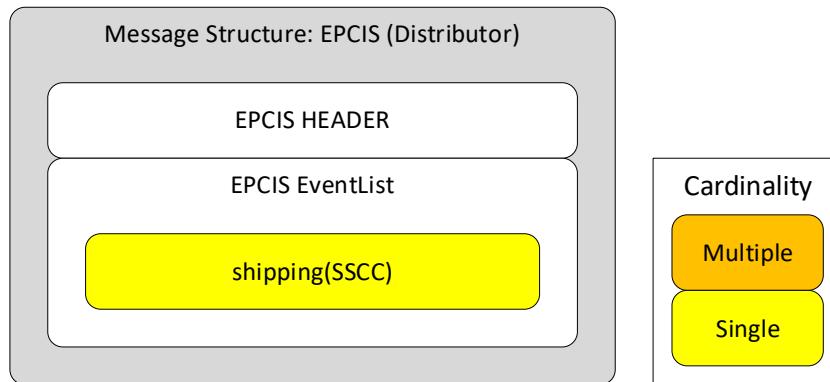
Figure 8 SENDER EPCIS Message Format

The specific scenarios covered are

    i. Shipping

    ii. Shipping Returns

    iii. Void (cancel) Shipping

    iv. Void (cancel) Shipping Returns

b. A single GS1 "receiving" EPCIS event recorded in the message and follows the structure below.
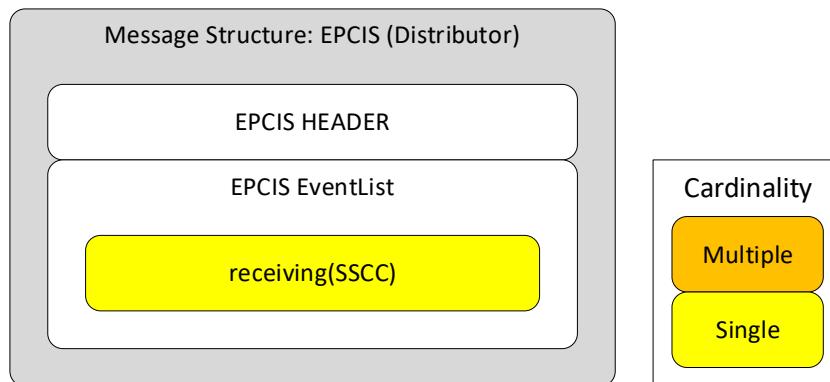
Figure 9 RECEIVER EPCIS Message Structure

The specific scenarios covered are

    i. Receiving

    ii. Receiving Returns

    iii. Void (cancel) Receiving

    iv. Void (cancel) Receiving Returns

5. Only the top level hierarchy serialisation IDs are included in each of the shipping and receiving messages.

3.5 Product Hierarchy Update Within UAE

A product hierarchy update consists of one of two possible operations at a Manufacturer; Licensing Agent or Distributor location.

- Pack (consolidation of new aggregation structure)
- Unpack (deconsolidation of existing aggregation structure)

Aggregation is defined by the relationship between a parent item and children item(s). The Manufacturer; Licensing Agent or Distributor must note that defining a new parent that has not been previously registered in the Tatmeen solution requires that the top level (parent) identifier must first be registered before the aggregation activity is recorded.

Pack and Unpack activities with the supply chain must trigger reporting to inform the Tatmeen solution of the product hierarchy relationship changes.

3.5.1 Pack New SSCC

3.5.1.1 Business Process Outline

The following steps outline the process for packing product items into a new logistics unit (SSCC).

1. During the supply chain logistics process to pack serialised product items into a new logistics units the SSCC label for the serialised logistics unit is generated. The new SSCC serialised identifier is captured to register the new identifier.

2. During the physical packing activities, the Manufacturer; Licensing Agent or Distributor must capture the serialised product item serialised items (SGTIN / SSCC) that are associated with the top level identifier.

3. The Manufacturer; Licensing Agent or Distributor must send an EPCIS document to the Tatmeen solution containing the serialised identifiers captured in the previous step. This document contains:

    a. The EPCIS commissioning event that then registers the new SSCC parent so it is known to the Tatmeen solution.

    b. The EPCIS packing event that then registers the parent/child relationship between the new SSCC and the captured child identifiers.

3.5.1.2 Constraints and Validations

1. The Manufacturer; Licensing Agent or Distributor must hold the pharmaceutical stock at their location immediately prior to changing the hierarchy.

2. A pair of EPCIS messages must be sent that defines:

    a. The creation of the SSCC identifier.

    b. The new parent/child association with the new SSCC as parent.

3. Each EPCIS message must contain an EPCIS Header, that specifies:

    a. A unique message identifier that is generated by the Manufacturer; Licensing Agent or Distributor and is used to identify each EPCIS message.

    b. The message creation date and time.

    c. The message sender information, i.e., the logistics Manufacturer; Licensing Agent or Distributor GLN.

    d. The identifier for the relevant Tatmeen system that will receive the EPCIS message.

4. Each EPCIS document must consist of the pair of EPCIS events recorded according to the structure below.
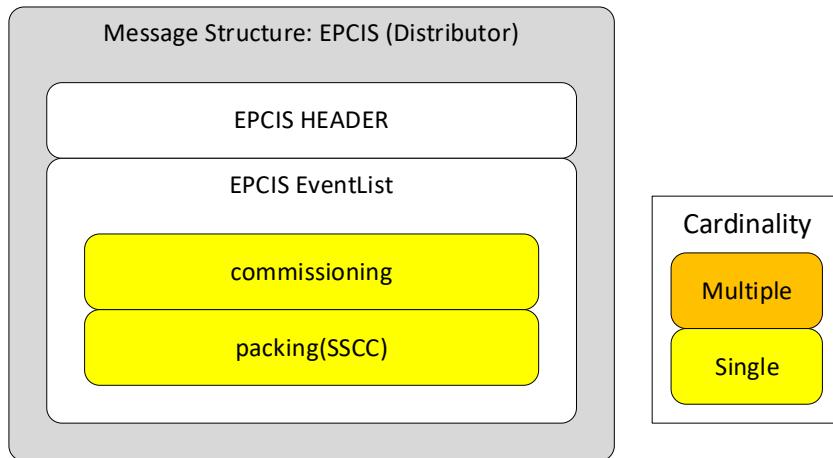
Figure 10 Pack to New SSCC – EPCIS Document Structure

3.5.2 Pack Into Existing SSCC

3.5.2.1 Business Process Outline

The following steps outline the process for packing product items into an existing logistics unit (SSCC).

1. During the supply chain logistics process to pack serialised product items into an existing logistics units the SSCC identifier is captured.

2. During the physical packing activities, the Manufacturer; Licensing Agent or Distributor must capture the serialised product item serialised items (SGTIN / SSCC) that are added to the logistics unit top level identifier.

3. The Manufacturer; Licensing Agent or Distributor must send an EPCIS document to the Tatmeen solution containing the serialised identifiers captured in the previous steps. This document contains the EPCIS packing event that then registers the extended parent/child relationship between the existing SSCC and the captured child identifiers.

3.5.2.2 Constraints and Validations

1. The Manufacturer; Licensing Agent or Distributor must hold the pharmaceutical stock at their location immediately prior to changing the hierarchy.

2. A single EPCIS messages must be sent that defines extended parent/child association with the existing SSCC as parent.

3. Each EPCIS message must contain an EPCIS Header, that specifies:

    a. A unique message identifier that is generated by the Manufacturer; Licensing Agent or Distributor and is used to identify each EPCIS message.

    b. The message creation date and time.

    c. The message sender information, i.e., the logistics Manufacturer; Licensing Agent or Distributor GLN.

    d. The identifier for the relevant Tatmeen system that will receive the EPCIS message.

4. Each EPCIS document must consist of the pair of EPCIS events recorded according to the structure below.
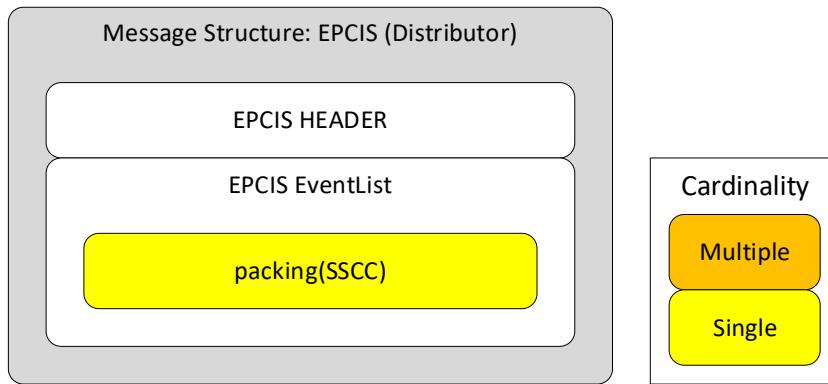
Figure 11 Pack to Existing SSCC – EPCIS Document Structure

3.5.3 Unpack Existing Hierarchy

3.5.3.1 Business Process Outline

The following steps outline the process for unpacking product items from an existing logistics unit (SSCC) or aggregated level SGTIN product item.

1. During the supply chain logistics process to unpack serialised product items from an existing structure the Manufacturer; Licensing Agent or Distributor must capture the serialised product item identifier of the top level item.

2. The Manufacturer; Licensing Agent or Distributor must send an EPCIS document to the Tatmeen solution containing the serialised identifiers captured in the previous step. This document contains a single EPCIS message that then registers the disassociation of the next level child items from the parent identifier. The parent identifier may no longer be used.

3.5.3.2 Constraints and Validations

1. The Manufacturer; Licensing Agent or Distributor must hold the pharmaceutical stock at their location immediately prior to changing the hierarchy.

2. Each EPCIS message must contain an EPCIS Header, that specifies:

   a. A unique message identifier that is generated by the Manufacturer; Licensing Agent or Distributor and is used to identify each EPCIS message.

   b. The message creation date and time.

   c. The message sender information, i.e., the logistics Manufacturer; Licensing Agent or Distributor GLN.

d. The identifier for the relevant Tatmeen system that will receive the EPCIS message.

3. Each EPCIS document must consist of a single GS1 "unpacking" EPCIS event recorded in the message and follows the structure below.
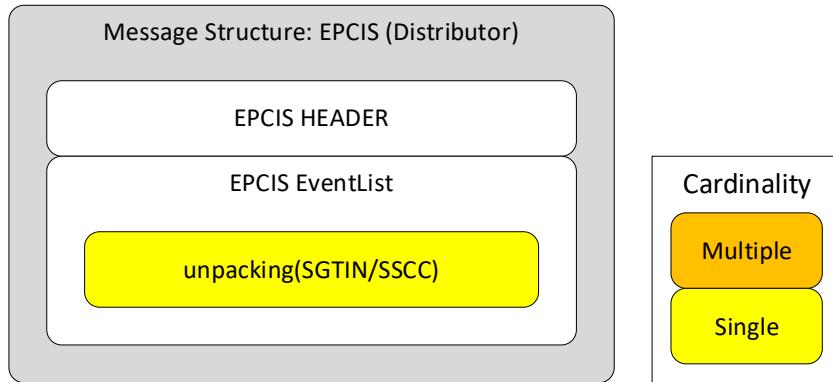
Figure 12 Unpack EPCIS Document Structure

3.6 Product status update within the UAE

Serialised product items can have the item status changed if they are:

- Known to the Tatmeen solution.
- Located at a licensed UAE Manufacturer; Licensing Agent or Logistics location.
- Possible status changes are:
  - o Damaged
  - o Stolen
  - o Exported
  - o Lost/missing

3.6.1 Business Process Outline

The following steps outline the process for product item status change to restrict unsuitable product items from dispensing.

1. During the logistics process to change the status of any serialised product item, the Manufacturer; Licensing Agent or Logistics location must capture the individual unique top level tracking identification

a. Item SGTIN

b. Product Batch

c. Serial Shipping Container Codes (SSCCs)

2. The Manufacturer; Licensing Agent or Logistics location must send an EPCIS document to the Tatmeen solution containing the serialised identifiers captured in the previous step. This document contains a single EPCIS message that then registers the specific items for status change so they are not available for dispensing in the UAE market.

3.6.2 Constraints and Validations

1. The Manufacturer; Licensing Agent or Logistics location must hold the pharmaceutical stock at their location immediately prior to changing the status.

2. A single EPCIS message must be sent that defines the status change.

3. Each EPCIS message must contain an EPCIS Header, that specifies:

a. A unique message identifier that is generated by the Manufacturer; Licensing Agent or Distributor and is used to identify each EPCIS message.

b. The message creation date and time.

c. The message sender information, i.e., the Manufacturer; Licensing Agent or Logistics location GLN.

d. The identifier for the relevant Tatmeen system that will receive the EPCIS message.

4. Each EPCIS message must consist of a single GS1 status change EPCIS event recorded in the message and follows the structure below using the Business Step and Disposition identified in Table 4.
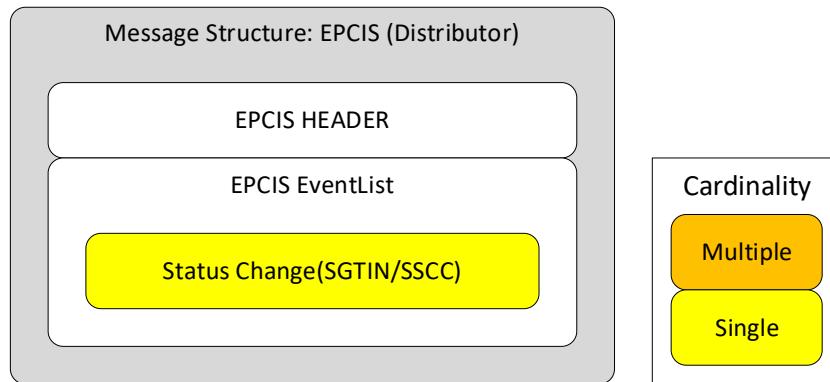
Figure 13 Status Change EPCIS Message Structure

Case	Business Step	Disposition
Damaged	DECOMMISSIONING	DAMAGED
Stolen	DECOMMISSIONING	STOLEN
Export	DECOMMISSIONING	NON_SELLABLE_OTHER
Lost/Missing	DECOMMISSIONING	INACTIVE

Table 4 Status Change Parameters

5. Only the top level hierarchy IDs (LGTIN/SGTIN/SSCC) are included in the status change message.

3.7 Destruction of product within the UAE

Destruction is a logistics operation that removes previously valid and authentic products from the market for a variety of situations. After destruction:

- No dispensing of any destroyed products is possible

- Also no transfer is possible when blocked for destruction.

3.7.1 Business Process Outline

The following steps outline the multi-step process for destruction of products in the UAE. The stocking location (MAH / Licensing Agent; Logistics location entity) for a product is permitted to initiate a destruction once the MoHAP reference is issued. The completion step is always done by the same partner as initiated the destruction.
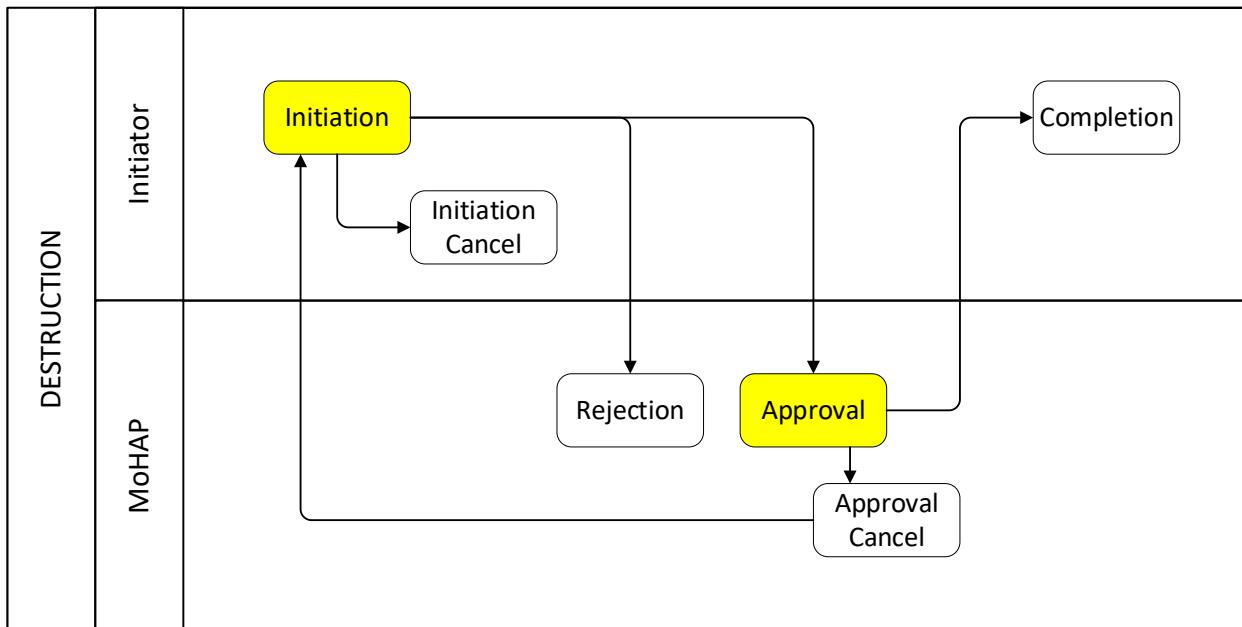
Figure 14 Destruction Process

1. During the process to record the destruction/removal of product item identifiers from record, the Manufacturer; Licensing Agent or Logistics location must capture the individual unique top level tracking identifiers either by scanning or from internal records.

2. The Manufacturer; Licensing Agent or Logistics location must send an EPCIS document to the Tatmeen solution containing the serialised identifiers captured in the previous step. This document contains a single EPCIS message for the appropriate destruction activity that then registers the specific items destruction in the Tatmeen system and further blocking the items for dispensing in the UAE market.

3.7.2 Constraints and Validations

1. The last known location of the serialised product items must be the Manufacturer; Licensing Agent or Logistics location reporting the destruction activity.

2. A single EPCIS document must be sent that reports the relevant destruction scenario of the identified serialised IDs.

3. Each EPCIS message must contain an EPCIS Header, that specifies:

a. A unique message identifier that is generated by the Manufacturer; Licensing Agent or Logistics location and is used to identify each EPCIS message.

b. The message creation date and time.

c. The message sender information, i.e., the reporting Manufacturer; Licensing Agent or Logistics location GLN.

d. The identifier for the relevant Tatmeen system that will receive the EPCIS message.

4. Each EPCIS message must consist of a single GS1 destruction EPCIS event (see Table 5 for event context) recorded in the document and follows the structure below.
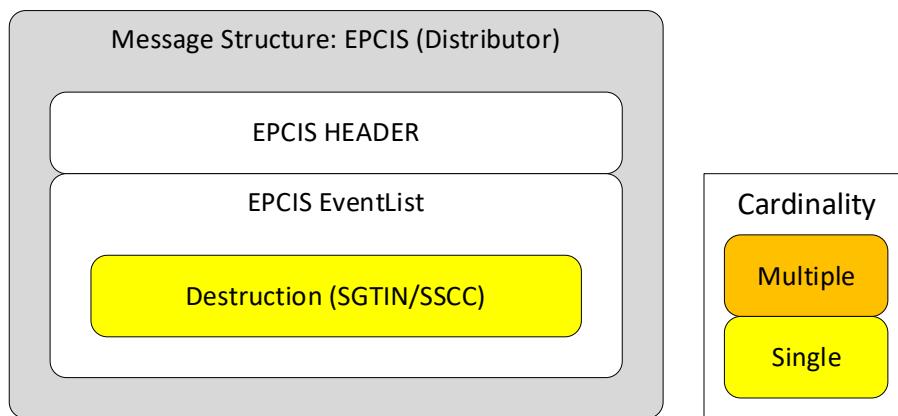
Figure 15 Destruction EPCIS Message Structure

Case	Business Step	Disposition
Destruction Initiation	UPDATING	DESTROY_INIT
Destruction Initiation Cancel	UPDATING	DESTROY_INIT_CANCEL
Destruction Completion	DESTROYING	DESTROYED

Table 5 Destruction Parameters

5. Only the top level hierarchy IDs (SGTIN/SSCC) are included in the destruction message.

3.8 Batch/Product Recall

Batch/Product Recall is a logistics operation that removes previously valid and authentic products from the market:

- For Batch Recall, the products are identified by the single product batch identifier (LGTIN).

- For Product Recall, the products are identified by the single product identifier (GTIN).

3.8.1 Business Process Outline (Batch Recall)

The following steps outline the multi-step process for batch recall of products in the UAE.
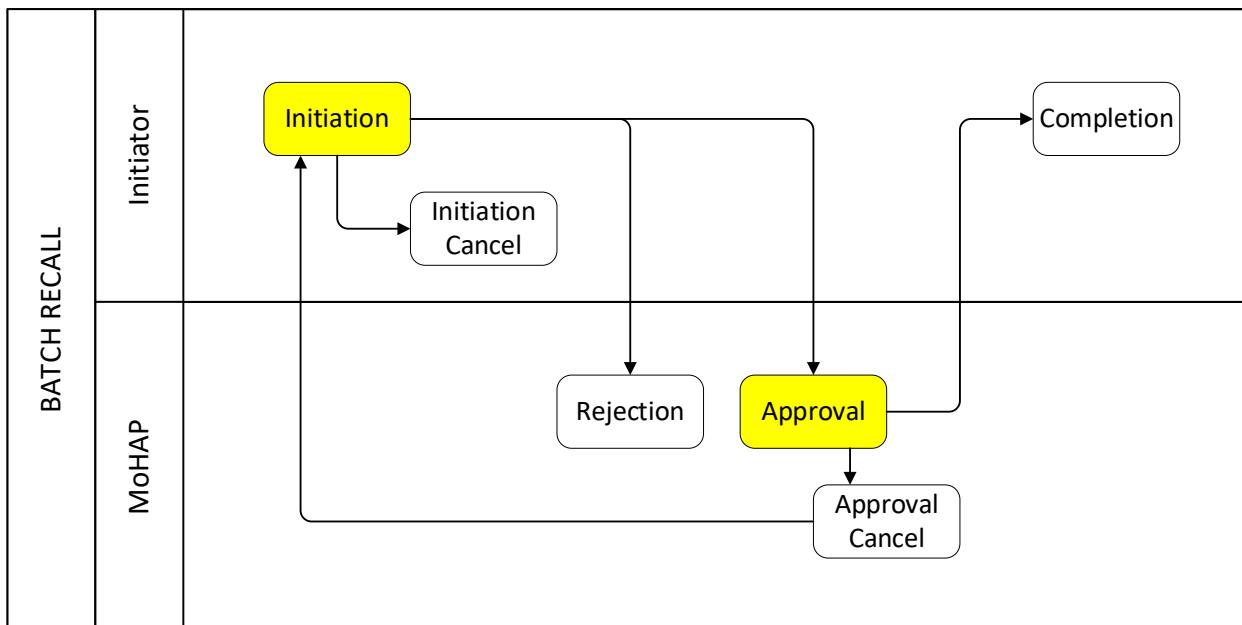
Figure 16 Batch Recall Steps

The MAH (or delegated Scientific Office) / Licensing Agent for a product, is defined in the GS1-UAE BrandSync master data and any of those partners are permitted to initiate the Tatmeen Batch Recall. The current process of requesting a "Recall Reference" remains unchanged and this reference is required to execute the "Initiation" step.   The "Completion" step is always done by the same partner as initiated the Batch Recall.

The following steps outline the process for Batch Recall of products in the UAE.

1. During the process to record the Batch Recall of product batch item identifier, the Manufacturer; or Licensing Agent must capture the individual unique top level tracking identifier for the product batch.

2. The Manufacturer (or Scientific Office); Licensing Agent must send an EPCIS document to the Tatmeen solution containing the serialised batch/lot identifier captured in the previous step. This document contains a single EPCIS message for the appropriate batch recall activity that then registers the activity in the Tatmeen system and subsequent blocking the items for dispensing in the UAE market.

3.8.2 Business Process Outline (Product Recall)

The following steps outline the multi-step process for product recall in the UAE.
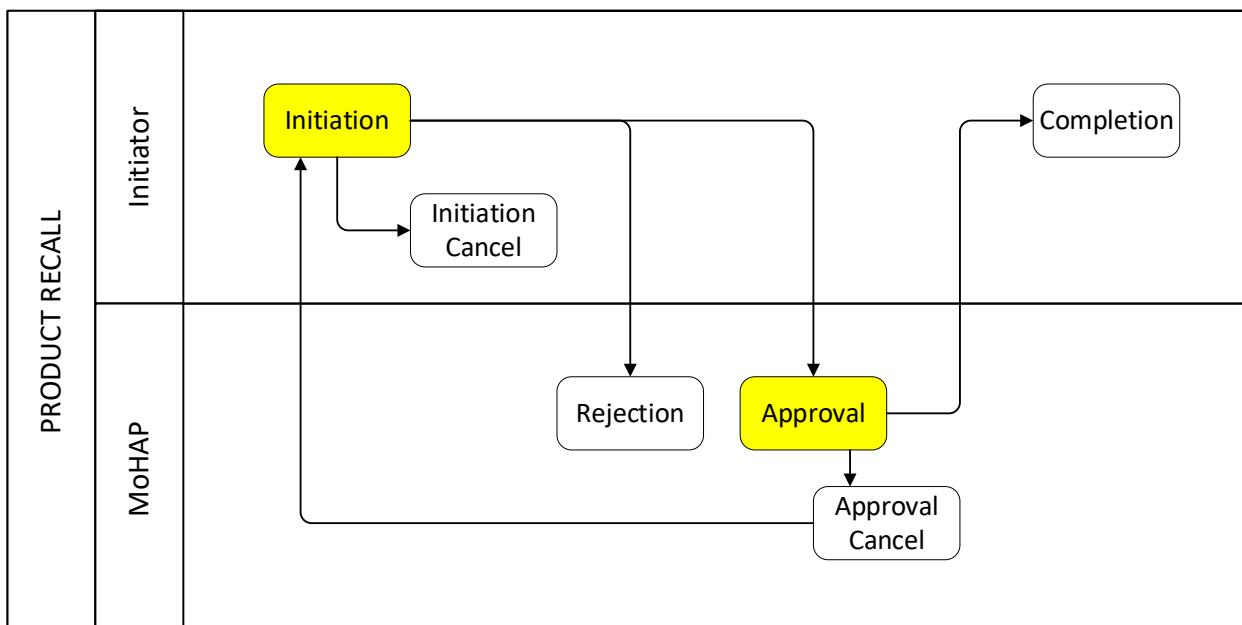
Figure 17 Product Recall Steps

Similar to the Batch Recall, the MAH (or delegated Scientific Office) / Licensing Agent for a product, defined in the GS1-UAE BrandSync master data determines those partners permitted to initiate the Tatmeen Product Recall. The current process of requesting a "Recall Reference" also remains unchanged and this reference is required to execute the "Initiation" step. The "Completion" step is always done by the same partner as initiated the Product Recall.

The following steps outline the process for Product Recall of products in the UAE.

1. During the process to record the Product Recall of product GTIN identifier for the secondary packaged item (EACHES), the Manufacturer; or Licensing Agent must capture the individual unique GTIN for the product.

2. The Manufacturer; Licensing Agent must send an oData message to the Tatmeen solution containing the GTIN identifier captured in the previous step. This message is outlined in Section 6 for the appropriate product recall activity that then registers the activity in the Tatmeen system and subsequent blocking the items for dispensing in the UAE market.

3.8.3 Constraints and Validations

Batch Recall:

1. A single EPCIS document must be sent that reports the relevant batch recall scenario of the identified batch ID.

2. Each EPCIS message must contain an EPCIS Header, that specifies:

    a. A unique message identifier that is generated by the Manufacturer or Licensing Agent and is used to identify each EPCIS message.

    b. The message creation date and time.

    c. The message sender information, i.e., the reporting Manufacturer; or Licensing Agent GLN.

    d. The identifier for the relevant Tatmeen system that will receive the EPCIS message.

3. Each EPCIS message must consist of a single GS1 Batch Recall EPCIS event (see Table 5 for event context) recorded in the document and follows the structure below.
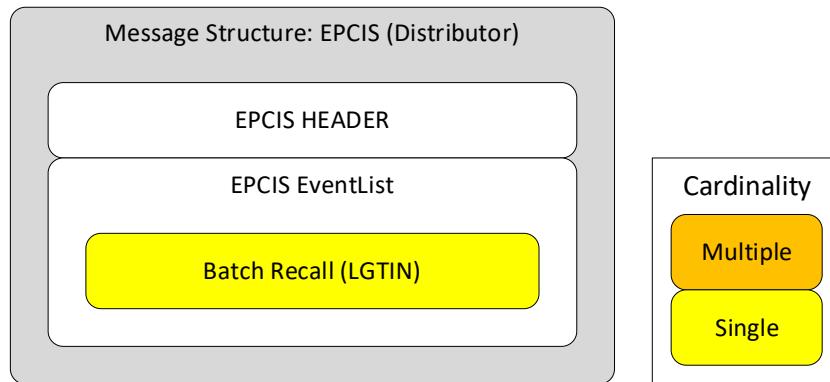
Figure 18 Recall Initiate/Complete EPCIS Message Structure

Case	Business Step	Disposition
Batch Recall Initiation	UPDATING	RECALL_INIT
Batch Recall Initiation Cancel	UPDATING	RECALL_INIT_CANCEL
Batch Recall Completion	UPDATING	RECALLED

Table 6 Batch Recall Parameters

The Batch Recall "Initiation" message is subject to the following limitations & actions:

- o Only authorized entities are allowed to trigger batch recall initiation
    - ▪ MAH that is an owner of the product (product master MAH GLN field)
    - ▪ Scientific Office that is an owner of the product (product master MAH GLN field)
    - ▪ Licensed agent that is an owner of the product (product master Licensed Agent GLN field).
    - ▪ MoHAP /DOH/DHA Pharmacovigilance (PVI).
- o MAH / Scientific Office / Licensed Agent can recall only their GTINs batches.
- o Batch/GTIN (LGTIN) must exist in Tatmeen.
- o "Initiation" is possible only if LGTIN is not recalled yet
- o "Initiation" is possible only if there is no existing batch recall initiation pending for approval but not approved yet
- o "Initiation" is possible only if there is no existing approved batch recall initiation for the same LGTIN.
- o Only secondary packaging GTIN (EACHES) can be batch recalled
- o The Circular Number is mandatory for "Initiation".

Product Recall:

For product recalls, the oData service allows the following activities for Manufacturers and Licensing Agents:

Case	Activity
Product Recall Initiation	PRD-INI
Product Recall Initiation Cancel	PRD-CNC
Product Recall Completion	PRD-COM

Table 7 Product Recall Parameters

Product Recall "Initiation" message is subject to the following limitations & actions:
- o Only authorized entities are allowed to trigger Product recall initiation
    - ▪ MAH that is an owner of the product (product master MAH GLN field)
    - ▪ Scientific Office that is an owner of the product (product master MAH GLN field)
    - ▪ Licensed agent that is an owner of the product (product master Licensed Agent GLN field)
    - ▪ MoHAP /DOH/DHA Pharmacovigilance (PVI)
- o MAH / Scientific Office / Licensed Agent can recall only their GTINs
- o Only entity which performed the "Initiation" is allowed to perform "Initiation Cancellation".
- o The GTIN product master record must exist in Tatmeen
- o "Initiation" is possible only if GTIN is not recalled yet
- o "Initiation" is possible only if there is no existing product recall initiation pending for approval but not approved yet.
- o "Initiation" is possible only if there is no existing approved product recall initiation for the same GTIN.
- o only secondary packaging (EACHES) GTIN can be product recalled.
- o Circular Number is mandatory for "Initiation".

4 API Specification

During the business partner onboarding process, the MAH / Domestic Manufacturer Single Point of Contact (SPOC) will be registered, and the SPOC then manages the API subscription to enable electronic submission of messages to the Tatmeen solution. This section describes the following:

- API Subscription

- Service APIs

- Message Formats

- Message Status Formats

- Message Acknowledgements

4.1 API Subscription

To be able to subscribe to the Tatmeen solution APIs, the following steps must be followed.

1. The business partner (MAH) SPOC must register a technical user following the registration process in the Tatmeen Technical Onboarding Guide.

2. Once approval for the user is given, the technical user credentials (sign-on ID and password) are created in the Tatmeen solution and authorised for messages that reference the business partner GLN.

3. In the scenario where the business partner delegates the technical activities to a third party representative, the business partner SPOC must securely share the credentials with that third party with instructions to only use the credentials in association with the business partner Global Location Identifier (GLN).

4. The MAH / Domestic Manufacturer SPOC (or relevant technical representative) must subscribe to the Tatmeen APIs on receiving the technical user credentials. During subscription the Tatmeen API Application Key and Application Secret are issued. These must be saved for use during technical messaging with the Tatmeen system.

4.2 API Authentication

Prior to connecting to any specific API services, the API connection must be authenticated using OpenID Connect. OpenID Connect is an identity layer that allows the business partner technical user to be verified against the Tatmeen identity service.

The following considerations are required.

1. The API calls must use OpenID authentication to communicate with the Tatmeen system.

2. Each API technical user must send messages by calling the designated API Authentication endpoints and must include the ClientID Token and API Application Secret Key.

4.2.1 Staging Authentication Endpoints

The table below contains the current test endpoint.

IP Range	Service URL	Operations	Description
x.x.x.x	*https://stgapim.tatmeen.ae:443/v1*	*/auth*	Authorization Service

Table 8 Authentication Test Endpoints

4.2.2 Live Authentication Endpoints

The table below contains the current live endpoint.

IP Range	Service URL	Operations	Description
x.x.x.x	*https://apim.tatmeen.ae/v1*	*/auth*	Authorization Service

Table 9 Authentication Live Endpoints

4.3 Service APIs

The tables below (Table 10 and Table 11) provide the list of service URLs for the MAH / Domestic Manufacturer / Licensing Agent activities.

4.3.1 Staging Service Endpoints

IP Range	Service URL	Operations	Description
x.x.x.x	*https:/stgapim.tatmeen.ae:443/v1*	*/scp/SendEPCIS*	EPCIS Message Events
x.x.x.x	*https:/stgapim.tatmeen.ae:443/v1*	*/GTINRecall*	Service for Product Recall
x.x.x.x	*https:/stgapim.tatmeen.ae:443/v1*	*/VerifyProduct*	Service for Product Verification
x.x.x.x	*https:/stgapim.tatmeen.ae:443/v1*	*/epcisMsgStatus*	Check EPCIS Message Status

Table 10 Service Test Endpoints

4.3.2 Live Service Endpoints

IP Range	Service URL	Operations	Description
x.x.x.x	*https://apim.tatmeen.ae/v1*	*/scp/SendEPCIS*	EPCIS Message Events
x.x.x.x	*https://apim.tatmeen.ae/v1*	*/GTINRecall*	Service for Product Recall
x.x.x.x	*https://apim.tatmeen.ae/v1*	*/VerifyProduct*	Service for Product Verification
x.x.x.x	*https://apim.tatmeen.ae/v1*	*/epcisMsgStatus*	Check EPCIS Message Status

Table 11 Service Live Endpoints

4.4 Message Formats

The following message formats are to be used.

Data	Content-Type	Standards
EPCIS Event Messages	Application/xml	GS1 EPCIS 1.2
Product Recall Messages	OData Activity	Tatmeen OData API
Product Verification Query	OData Activity	Tatmeen OData API
EPCIS Message Status Query	Application/xml	Tatmeen xml

Table 12 Message Formats

For further details about the message formats, please refer to:

- GS1 EPCIS and CBV Implementation guide document

    (https://www.gs1.org/docs/epc/EPCIS_Guideline.pdf)

- GS1 Common Business Vocabulary Standard

    (https://www.gs1.org/sites/default/files/docs/epc/CBV-Standard-1-2-2-r-2017-10-12.pdf)

- GS1 Standard Business Document Header (SBDH) Version 1.3

    (https://www.gs1.org/sites/default/files/docs/xml/SBDH_v1_3_Technical_Implementation_Guide.pdf)

- ISO 8601: Representation of dates and times "Data elements and interchange formats – Information interchange."

These documents form the basis for the EPCIS Message Formats described in the next section.

5 EPCIS Message Format

This section provides detailed information about the format of the EPCIS messages that must be sent by the MAH / Domestic Manufacturer (or relevant technical representative) to the Tatmeen system.

The format of an EPCIS message is defined in:

- Figure 5, the EPCIS message sent by the MAH (or relevant technical representative) for importation of registered drugs into the UAE,

- Figure 7, the EPCIS message sent by the Domestic Manufacturer (or relevant technical representative), for goods manufactured within the UAE for the domestic UAE market.

It is assumed that the recipient of this document is familiar with the GS1 EPCIS standards and the technical xml formats described in the subsequent sections.

5.1 Sample Import Permit

As mentioned in the EPCIS messages above, to be able to do a commissioning event, you need to have a valid import permit number to conduct the integration testing in PRE-PROD (Staging) environment only, MoHAP has provided the below import permit samples to be able to run your tests:

Permit Status	Permit Number
Approved	SHP/MP/48913/2020
Pending	SHP/MP/42852/2021
Rejected	SHP/MP/46773/2021

Table 13 Sample Test Permit Numbers for Staging

5.2 EPCIS: Custom Tatmeen Namespace

To allow custom Tatmeen vocabulary within the EPCIS messages, the EPCIS messages contain a custom xml namespace definition at the start of the message envelope.

This namespace definition is:

xmlns:tatmeen="http://tatmeen.ae/epcis/"

5.3 EPCIS: Header Attributes

All EPCIS messages originating from a MAH / Domestic Manufacturer (or relevant technical representative) must present a standard GS1 EPCIS header at the start of the message that is structured according to the UN/CEFACT V1.3: 2004 standard business document header (SBDH) specification as described in the GS1 Standard Business Document Header (SBDH) Version 1.3 Technical Implementation Guide.

This header contains information to uniquely identify:

- Which manufacturer sent the message.

- The intended destination for the message.

- A unique message identifier identifying a specific message.

Element	Occurrence & Format	Description	Example
<HeaderVersion>	Mandatory	Constant value representing the header version, being v1.3: (2004).	<sbdh:HeaderVersion>**1.3**</sbdh:HeaderVersion>
<Sender><Identifier>	Mandatory	The Authority is always "GS1", followed by the GLN representing the Sender Application or the GLN for the MAH / Domestic Manufacturer business partner in standard 13-digit format.	<sbdh:Sender><sbdh:Identifier Authority="GS1">**Sender GLN**</sbdh:Identifier></sbdh:Sender>
<Receiver><Identifier>	Mandatory	The Authority is always "GS1", followed by the Receiver GLN. This is always the Tatmeen system GLN (see Table 15 for valid values).	<sbdh:Receiver><sbdh:Identifier Authority="GS1">**Tatmeen GLN**</sbdh:Identifier></sbdh:Receiver>
<DocumentIdentification><sbdh:Standard>	Mandatory	Constant Value "EPCglobal"	<sbdh:Standard>**EPCglobal**</sbdh:Standard>
<sbdh:TypeVersion>	Mandatory	Constant Value "1.0" that matches the 'xsd:schema' version for ATTP.	<sbdh:TypeVersion>**1.0**</sbdh:TypeVersion>
<InstanceIdentifier>	Mandatory	A unique message identifier issued by the Manufacturer. This is limited to a maximum of 40 alphanumeric characters.	<sbdh:InstanceIdentifier>**e999f82e7828a9633d977c64016a8f81**</sbdh:InstanceIdentifier>
<sbdh:Type>	Mandatory	Constant Value "Events" from GS1 standard.	<sbdh:Type>**Events**</sbdh:Type>
<CreationDateAndTime>	Mandatory	Creation timestamp of this message according to ISO 8601 standard UTC format; indicated by the suffix "Z".	<sbdh:CreationDateAndTime>2020-05-05T10:04:17Z</sbdh:CreationDateAndTime>

Table 14 EPCIS: Header Attributes

The message header <Receiver><Identifier> values are:

Environment	Tatmeen GLN
Pre-Production / Staging	6297001273005
PRODUCTION	6297001273036

Table 15 Tatmeen GLN Receiver Identifiers

5.4 EPCIS Commissioning

There are two scenarios that introduce variations on the event attributes.

- Commissioning Trade Item (SGTIN): that commissions product items against the relevant permit associated with the importation or domestic manufacture of trade items. Serialised trade items are uniquely identified by the SGTIN identifier of the product.

- Commissioning Logistics Unit (SSCC): that commissions a logistics unit container represented by an SSCC identifier. There is no specific permit reference for an SSCC as permits are administered and managed by the specific serialised contents of logistics unit.

Additionally, the optional decommissioning event attributes are also included.

5.4.1 EPCIS Commissioning – SGTIN Attributes

There are several constant values in the definition below that are explained in the GS1 EPCIS Common Business Vocabulary standard. The assumption of this technical guide is that this is read in conjunction with the standards on which message formats are defined.

Every SGTIN commissioning event must have the master date (ILMD) extension as specified in below table. A single SGTIN commissioning event contains only those product EPCs that have the same Lot Number. Therefore, multiple lots for the same product always result in an event list with multiple commissioning events.

	Element	Occurrence & Format	Description	Example
Standard Fields	<eventTime>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Application asserts the event occurred.	<eventTime>2021-05-31T12:02:11.000Z</eventTime>

	Element	Occurrence & Format	Description	Example
	\<eventTimeZoneOffset>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	\<eventTimeZoneOffset>+01:00</eventTimeZoneOffset>
	\<epcList>	Mandatory	A list of one or more SGTIN EPCs naming specific objects to which the event pertained.	\<epcList>\<epc>urn:epc:id:sgtin:123456.0202991.AFA0UM128F4C</epc>\</epcList>
	\<action>	Mandatory	Constant Value from "xsd:schema" for the event type action.	\<action>ADD</action>
	\<bizStep>	Mandatory	Constant value. The business step representing the event activity.	\<bizStep>urn:epcglobal:cbv:bizstep:**commissioning**</bizStep>
	\<disposition>	Mandatory	Constant Value.	\<disposition>urn:epcglobal:cbv:disp:active</disposition>
	\<readPoint>	Mandatory	The read point must be the GLN in urn SGLN format of the MAH / Domestic Manufacturer / Licensing Agent.	\<readPoint>\<id>urn:epc:id:sgln:123456.789101.0</id>\</readPoint>
	\<bizLocation>	Mandatory	The business location must be the same SGLN as the \<readpoint>.	\<bizLocation>\<id>urn:epc:id:sgln:123456.789101.0</id>\</bizLocation>
Extension	\<extension>\<ilmd>	Mandatory for SGTINs	This element is to capture the master data extensions for the listed EPCs.	
	\<cbvmda:lotNumber>	Mandatory for SGTINs	Single manufacturers Lot number for the products commissioned in this event. The Lot number consists of upper-case letters and numbers.	\<cbvmda:lotNumber>LOT123456</cbvmda:lotNumber>
	\<cbvmda:itemExpirationDate>	Mandatory for SGTINs	Expiry date of products for this lot number in abbreviated ISO 8601 format (YYYY-MM-DD).	\<cbvmda:itemExpirationDate>2023-02-28</cbvmda:itemExpirationDate>
	\<tatmeen:lotManufacturingDate>	Mandatory for SGTINs	This element is to capture the manufacturing date associated with the lot number in abbreviated ISO 8601 format (YYYY-MM-DD).	\<tatmeen:lotManufacturingDate>2021-02-28</tatmeen:lotManufacturingDate>
	\<tatmeen:manufacturingOrigin>	Mandatory for SGTINs	This is to identify the categorise the Origin of the product and must be one of two values: • Imported Production - "I". • Local Production - "L".	\<tatmeen:manufacturingOrigin>L</tatmeen:manufacturingOrigin> OR \<tatmeen:manufacturingOrigin>I</tatmeen:manufacturingOrigin>

Element	Occurrence & Format	Description	Example
<tatmeen:shipmentPermit>	Conditional	Mandatory for importation into the UAE for foreign manufactured products. This element references the valid Shipping Import Permit held by the MAH / Licensing Agent and must apply to all serialised product EPCs in the event. Commissioned SGTIN EPCs must have a valid permit reference to be registered in the Tatmeen solution.	<tatmeen:shipmentPermit>**SHP/MP/489 13/2020**</tatmeen:shipmentPermit>
<tatmeen:local SalesPermit>	Conditional	Mandatory for local manufacture of goods for the domestic UAE market. This element references the Local Sales Permit held by the Domestic Manufacturer / Licensing Agent and must apply to all serialised product EPCs in the Event. Commissioned SGTIN EPCs must have a valid permit reference to be registered in the Tatmeen solution.	<tatmeen:localSalesPermitt>**LSAL/MP/ ATL02/2022**</tatmeen:localSalesPermit >

Table 16 Commissioning – SGTIN

5.4.2 EPCIS Commissioning – SSCC Attributes

This section provides information about the logistics unit (pallets, etc.) commissioning event definition. As before, there are several constant values in the definition below that are explained in the GS1 EPCIS Common Business Vocabulary standard. The assumption of this technical guide is that this is read in conjunction with the standards on which message formats are defined.

Every SSCC commissioning event must NOT have the master data (ILMD) extension as described in the previous section.

	Element	Occurrence & Format	Description	Example
Standard	<eventTime>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Applications asserts the event occurred.	<eventTime>2021-05-31T12:02:11.000Z</eventTime>

Element	Occurrence & Format	Description	Example
<eventTimeZoneOffset>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	<eventTimeZoneOffset>+01:00</eventTimeZoneOffset>
<epcList>	Mandatory	A list of one or more SSCC EPCs naming specific objects to which the event pertained.	<epcList> <epc>urn:epc:id:sscc:123456.02029914567</epc> </epcList>
<action>	Mandatory	Constant Value from "xsd:schema" for the event type action.	<action>ADD</action>
<bizStep>	Mandatory	Constant value. The business step representing the event activity.	
<disposition>	Mandatory	Constant Value.	<disposition>urn:epcglobal:cbv:disp:active</disposition>
<readPoint>	Mandatory	The read point must be the GLN in SGLN format of the MAH / Domestic Manufacturer.	<readPoint> <id>urn:epc:id:sgln:123456.789101.0</id> </readPoint>
<bizLocation>	Mandatory	The business location must be the same SGLN as the <readpoint>.	<bizLocation> <id>urn:epc:id:sgln:123456.789101.0</id> </bizLocation>

Table 17 Commissioning – SSCC

5.4.3 EPCIS Decommissioning Attributes

There are several constant values in the definition below that are explained in the GS1 EPCIS Common Business Vocabulary standard. The assumption of this technical guide is that this is read in conjunction with the standards on which message formats are defined.

	Element	Occurrence & Format	Description	Example
Standard Fields	<eventTime>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Application asserts the event occurred.	<eventTime>2021-05-31T12:02:11.000Z</eventTime>
	<eventTimeZoneOffset>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	<eventTimeZoneOffset>+01:00</eventTimeZoneOffset>

Element	Occurrence & Format	Description	Example
<epcList>	Mandatory	A list of one or more SGTIN EPCs naming specific objects to which the event pertained.	<epcList> <epc>urn:epc:id:sgtin:123456.0202991. AFA0UM128F4C</epc> </epcList>
<action>	Mandatory	Constant Value from "xsd:schema" for the event type action.	<action>DELETE</action>
<bizStep>	Mandatory	Constant value. The business step representing the event activity.	<bizStep>urn:epcglobal:cbv:bizstep:de**c ommissioning**</bizStep>
<disposition>	Mandatory	Constant Value.	<disposition>urn:epcglobal:cbv:disp:**unk nown**</disposition>
<readPoint>	Mandatory	The read point must be the GLN in GS1 URN SGLN format of the MAH / Domestic Manufacturer / Licensing Agent.	<readPoint> <id>urn:epc:id:sgln:123456.789101.0</i d> </readPoint>

Table 18 Decommissioning

5.5 EPCIS for Hierarchy Change

This section provides detailed information about the parent / child relationship between packaged product items as they progress through manufacture in preparation of being shipped.

5.5.1 EPCIS Aggregation Event: Packing Attributes

The EPCIS *packing* event is the same for serialised objects (SGTIN) and logistics units (SSCC). Parent / child relationships expected for manufacturer reporting are:

- EA-2-BE Serialised product with UoM=EA, packaged into a serialised bundle (UoM=BE).

- BE-2-CS Serialised bundle with UoM=BE, packaged into a serialised case (UoM=CS).

- Product-2-SSCC Serialised products packaged into any logistics unit.

There must be a single aggregation event representing a single parent and the time sequencing of aggregation events must:

- Be later than the commissioning of all parent and child EPCs.

- Have the smallest unit of measure parent (i.e., UoM=BE) with the earliest timestamp.

- Have the next in sequencing as parent EPCs with UoM=CS.
- Have SSCCs always last in the timestamp sequence.

	Element	Occurrence & Format	Description	Example
Standard Fields	\<eventTime\>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Applications asserts the event occurred.	\<eventTime\>2021-05-31T12:02:11.000Z\</eventTime\>
	\<eventTimeZoneOffset\>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	\<eventTimeZoneOffset\>+01:00\</eventTimeZoneOffset\>
	\<parentID\>	Mandatory	The parent element to capture the EPC of parent SGTIN/SSCC for the following packed items.	\<parentID\>urn:id:sgtin:0123456.305513.NN3P266YLXPC\</parentID\>
	\<childEPCs\>	Mandatory	A list of one or more EPCs of contained objects identified by instance-level identifiers. Any EPC could either be an SGTIN or an SSCC.	\<childEPCs\> \<epc\>urn:epc:id:sgtin:0123456.205513.NN2P266YLXPC\</epc\> \<epc\>urn:epc:id:sgtin:0123456.205513.NN2P266YYXX2\</epc\> \</childEPCs\>
	\<action\>	Mandatory	Constant Value from "xsd:schema" for the event type action.	\<action\>**ADD**\</action\>
	\<bizStep\>	Mandatory	Constant value. The business step representing the event activity.	\<bizStep\>urn:epcglobal:cbv:bizstep:**packing**\</bizStep\>
	\<readPoint\>	Mandatory	The read point must be the same GLN as define in Section 5.4.	\<readPoint\> \<id\>urn:epc:id:sgln:123456.789101.0\</id\> \</readPoint\>
	\<bizLocation\>	Mandatory	The business location must be the same SGLN as define in Section 5.4.	\<bizLocation\> \<id\>urn:epc:id:sgln:123456.000000.0\</id\> \</bizLocation\>

Table 19 Aggregation Attributes

5.5.2 EPCIS Aggregation Event: Unpacking Attributes

This section provides detailed information about the disaggregation of the parent / child relationship between packaged product items. There are two scenarios that introduce variations on the event attributes.

- Unpack Parent: that disaggregates all the immediate children from the parent identifier resulting in an empty parent. Any empty SGTIN parent should subsequently be decommissioned in this scenario.

- Unpack Selected Object: that only applies to a logistics unit parent and permits removal of specific child objects from the parent. The parent retains the parent/child relationship for all other objects in the hierarchy.

5.5.2.1 Scenario: Unpack Parent

	Element	Occurrence & Format	Description	Example
Standard Fields	<eventTime>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Applications asserts the event occurred.	<eventTime>2021-05-31T12:02:11.000Z</eventTime>
	<eventTimeZoneOffset>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	<eventTimeZoneOffset>+01:00</eventTimeZoneOffset>
	<parentID>	Mandatory	The parent element to capture the EPC of parent SGTIN/SSCC for the following packed items.	<parentID>urn:epc:id:sscc:0123456.0001000516</parentID>
	<childEPCs>	Mandatory	This is a mandatory empty list as only the top level item is captured to disassociate the parentID from all the childEPCs.	<childEPCs></childEPCs>
	<action>	Mandatory	Constant Value from "xsd:schema" for the event type action (see Section 8 for overview).	<action>**DELETE**</action>
	<bizStep>	Mandatory	Constant value. The business step representing the event activity (see Section 8 for overview).	<bizStep>urn:epcglobal:cbv:bizstep:**unpacking**</bizStep>
	<readpoint>	Mandatory	The read point must be the GLN in SGLN format of the MAH / Domestic Manufacturer / Licensing Agent.	<readPoint><id>urn:epc:id:sgln:123456.789101.0</id></readPoint>
	<bizLocation>	Mandatory	The business location must be the same SGLN as the <readpoint>.	<bizLocation><id>urn:epc:id:sgln:123456.000000.0</id>

Element	Occurrence & Format	Description	Example
			</bizLocation>

Table 20 Aggregation – "Unpacking Parent" Attributes

5.5.2.2 Scenario: Unpack Selected Objects

	Element	Occurrence & Format	Description	Example
Standard Fields	<eventTime>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Applications asserts the event occurred.	<eventTime>2021-05-31T12:02:11.000Z</eventTime>
	<eventTimeZoneOffset>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	<eventTimeZoneOffset>+01:00</eventTimeZoneOffset>
	<parentID>	Mandatory	The parent element to capture the EPC of parent SGTIN/SSCC for the following packed items.	<parentID>urn:epc:id:sscc:0123456.0001000516</parentID>
	<childEPCs>	Mandatory	A list of one or more EPCs of selected objects to remove from the parent, each selected object being identified by instance-level identifiers. Only these selected items are removed from the hierarchy.	<childEPCs> <epc>urn:epc:id:sgtin:0123456.305513.NN2P266YLXPC</epc> </childEPCs>
	<action>	Mandatory	Constant Value from "xsd:schema" for the event type action (see Section 8 for overview).	<action>**DELETE**</action>
	<bizStep>	Mandatory	Constant value. The business step representing the event activity (see Section 8 for overview).	<bizStep>urn:epcglobal:cbv:bizstep:**unpacking**</bizStep>
	<readpoint>	Mandatory	The read point must be the GLN in SGLN format of the MAH / Domestic Manufacturer / Licensing Agent.	<readPoint> <id>urn:epc:id:sgln:123456.789101.0</id> </readPoint>
	<bizLocation>	Mandatory	The business location must be the same GLN as the <readpoint>.	<bizLocation>

Element	Occurrence & Format	Description	Example
			<id>urn:epc:id:sgln:123456.000000.0</id> </bizLocation>

Table 21 Aggregation – "Unpacking Selected Objects" Attributes

5.6 EPCIS for Product Transfer

The following product transfer activities are reported using the EPCIS message attributes defined in the sub-sections.

- Shipping

- Shipping Returned products

- Receiving

- Receiving Returned products

- Cancellations for the above four activities

5.6.1 EPCIS Shipping Event Attributes

The shipping event is used to control the flow of goods as they are shipped from the manufacturer to the UAE market. Typically, the products are packaged onto logistics units (SSCC), prior to shipping. This aids logistics transactions and logistics movements for warehouse efficiency. The transaction based messages, therefore:

- Must follow the aggregation events for the top level hierarchy EPC and relevant packaged product items.

- Must report only the top-level hierarchy EPCs.

	Element	Occurrence & Format	Description	Example
Standard Fields	<eventTime>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Application asserts the event occurred.	<eventTime>2021-05-31T12:02:11.000Z</eventTime>
	<eventTimeZoneOffset>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	<eventTimeZoneOffset>+01:00</eventTimeZoneOffset>

	Element	Occurrence & Format	Description	Example
	\<epcList\>	Mandatory	A list of one or more EPCs naming specific objects to which the event pertained. Only the highest level aggregated EPCs in the hierarchy are listed here.	\<epcList\> \<epc\>urn:epc:id:sscc:123456. 02029914567\</epc\> \</epcList\>
	\<action\>	Mandatory	Constant Value from "xsd:schema" for the event type action.	\<action\>OBSERVE\</action\>
	\<bizStep\>	Mandatory	Constant value. The business step representing the event activity.	\<bizStep\>urn:epcglobal:cbv:bizstep:**shipping**\</bizStep\>
	\<disposition\>	Mandatory	Constant Value.	\<disposition\>urn:epcglobal:cbv:disp:**in_transit**\</disposition\>
	\<readPoint\>	Mandatory	The read point must be the same SGLN as define in Section 5.4.	\<readPoint\> \<id\>urn:epc:id:sgln:123456.789101.0 \</id\> \</readPoint\>
	\<bizTransaction List\>	Optional	A list of business transactions that define the context of this event.	
	\<bizTransaction \>	Optional	An identifier that denotes the specific shipping despatch advice reference to the business transaction between the MAH / Domestic Manufacturer and the recipient where the stock will enter the UAE market. Typically, this is the shipping document reference for the goods to enter the UAE.	\<bizTransaction type="urn:epcglobal:cbv:btt:desadv"\> urn:epcglobal:cbv:bt:0123456999995: 0105\</bizTransaction\>
Extension	\<extension\>\<sourceList\>	Mandatory	A list of Source elements that provides context about the originating endpoint.	
	\<source\>	Mandatory	Only the Owning Party applies to this Event and is the same GLN as the \<readPoint\> represented in GS1 URN SGLN format.	\<source type="urn:epcglobal:cbv:sdt:owning_party"\>urn:epc:id:sgln:123456.789101.0\</source\>
	\<destinationList \>	Mandatory	A list of Destination elements that provide context about the terminating endpoint of a business transfer.	
	\<destination\>	Mandatory	Both the Owning Party (sold-to partner) and the Location (ship-to partner) GLNs are required in SGLN format. This is one	\<destination type="urn:epcglobal:cbv:sdt:owning_party"\>urn:epc:id:sgln:0333333.00000.0\</destination\>

Element	Occurrence & Format	Description	Example
		of the following dependant on the process scenario: • The Distributor or 3PL where the importation customs inspection will take place. • The destination UAE supply chain partner for locally manufactured products.	<destination type="urn:epcglobal:cbv:sdt:location">urn:epc:id:sgln:0356787.00040.0</destination>

Table 22 Shipping Attributes – Shipping Event

Note that the <bizTransaction> is shown as optional as this reference has no significance to the Tatmeen solution.

5.6.2 EPCIS Shipping Return Event Attributes

The shipping return event is used to control the flow of goods for a shipment or partial shipment that is returned to the original SENDER. The transaction based messages therefore:

• Must follow any disaggregation or aggregation events relevant to the returns preparation and loading processes.

• Must report only the top-level hierarchy EPCs being returned.

	Element	Occurrence & Format	Description	Example
Standard Fields	<eventTime>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Application asserts the event occurred.	<eventTime>2021-05-31T12:02:11.000Z</eventTime>
	<eventTimeZoneOffset>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	<eventTimeZoneOffset>+01:00</eventTimeZoneOffset>
	<epcList>	Mandatory	A list of one or more EPCs naming specific objects to which the event pertained. Only the highest level aggregated EPCs in the hierarchy are listed here.	<epcList> <epc>urn:epc:id:sscc:0471234.1001234569</epc> <epc>urn:epc:id:sscc:123456.02029914567</epc>

	Element	Occurrence & Format	Description	Example
				</epcList>
	<action>	Mandatory	Constant Value from "xsd:schema" for the event type action (see Section 8 for overview).	<action>OBSERVE</action>
	<bizStep>	Mandatory	Constant value. The business step representing the event activity (see Section 8 for overview).	<bizStep>urn:epcglobal:cbv:bizstep:**shipping**</bizStep>
	<disposition>	Mandatory	Constant value. The disposition relevant to the business step representing the event activity (see Section 8 for overview).	<disposition>urn:epcglobal:cbv:disp:**returned**</disposition>
	<readPoint>	Mandatory	The read point must be the GLN in SGLN format of the MAH / Domestic Manufacturer / Licensing Agent.	<readPoint> <id>urn:epc:id:sgln:0473456.00100.0</id> </readPoint>
	<bizTransaction List>	Optional	A list of business transactions that define the context of this event.	
	<bizTransaction>	Optional	An identifier that denotes the specific shipping despatch advice and returns authorisation references between the MAH / Domestic Manufacturer / Licensing Agent and the recipient. The "desadv" reference and "rma" reference are recorded in the Tatmeen solution when provided within the message. Format is: **bt:<GLN>:<reference>** where <GLN> is the MAH / Domestic Manufacturer / Licensing Agents own GLN and the <reference> is the MAH / Domestic Manufacturer / Licensing Agent unique reference.	<bizTransactionList> <bizTransaction type="urn:epcglobal:cbv:btt:**desadv**">urn:epcglobal:cbv:bt:0476543000102:0105</bizTransaction> <bizTransaction type="urn:epcglobal:cbv:btt:**rma**">urn:epcglobal:cbv:bt:0476543000102:R0105</bizTransaction> </bizTransactionList>
Extension	<extension><sourceList>	Mandatory	A list of Source elements that provide context about the originating endpoint.	

Element	Occurrence & Format	Description	Example
<source>	Mandatory	Only the Owning Party applies to this Event and is the same GLN as the <readPoint> represented in urn SGLN format.	<source type="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:0476543.00010.0</source>
<destinationList>	Mandatory	A list of Destination elements that provide context about the terminating endpoint of a business transfer.	
<destination>	Mandatory	Both the Owning Party (sold-to partner) and the Location (ship-to partner) GLNs are required in SGLN format.	<destination type="urn:epcglobal:cbv:sdt:**owning_party**">urn:epc:id:sgln:0473456.00001.0</destination><destination type="urn:epcglobal:cbv:sdt:**location**">urn:epc:id:sgln:0473456.00100.0</destination>
<tatmeen:reasonCode>	Mandatory	Custom reason code for shipping return. See Table 24 for possible codes.	<tatmeen:reasonCode>R01</tatmeen:reasonCode>

Table 23 Shipping Attributes – Shipping Return Event

Note that the <bizTransaction> is shown as optional as this reference has no significance to the Tatmeen solution. Recording this allows the MAH / Domestic Manufacturer / Licensing Agent to track event records against their own business document references.

Reason Code	Description
R01	Product does not match
R02	Quantity does not match
R03	Permit and Delivery Order mismatch
R04	Serial number mismatch
R05	Seal broken
R06	Packaging damaged
R07	Storage conditions violated
R08	Multiple supporting documents missing

Table 24 Shipping Return Reason Codes

5.6.3 EPCIS Receiving Event Attributes

The receiving event is used to control the flow of goods as they arrive at locations throughout the UAE market. Typically, the products are packaged onto pallets (SSCC), prior to shipping. This aids logistics transactions and logistics movements for supply chain partner warehouse efficiency. The transaction based messages therefore:

- Must follow the shipping events initiating the transfer of the top level hierarchy EPC and relevant packaged product items.

- Must report only the top-level hierarchy EPCs.

	Element	Occurrence & Format	Description	Example
Standard Fields	<eventTime>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Application asserts the event occurred.	<eventTime>2021-05-31T12:02:11.000Z</eventTime>
	<eventTimeZoneOffset>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	<eventTimeZoneOffset>+01:00</eventTimeZoneOffset>
	<epcList>	Mandatory	A list of one or more EPCs naming specific objects to which the event pertained. Only the highest level aggregated EPCs in the hierarchy are listed here.	<epcList> <epc>urn:epc:id:sscc:123456.02029914567</epc> </epcList>
	<action>	Mandatory	Constant Value from "xsd:schema" for the event type action (see Section 8 for overview).	<action>**OBSERVE**</action>
	<bizStep>	Mandatory	Constant value. The business step representing the event activity (see Section 8 for overview).	<bizStep>urn:epcglobal:cbv:bizstep:**receiving**</bizStep>
	<disposition>	Mandatory	Constant value. The disposition relevant to the business step representing the event activity (see Section 8 for overview).	<disposition>urn:epcglobal:cbv:disp:**in_progress**</disposition>
	<readpoint>	Mandatory	The read point must be the GLN in GS1 URN SGLN format of the MAH / Domestic Manufacturer / Licensing Agent.	<readPoint> <id>urn:epc:id:sgln:0356787.00040.0</id> </readPoint>

Element	Occurrence & Format	Description	Example
<bizLocation>	Mandatory	The business location must be the same SGLN as the <readPoint>.	<bizLocation><id>urn:epc:id:sgln:0356787.00040.0</id></bizLocation>
<bizTransaction List>	Optional	A list of business transactions that define the context of this event.	
<bizTransaction>	Optional	An identifier that denotes the specific shipping despatch advice reference between the MAH / Domestic Manufacturer / Licensing Agent and the recipient. Only the "recadv" reference is expected to be recorded in the Tatmeen solution when provided within the message. Format is: **bt:<GLN>:<reference>** where <GLN> is the MAH / Domestic Manufacturer / Licensing Agents own GLN and the <reference> is the MAH / Domestic Manufacturer / Licensing Agent unique reference.	<bizTransaction type="urn:epcglobal:cbv:btt:recadv">urn:epcglobal:cbv:bt:0356787000406:GR8015694</bizTransaction>
<source>	Optional	Optional parameter specifying the Sending Party represented in GS1 URN SGLN format.	<source type="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:123456.789101.0</source>
<destinationList>	Optional	A list of Destination elements that provide context about the terminating endpoint of a business transfer.	
<destination>	Optional	Both the Owning Party (sold-to partner) and the Location (ship-to partner) GLNs can optionally be provided in GS1 URN SGLN format.	<destination type="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:0333333.00000.0</destination><destination type="urn:epcglobal:cbv:sdt:location">urn:epc:id:sgln:0356787.00040.0</destination>

Table 25 Receiving Attributes – Receiving Event

Note that the <bizTransaction> is shown as optional as this reference has no significance to the Tatmeen solution. Recording this allows the product recipient to track event records against their own business document references.

5.6.4 EPCIS Receiving Returns Event Attributes

The receiving returns event is used to control the flow of goods as they are returned at locations throughout the UAE market. Typically, the products are packaged onto pallets (SSCC), prior to returned shipping. This aids logistics transactions and logistics movements for supply chain warehouse efficiency. The transaction based messages therefore:

- Must follow the shipping events initiating the transfer of the top level hierarchy EPC and relevant packaged product items.

- Must report only the top-level hierarchy EPCs.

	Element	Occurrence & Format	Description	Example
Standard Fields	<eventTime>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Applications asserts the event occurred.	<eventTime>2021-05-31T12:02:11.000Z</eventTime>
	<eventTimeZoneOffset>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	<eventTimeZoneOffset>+01:00</eventTimeZoneOffset>
	<epcList>	Mandatory	A list of one or more EPCs naming specific objects to which the event pertained. Only the highest level aggregated EPCs in the hierarchy are listed here.	<epcList><epc>urn:epc:id:sscc:0471234.1001234569</epc><epc>urn:epc:id:sscc:123456. 02029914567</epc></epcList>
	<action>	Mandatory	Constant Value from "xsd:schema" for the event type action (see Section 8 for overview).	<action>**OBSERVE**</action>
	<bizStep>	Mandatory	Constant value. The business step representing the event activity (see Section 8 for overview).	<bizStep>urn:epcglobal:cbv:bizstep:**receiving**</bizStep>

Element	Occurrence & Format	Description	Example
<disposition>	Mandatory	Constant value. The disposition relevant to the business step representing the event activity (see Section 8 for overview).	<disposition>urn:epcglobal:cbv:disp:**returned**</disposition>
<readpoint>	Mandatory	The read point must be the GLN in SGLN format of the MAH / Domestic Manufacturer / Licensing Agent.	<readPoint><id>urn:epc:id:sgln:0356787.00040.0</id></readPoint>
<bizLocation>	Mandatory	The business location must be the same GLN as the <readpoint>.	<bizLocation><id>urn:epc:id:sgln:0473456.00100.0</id></bizLocation>
<bizTransactionList>	Optional	A list of business transactions that define the context of this event.	
<bizTransaction>	Optional	An identifier that denotes the specific shipping despatch advice reference between the MAH / Domestic Manufacturer / Licensing Agent and the recipient. Only the "recadv" reference is expected to be recorded in the Tatmeen solution when provided within the message. Format is: **bt:<GLN>:<reference>** where <GLN> is the MAH / Domestic Manufacturer / Licensing Agents own GLN and the <reference> is the MAH / Domestic Manufacturer / Licensing Agents unique reference.	<bizTransaction type="urn:epcglobal:cbv:btt:recadv">urn:epcglobal:cbv:bt: 0473456001004:GR8015694</bizTransaction>
<extension><sourceList>	Optional	A list of Source elements that provide context about the originating endpoint.	
<source>	Optional	Optional parameter specifying the returned delivery Sending Party represented in GS1 URN SGLN format.	<source type="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:0476543.00010.0</source>

Element	Occurrence & Format	Description	Example
<destinationList >	Optional	A list of Destination elements that provide context about the terminating endpoint of a business transfer.	
<destination>	Optional	Both the Owning Party (sold-to partner) and the Location (ship-to partner) GLNs can optionally be provided in GS1 URN SGLN format.	<destination type="urn:epcglobal:cbv:sdt:**owning_p arty**">urn:epc:id:sgln:0473456.00001.0 </destination> <destination type="urn:epcglobal:cbv:sdt:**location**"> urn:epc:id:sgln:0473456.00100.0</dest ination>

Table 26 Receiving Attributes – Receiving Returns Event

Note that the <bizTransaction> is shown as optional as this reference has no significance to the Tatmeen solution. Recording this allows the supply chain partner to track event records against their own business document references.

5.6.5 EPCIS Product Transfer Cancellations

EPCIS events that are sent to the Tatmeen solution may be cancelled and the following four scenarios are possible.

- Shipping event cancellation

- Shipping Return event cancellation

- Receiving event cancellation

- Receiving Return event cancellation

To maintain the integrity of the Tatmeen repository a cancellation can only be made with reference to the original message and no subsequent event may have taken place for the tracked object/logistic unit identifiers

5.6.5.1 EPCIS Shipping Event Cancellation Attributes

The shipping cancellation event is used to cancel a specific shipping event as a complete event reversal. As per the Shipping Event, the transaction based messages therefore:

- Must follow the shipping event for the top level hierarchy EPC.

- Must precede any subsequent activity such as receiving at the destination location.

- Must report only the top-level hierarchy EPCs.

	Element	Occurrence & Format	Description	Example
Standard Fields	<eventTime>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Application asserts the event occurred.	<eventTime>2021-05-31T12:02:11.000Z</eventTime>
	<eventTimeZoneOffset>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	<eventTimeZoneOffset>+01:00</eventTimeZoneOffset>
	<epcList>	Mandatory	A list of one or more EPCs naming specific objects to which the event pertained. Only the highest level aggregated EPCs in the hierarchy are listed here.	<epcList> <epc>urn:epc:id:sscc:123456.02029914567</epc> </epcList>
	<action>	Mandatory	Constant Value from "xsd:schema" for the event type action (see Section 8 for overview).	<action>OBSERVE</action>
	<bizStep>	Mandatory	Constant value. The business step representing the event activity (see Section 8 for overview).	<bizStep>urn:epcglobal:cbv:bizstep:**void_shipping**</bizStep>
	<disposition>	Mandatory	Constant value. The disposition relevant to the business step representing the event activity (see Section 8 for overview).	<disposition>urn:epcglobal:cbv:disp:**in_progress**</disposition>
	<readPoint>	Mandatory	The read point must be the GLN in SGLN format of the MAH / Domestic Manufacturer / Licensing Agent.	<readPoint> <id>urn:epc:id:sgln:123456.789101.0</id> </readPoint>
	<bizLocation>	Mandatory	The business location must be the same GLN as the <readPoint>.	<bizLocation> <id>urn:epc:id:sgln:123456.789101.0</id> </bizLocation>
	<bizTransactionList>	Optional	A list of business transactions that define the context of this event.	
	<bizTransaction>	Optional	An identifier that denotes the specific shipping despatch advice reference between the MAH / Domestic	<bizTransaction type="urn:epcglobal:cbv:btt:desadv">urn:epcglobal:cbv:bt:0123456999995:0105</bizTransaction>

	Element	Occurrence & Format	Description	Example
			Manufacturer / Licensing Agent and the recipient. Only the "desadv" reference is recorded in the Tatmeen solution when provided within the message. Format is: **bt:\<GLN\>:\<reference\>** where \<GLN\> is the MAH / Domestic Manufacturer / Licensing Agents own GLN and the \<reference\> is the MAH / Domestic Manufacturer / Licensing Agents unique reference.	
Extension	\<extension\>\<sourceList\>	Optional	A list of Source elements that provide context about the originating endpoint.	
	\<source\>	Optional	Optional parameter specifying the Owning Party and is the same GLN as the \<readPoint\> represented in GS1 URN SGLN format.	\<source type="urn:epcglobal:cbv:sdt:owning_party"\>urn:epc:id:sgln:123456.789101.0\</source\>
	\<destinationList\>	Optional	A list of Destination elements that provide context about the terminating endpoint of the original business transfer being cancelled.	
	\<destination\>	Optional	Both the Owning Party (sold-to partner) and the Location (ship-to partner) GLNs can optionally be shown in GS1 URN SGLN format.	\<destination type="urn:epcglobal:cbv:sdt:owning_party"\>urn:epc:id:sgln:0333333.00000.0\</destination\> \<destination type="urn:epcglobal:cbv:sdt:location"\>urn:epc:id:sgln:0356787.00040.0\</destination\>
	\<tatmeen:instanceIdentifierReference\>	Mandatory	The message identifier of the original message that is being cancelled is required to be able to cancel.	\<tatmeen:instanceIdentifierReference\>**0kjulihdsafno5e2133s6uy**\</tatmeen:instanceIdentifierReference\>

Table 27 Shipping Cancellation Attributes – Void Shipping Event

Note that the \<bizTransaction\> is shown as optional as this reference has no significance to the Tatmeen solution. Recording this allows the supply chain partner to track event records against their own business document references.

5.6.5.2 EPCIS Shipping Return Cancellation Event Cancellation Attributes

The shipping return cancellation event is used to control the reversal of a returns shipment. As per the Shipping Returns Event, the transaction based messages therefore:

- Must follow the shipping returns event for the top level hierarchy EPC.

- Must precede any subsequent activity such as receiving returns at the destination location.

- Must report only the top-level hierarchy EPCs.

	Element	Occurrence & Format	Description	Example
Standard Fields	<eventTime>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Applications asserts the event occurred.	<eventTime>2021-05-31T12:02:11.000Z</eventTime>
	<eventTimeZoneOffset>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	<eventTimeZoneOffset>+01:00</eventTimeZoneOffset>
	<epcList>	Mandatory	A list of one or more EPCs naming specific objects to which the event pertained. Only the highest level aggregated EPCs in the hierarchy are listed here.	<epcList> <epc>urn:epc:id:sscc:0471234.1001234569</epc> <epc>urn:epc:id:sscc:123456.02029914567</epc> </epcList>
	<action>	Mandatory	Constant Value from "xsd:schema" for the event type action (see Section 8 for overview).	<action>OBSERVE</action>
	<bizStep>	Mandatory	Constant value. The business step representing the event activity (see Section 8 for overview).	<bizStep>urn:epcglobal:cbv:bizstep:**void_shipping**</bizStep>
	<disposition>	Mandatory	Constant value. The disposition relevant to the business step representing the event activity (see Section 8 for overview).	<disposition>urn:epcglobal:cbv:disp:**returned**</disposition>

	Element	Occurrence & Format	Description	Example
			This disposition is used within MoHAP Analytics to distinguish between this event and the event described in Section 5.6.5.1 for Shipping Cancellation.	
	\<readPoint\>	Mandatory	The read point must be the GLN in SGLN format of the MAH / Domestic Manufacturer / Licensing Agent.	\<readPoint\> \<id\>urn:epc:id:sgln:0473456.00100.0\</id\> \</readPoint\>
	\<bizLocation\>	Mandatory	The business location must be the same GLN as the \<readPoint\>.	\<bizLocation\> \<id\>urn:epc:id:sgln:0473456.00100.0\</id\> \</bizLocation\>
	\<bizTransaction List\>	Optional	A list of business transactions that define the context of this event.	
	\<bizTransaction \>	Optional	An identifier that denotes the specific shipping despatch advice and returns authorisation references between the MAH / Domestic Manufacturer / Licensing Agent and the recipient. The "desadv" reference and "rma" reference are recorded in the Tatmeen solution when provided within the message. Format is: **bt:\<GLN\>:\<reference\>** where \<GLN\> is the MAH / Domestic Manufacturer / Licensing Agents own GLN and the \<reference\> is the MAH / Domestic Manufacturer / Licensing Agents unique reference.	\<bizTransactionList\> \<bizTransaction type="urn:epcglobal:cbv:btt:**desadv**"\>urn:epcglobal:cbv:bt:0476543000102:0105\</bizTransaction\> \<bizTransaction type="urn:epcglobal:cbv:btt:**rma**"\>urn:epcglobal:cbv:bt:0476543000102:R0105\</bizTransaction\> \</bizTransactionList\>
Extension	\<extension\>\<so urceList\>	Optional	A list of Source elements that provide context about the originating endpoint.	
	\<source\>	Optional	Optional parameter specifying the Owning Party and is the same GLN as the \<readPoint\> represented in GS1 URN SGLN format.	\<source type="urn:epcglobal:cbv:sdt:owning_party"\>urn:epc:id:sgln:0476543.00010.0\</source\>

Element	Occurrence & Format	Description	Example
<destinationList>	Optional	A list of Destination elements that provide context about the terminating endpoint of the original business transfer being cancelled.	
<destination>	Optional	Both the Owning Party (sold-to partner) and the Location (ship-to partner) GLNs can optionally be shown in GS1 URN SGLN format.	<destination type="urn:epcglobal:cbv:sdt:**owning_party**">urn:epc:id:sgln:0473456.00001.0</destination><destination type="urn:epcglobal:cbv:sdt:**location**">urn:epc:id:sgln:0473456.00100.0</destination>
<tatmeen:instanceIdentifierReference>	Mandatory	The message identifier of the original message that is being cancelled is required to be able to cancel.	<tatmeen:instanceIdentifierReference>**0kjulihdsafno5e2133s6uy**</tatmeen:instanceIdentifierReference>

Table 28 Shipping Cancellation Attributes – Void Shipping Return Event

Note that the <bizTransaction> is shown as optional as this reference has no significance to the Tatmeen solution. Recording this allows the supply chain partner to track event records against their own business document references.

5.6.5.3 EPCIS Receiving Event Cancellation Attributes

The receiving cancellation event is used to cancel a specific receiving event as a complete event reversal. As per the receiving cancellation event, the transaction based messages therefore:

- Must follow the receiving event for the top level hierarchy EPC.
- Must precede any subsequent follow-on activities such as unpacking at the receiving location.
- Must report only the top-level hierarchy EPCs.

	Element	Occurrence & Format	Description	Example
Standard Fields	<eventTime>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Applications asserts the event occurred.	<eventTime>2021-05-31T12:02:11.000Z</eventTime>

Element	Occurrence & Format	Description	Example
<eventTimeZoneOffset>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	<eventTimeZoneOffset>+01:00</eventTimeZoneOffset>
<epcList>	Mandatory	A list of one or more EPCs naming specific objects to which the event pertained. Only the highest level aggregated EPCs in the hierarchy are listed here.	<epcList> <epc>urn:epc:id:sscc:123456.02029914567</epc></epcList>
<action>	Mandatory	Constant Value from "xsd:schema" for the event type action (see Section 8 for overview).	<action>**OBSERVE**</action>
<bizStep>	Mandatory	Constant value. The business step representing the event activity (see Section 8 for overview).	<bizStep>urn:tatmeen:cbv:bizstep:**void_receiving**</bizStep>
<disposition>	Mandatory	Constant value. The disposition relevant to the business step representing the event activity (see Section 8 for overview).	<disposition>urn:epcglobal:cbv:disp:**in_transit**</disposition>
<readpoint>	Mandatory	The read point must be the GLN in SGLN format of the MAH / Domestic Manufacturer / Licensing Agent.	<readPoint><id>urn:epc:id:sgln:0356787.00040.0</id></readPoint>
<bizTransactionList>	Optional	A list of business transactions that define the context of this event.	
<bizTransaction>	Optional	An identifier that denotes the specific shipping despatch advice reference between the MAH / Domestic Manufacturer / Licensing Agent and the recipient. Only the "recadv" reference is recorded in the Tatmeen solution when provided within the message. Format is: **bt:<GLN>:<reference>** where <GLN> is the MAH / Domestic Manufacturer / Licensing Agents own GLN and the <reference> is the MAH /	<bizTransaction type="urn:epcglobal:cbv:btt:recadv">urn:epcglobal:cbv:bt: 0356787000406:GR8015694</bizTransaction>

	Element	Occurrence & Format	Description	Example
Extension			Domestic Manufacturer / Licensing Agents unique reference.	
	<extension><sourceList>	Mandatory	A list of Source elements that provides context about the originating endpoint.	<extension><sourceList>
	<source>	Optional	Optional parameter specifying the Sending Party represented in GS1 URN SGLN format.	<source type="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:123456.789101.0</source>
	<destinationList>	Optional	A list of Destination elements that provide context about the terminating endpoint of a business transfer.	
	<destination>	Optional	Both the Owning Party (sold-to partner) and the Location (ship-to partner) GLNs can optionally be provided in GS1 URN SGLN format.	<destination type="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:0333333.00000.0</destination> <destination type="urn:epcglobal:cbv:sdt:location">urn:epc:id:sgln:0356787.00040.0</destination>
	<tatmeen:instanceIdentifierReference>	Mandatory	This is the message identifier reference from the original Receiving Event message that is being cancelled.	<tatmeen:instanceIdentifierReference>**0kjulihdsafno5e2133s6uy**</tatmeen:instanceIdentifierReference>

Table 29 Receiving Cancellation Event – Void Receiving Attributes

Note that the <bizTransaction> is shown as optional as this reference has no significance to the Tatmeen solution. Recording this allows the supply chain partner to track event records against their own business document references.

5.6.5.4 EPCIS Receiving Returns Event Cancellation Attributes

The receiving returns cancellation event is used to cancel a specific receiving returns event as a complete event reversal. As per the receiving returns cancellation event, the transaction based messages therefore:

- Must follow the receiving returns event for the top level hierarchy EPC.

- Must precede any subsequent follow-on activities such as unpacking at the receiving location.
- Must report only the top-level hierarchy EPCs.

	Element	Occurrence & Format	Description	Example
Standard Fields	<eventTime>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Applications asserts the event occurred.	<eventTime>2021-05-31T12:02:11.000Z</eventTime>
	<eventTimeZoneOffset>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	<eventTimeZoneOffset>+01:00</eventTimeZoneOffset>
	<epcList>	Mandatory	A list of one or more EPCs naming specific objects to which the event pertained. Only the highest level aggregated EPCs in the hierarchy are listed here.	<epcList> <epc>urn:epc:id:sscc:0471234.1001234569</epc> <epc>urn:epc:id:sscc:123456.02029914567</epc> </epcList>
	<action>	Mandatory	Constant Value from "xsd:schema" for the event type action (see Section 8 for overview).	<action>**OBSERVE**</action>
	<bizStep>	Mandatory	Constant value. The business step representing the event activity (see Section 8 for overview).	<bizStep>urn:tatmeen:cbv:bizstep:**void_receiving**</bizStep>
	<disposition>	Mandatory	Constant value. The disposition relevant to the business step representing the event activity (see Section 8 for overview). This disposition is used within MoHAP Analytics to distinguish between this event and the event described in Section 5.6.5.1 for Receiving Cancellation.	<disposition>urn:epcglobal:cbv:disp:**returned**</disposition>
	<readpoint>	Mandatory	The read point must be the GLN in SGLN format of the MAH / Domestic Manufacturer / Licensing Agent.	<readPoint> <id>urn:epc:id:sgln:0356787.00040.0</id> </readPoint>

	Element	Occurrence & Format	Description	Example
	<bizTransaction List>	Optional	A list of business transactions that define the context of this event.	
	<bizTransaction >	Optional	An identifier that denotes the specific shipping despatch advice reference between the MAH / Domestic Manufacturer / Licensing Agent and the recipient. Only the "recadv" reference is recorded in the Tatmeen solution when provided within the message. Format is: **bt:<GLN>:<reference>** where <GLN> is the MAH / Domestic Manufacturer / Licensing Agents own GLN and the <reference> is the MAH / Domestic Manufacturer / Licensing Agents unique reference.	<bizTransaction type="urn:epcglobal:cbv:btt:recadv">urn:epcglobal:cbv:bt: 0473456001004:GR8015694</bizTransaction>
Extension	<extension><so urceList>	Mandatory	A list of Source elements that provide context about the originating endpoint.	
	<source>	Optional	Optional parameter specifying the Sending Party represented in GS1 URN SGLN format.	<source type="urn:epcglobal:cbv:sdt:owning_p arty">urn:epc:id:sgln:0476543.00010.0 </source>
	<destinationList >	Optional	A list of Destination elements that provide context about the terminating endpoint of a business transfer.	
	<destination>	Optional	Both the Owning Party (sold-to partner) and the Location (ship-to partner) GLNs can optionally be provided in GS1 URN SGLN format.	<destination type="urn:epcglobal:cbv:sdt:**owning_p arty**">urn:epc:id:sgln:0473456.00001.0 </destination> <destination type="urn:epcglobal:cbv:sdt:**location**">urn:epc:id:sgln:0473456.00100.0</destination>
	<tatmeen:instan ceIdentifierRefe rence>	Mandatory	This is the message identifier reference from the original Receiving Return Event message that is being cancelled.	<tatmeen:instanceIdentifierReference> 0kjulihdsafno5e2133s6uy</tatmeen:instanceIdentifierReference>

Table 30 Receiving Return Cancellation Event Attributes

Note that the <bizTransaction> is shown as optional as this reference has no significance to the Tatmeen solution. Recording this allows the supply chain partner to track event records against their own business document references.

5.7 EPCIS for Status Change

This section covers all status update definitions:

- Damaged Goods Event
- Stolen Goods Event
- Exportation (from the UAE) Event
- Lost/Missing Goods Event

5.7.1 EPCIS Damaged Goods Event

	Element	Occurrence & Format	Description	Example
Standard Fields	<eventTime>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Applications asserts the event occurred.	<eventTime>2021-05-31T12:02:11.000Z</eventTime>
	<eventTimeZoneOffset>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	<eventTimeZoneOffset>+01:00</eventTimeZoneOffset>
	<epcList>	Mandatory	A list of one or more EPCs naming specific objects to which the event pertained. Only the highest level aggregated EPCs in the hierarchy are listed here.	<epcList> <epc>urn:epc:id:sgtin:123456.0202991.AFA0UM128F4C</epc> </epcList>
	<action>	Mandatory	Constant Value from "xsd:schema" for the event type action (see Section 8 for overview).	<action>**DELETE**</action>
	<bizStep>	Mandatory	Constant value. The business step representing the event activity (see Section 8 for overview).	<bizStep>urn:epcglobal:cbv:bizstep:d**ecommissioning**</bizStep>

	Element	Occurrence & Format	Description	Example
	<disposition>	Mandatory	Constant Value (see Section 8 for overview).	<disposition>urn:epcglobal:cbv:disp:**damaged**</disposition>
	<readpoint>	Mandatory	The read point must be the GLN in urn SGLN format where the stock is located and applies to all objects in the <epcList>.	<readPoint><id>urn:epc:id:sgln:123456.789101.0</id></readPoint>
Ext.	<tatmeen:reasonCode>	Mandatory	Custom reason code for reported damage, see Table 32.	<tatmeen:reasonCode>D01</tatmeen:reasonCode>

Table 31 Damaged Attributes

Reason Code	Description
D01	Broken
D02	Unfolded
D03	Torn
D04	2D Matrix not readable
D05	Smashed
D06	Damage due To liquid spill
D07	Other

Table 32 Damage Reason Codes

5.7.2 EPCIS Stolen Goods Event

	Element	Occurrence & Format	Description	Example
Standard Fields	<eventTime>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Application asserts the event occurred.	<eventTime>2021-05-31T12:02:11.000Z</eventTime>

	Element	Occurrence & Format	Description	Example
	\<eventTimeZoneOffset>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	\<eventTimeZoneOffset>+01:00\</eventTimeZoneOffset>
	\<epcList>	Mandatory	A list of one or more EPCs naming specific objects to which the event pertained. Only the highest level aggregated EPCs in the hierarchy are listed here.	\<epcList> \<epc>urn:epc:id:sgtin:123456.0202991.AFA0UM128F4C\</epc> \</epcList>
	\<action>	Mandatory	Constant Value from "xsd:schema" for the event type action (see Section 8 for overview).	\<action>**DELETE**\</action>
	\<bizStep>	Mandatory	Constant value. The business step representing the event activity (see Section 8 for overview).	\<bizStep>urn:epcglobal:cbv:bizstep:**decommissioning**\</bizStep>
	\<disposition>	Mandatory	Constant value that qualifies the event activity (see Section 8 for overview).	\<disposition>urn:epcglobal:cbv:disp:**stolen**\</disposition>
	\<readpoint>	Mandatory	The read point must be the GLN in urn SGLN format where the stock is located and applies to all objects in the \<epcList>.	\<readPoint> \<id>urn:epc:id:sgln:123456.789101.0\</id> \</readPoint>

Table 33 Stolen Attributes

5.7.3 EPCIS Exportation Event

	Element	Occurrence & Format	Description	Example
Standard Fields	\<eventTime>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Application asserts the event occurred.	\<eventTime>2021-05-31T12:02:11.000Z\</eventTime>
	\<eventTimeZoneOffset>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	\<eventTimeZoneOffset>+01:00\</eventTimeZoneOffset>

	Element	Occurrence & Format	Description	Example
	\<epcList\>	Mandatory	A list of one or more EPCs naming specific objects to which the event pertained. Only the highest level aggregated EPCs in the hierarchy are listed here.	\<epcList\> \<epc\>urn:epc:id:sgtin:123456.0202991.AFA0UM128F4C\</epc\> \</epcList\>
	\<action\>	Mandatory	Constant Value from "xsd:schema" for the event type action (see Section 8 for overview).	\<action\>**DELETE**\</action\>
	\<bizStep\>	Mandatory	Constant value. The business step representing the event activity (see Section 8 for overview).	\<bizStep\>urn:epcglobal:cbv:bizstep:**decommissioning**\</bizStep\>
	\<disposition\>	Mandatory	Constant value that qualifies the event activity (see Section 8 for overview).	\<disposition\>urn:epcglobal:cbv:disp:**non_sellable_other**\</disposition\>
	\<readpoint\>	Mandatory	The read point must be the GLN in urn SGLN format where the stock is located and applies to all objects in the \<epcList\>.	\<readPoint\> \<id\>urn:epc:id:sgln:123456.789101.0\</id\> \</readPoint\>

Table 34 Export Attributes

5.7.4 EPCIS Lost/Missing Goods Event

	Element	Occurrence & Format	Description	Example
Standard Fields	\<eventTime\>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Applications asserts the event occurred.	\<eventTime\>2021-05-31T12:02:11.000Z\</eventTime\>
	\<eventTimeZoneOffset\>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	\<eventTimeZoneOffset\>+01:00\</eventTimeZoneOffset\>
	\<epcList\>	Mandatory	A list of one or more EPCs naming specific objects to which the event pertained.	\<epcList\> \<epc\>urn:epc:id:sgtin:123456.0202991.AFA0UM128F4C\</epc\> \</epcList\>

	Element	Occurrence & Format	Description	Example
			Only the highest level aggregated EPCs in the hierarchy are listed here.	
	<action>	Mandatory	Constant Value from "xsd:schema" for the event type action (see Section 8 for overview).	<action>**DELETE**</action>
	<bizStep>	Mandatory	Constant value that is the business step representing the event activity (see Section 8 for overview).	<bizStep>urn:epcglobal:cbv:bizstep:**decommissioning**</bizStep>
	<disposition>	Mandatory	Constant value that qualifies the event activity (see Section 8 for overview).	<disposition>urn:epcglobal:cbv:disp:**inactive**</disposition>
	<readpoint>	Mandatory	The read point must be the GLN in urn SGLN format where the stock is located and applies to all objects in the <epcList>.	<readPoint> <id>urn:epc:id:sgln:123456.789101.0</id> </readPoint>

Table 35 Lost Attributes

5.8 EPCIS for Batch Recall

5.8.1 EPCIS Batch Recall Initiation Attributes

The Batch recall initiation event is the first step in the batch recall process. Should the MAH / Licensing Agent for a specific regulated product determine that a specific batch of that product should be recalled, then the MAH / Licensing Agent is permitted to initiate this process for the specific product batch.

	Element	Occurrence & Format	Description	Example
Standard Fields	<eventTime>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Applications asserts the event occurred.	<eventTime>2021-05-31T12:02:11.000Z</eventTime>
	<eventTimeZoneOffset>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	<eventTimeZoneOffset>+01:00</eventTimeZoneOffset>
	<epcList>	Mandatory	An empty list representing all objects within the batch.	<epcList/>

	Element	Occurrence & Format	Description	Example
	<action>	Mandatory	Constant Value from "xsd:schema" for the event type action.	<action>OBSERVE</action>
	<bizStep>	Mandatory	Constant value. The business step representing the event activity (see Section 8 for overview).	<bizStep>urn:tatmeen:cbv:bizstep:**updating**</bizStep>
	<disposition>	Mandatory	Constant Value.	<disposition>urn:tatmeen:cbv:disp:**recall_init**</disposition>
	<readPoint>	Mandatory	The read point must be the GLN in urn SGLN format of the MAH / Domestic Manufacturer / Licensing Agent assigned to the product.	<readPoint> <id>urn:epc:id:sgln:123456.789101.0</id> </readPoint>
Extension	<quantityElement>	Mandatory	This element contains the Batch / Lot reference for the product and is represented in the form of an LGTIN, i.e., a serialized LOT. The LGTIN does not contain any quantity as this message is intended to apply to ALL of the available product for this event irrespective of the location. This LGTIN represents: • GTIN: 3012345055123 • LOT: LOTTEST1	<quantityList> <quantityElement> <epcClass>urn:epc:class:lgtin:0123456.305512.LOTTEST1</epcClass> </quantityElement> </quantityList>
	<tatmeen:recalled>	Mandatory	Constant value "I" to set the batch recall *initiation* status	<tatmeen:recalled>I</tatmeen:recalled>
	<tatmeen:reference>	Mandatory	Required reference of the RECALL initiation lodged with MoHAP and must apply to the complete Batch.	<tatmeen:reference>**MOHAP/O/22/0986478**</tatmeen:reference>

Table 36 Batch Recall Attributes – Initiate Event

5.8.1 EPCIS Batch Recall Initiate Cancellation

This activity can only be done through the Tatmeen Portal to ensure the correct alignment of the activity.

The Batch recall initiation event is the first step in the batch recall process. Should the MAH / Licensing Agent for a specific regulated product determine that a specific batch of that product should be recalled, then the MAH / Licensing Agent is permitted to initiate this process for the specific product batch.

	Element	Occurrence & Format	Description	Example
Standard Fields	\<eventTime\>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Applications asserts the event occurred.	\<eventTime\>2021-05-31T12:02:11.000Z\</eventTime\>
	\<eventTimeZoneOffset\>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	\<eventTimeZoneOffset\>+01:00\</eventTimeZoneOffset\>
	\<epcList\>	Mandatory	An empty list representing all objects within the batch.	\<epcList/\>
	\<action\>	Mandatory	Constant Value from "xsd:schema" for the event type action.	\<action\>OBSERVE\</action\>
	\<bizStep\>	Mandatory	Constant value. The business step representing the event activity (see Section 8 for overview).	\<bizStep\>urn:tatmeen:cbv:bizstep:**updating**\</bizStep\>
	\<disposition\>	Mandatory	Constant Value.	\<disposition\>urn:tatmeen:cbv:disp:**recall_init**\</disposition\>
	\<readPoint\>	Mandatory	The read point must be the GLN in urn SGLN format of the MAH / Domestic Manufacturer / Licensing Agent that initiated the Batch Recall.	\<readPoint\> \<id\>urn:epc:id:sgln:123456.789101.0\</id\> \</readPoint\>
Extension	\<quantityElement\>	Mandatory	This element contains the Batch / Lot reference for the product and is represented in the form of an LGTIN, i.e., a serialized LOT. The LGTIN does not contain any quantity as this message is intended to apply to ALL of the available product for this event irrespective of the location. This LGTIN represents: • GTIN: 3012345055123 • LOT: LOTTEST1	\<quantityList\> \<quantityElement\> \<epcClass\>urn:epc:class:lgtin:0123456.305512.LOTTEST1\</epcClass\> \</quantityElement\> \</quantityList\>
	\<tatmeen:recalled\>	Mandatory	Constant value "I" to set the batch recall *initiation* status	\<tatmeen:recalled\>I\</tatmeen:recalled\>
	\<tatmeen:reference\>	Mandatory	Required reference of the RECALL initiation lodged with MoHAP and must apply to the complete Batch.	\<tatmeen:reference\>**MOHAP/O/22/0986478**\</tatmeen:reference\>

Table 37 Batch Recall Attributes – Initiate Cancellation Event

5.8.2 EPCIS Batch Recall Completion Attributes

The shipping event is used to control the flow of goods as they are shipped from the manufacturer to the UAE market. Typically, the products are packaged onto pallets (SSCC), prior to shipping. This aids logistics transactions and logistics movements for warehouse efficiency. The transaction based messages, therefore:

- Must follow the aggregation events for the top level hierarchy EPC and relevant packaged product items.

- Must report only the top-level hierarchy EPCs.

	Element	Occurrence & Format	Description	Example
Standard Fields	<eventTime>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Applications asserts the event occurred.	<eventTime>2021-05-31T12:02:11.000Z</eventTime>
	<eventTimeZoneOffset>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	<eventTimeZoneOffset>+01:00</eventTimeZoneOffset>
	<epcList>	Mandatory	An empty list representing all objects within the batch.	<epcList/>
	<action>	Mandatory	Constant Value from "xsd:schema" for the event type action (see Section 8 for overview).	<action>OBSERVE</action>
	<bizStep>	Mandatory	Constant value. The business step representing the event activity (see Section 8 for overview).	<bizStep>urn:tatmeen:cbv:bizstep:**updating**</bizStep>
	<disposition>	Mandatory	Constant Value (see Section 8 for overview).	<disposition>urn:tatmeen:cbv:disp:**recall_init**</disposition>
	<readPoint>	Mandatory	The read point must be the GLN in urn SGLN format of the MAH / Domestic Manufacturer / Licensing Agent that initiated the Batch Recall.	<readPoint> <id>urn:epc:id:sgln:123456.789101.0</id> </readPoint>
Extension	<quantityElement>	Mandatory	This element contains the Batch / Lot reference for the product and is represented in the form of an LGTIN, i.e., a serialized LOT. The LGTIN does not contain any quantity as this message is	<quantityList> <quantityElement> <epcClass>urn:epc:class:lgtin:0123456.305512.LOTTEST1</epcClass>

Element	Occurrence & Format	Description	Example
		intended to apply to ALL of the available product for this event irrespective of the location. This LGTIN represents: • GTIN: 3012345055123 • LOT: LOTTEST1	</quantityElement> </quantityList>
<tatmeen:recalled>	Mandatory	Constant value "X" to set the batch recall *completion* status	<tatmeen:recalled>X</tatmeen:recalled>

Table 38 Batch Recall Attributes – Completion Event

5.9 EPCIS for Destruction

The MAH / Domestic Manufacturer / Licensing Agent may under certain conditions be part of a product Destruction Process.

- Destruction Initiation

- Destruction Initiation Cancel

- Destruction Completion

5.9.1 EPCIS Destruction Initiation Attributes

The Destruction Initiation event is the first step in the Destruction process and is limited the product items that are known at a single location. The Destruction Initiation process requires that a MoHAP reference has been issued for the destruction of specific product items at the location.

	Element	Occurrence & Format	Description	Example
Standard Fields	<eventTime>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Applications asserts the event occurred.	<eventTime>2021-05-31T12:02:11.000Z</eventTime>
	<eventTimeZoneOffset>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	<eventTimeZoneOffset>+01:00</eventTimeZoneOffset>
	<epcList>	Mandatory	A list of one or more EPCs naming specific objects to which the event	<epcList>

Element	Occurrence & Format	Description	Example
		pertained. Only the highest level aggregated EPCs in the hierarchy are listed here.	<epc>urn:epc:id:sgtin: 123456.0202991.AFA0UM128F4C </epc> <epc>urn:epc:id:sscc:123456. 02029914567</epc> </epcList>
<action>	Mandatory	Constant Value "OBSERVE" from "xsd:schema" for the event type action (see Section 8 for overview).	<action>OBSERVE</action>
<bizStep>	Mandatory	Constant custom value, "updating". The business step representing the event activity (see Section 8 for overview).	<bizStep>urn:tatmeen:cbv:bizstep:**updating**</bizStep>
<disposition>	Mandatory	Constant custom value, "destroy_init". The disposition qualifying the event activity (see Section 8 for overview).	<disposition>urn:tatmeen:cbv:disp:**destroy_init**</disposition>
<readPoint>	Mandatory	The read point must be the GLN in GS1 URN SGLN format where the stock is located and applies to all objects in the <epcList>.	<readPoint><id>urn:epc:id:sgln:123456.789101.0</id></readPoint>
<bizLocation>	Mandatory	The business location must be the same GLN in urn SGLN format as the <readpoint>.	<bizLocation><id>urn:epc:id:sgln:123456.789101.0</id></bizLocation>
Extension <tatmeen:destroy_sgtin>	Mandatory	Constant value "I" to set the sgtin destruction *initiation* status. This value is mandatory.	<tatmeen:destroy_sgtin>I</tatmeen:destroy_sgtin>
<tatmeen:destroy_sscc>	Conditional	Constant value "I" to set the sscc destruction *initiation* status. This value is mandatory when the <epcList> contains any sscc objects.	<tatmeen:destroy_sscc>I</tatmeen:destroy_sscc>
<tatmeen:reference>	Mandatory	Required reference of the DESTRUCTION initiation lodged with MoHAP and applicable to all objects in the <epcList>.	<tatmeen:reference>**MOHAP/DNOTE/22/123456**</tatmeen:reference>
<tatmeen:reasonCode>	Mandatory	Custom reason code for Destruction. See Table 40 for possible codes.	<tatmeen:reasonCode>**W02**</tatmeen:reasonCode>

Table 39 Batch Recall Attributes – Initiate Event

The following table contains the possible reason codes for Destruction of product items.

Reason Code	Description
W01	Item expired
W02	Improper storage
W03	Exceeded environmental conditions
W04	Contaminated

Table 40 Destruction Reason Codes

5.9.2 EPCIS Destruction Initiate Cancellation Attributes

The Destruction Initiate can be cancelled which will then allow the Product to become active and revert to the status prior to the Destruction Initiation. The cancellation is always done with reference to the originating initiation message.

	Element	Occurrence & Format	Description	Example
Standard Fields	<eventTime>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Applications asserts the event occurred.	<eventTime>2021-05-31T12:02:11.000Z</eventTime>
	<eventTimeZoneOffset>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	<eventTimeZoneOffset>+01:00</eventTimeZoneOffset>
	<epcList>	Mandatory	A list of one or more EPCs naming specific objects to which the event pertained. Only the highest level aggregated EPCs in the hierarchy are listed here.	<epcList> <epc>urn:epc:id:sgtin: 123456.0202991.AFA0UM128F4C</epc> <epc>urn:epc:id:sscc:123456. 02029914567</epc> </epcList>
	<action>	Mandatory	Constant Value "OBSERVE" from "xsd:schema" for the event type action (see Section 8 for overview).	<action>OBSERVE</action>
	<bizStep>	Mandatory	Constant custom business step value, "updating", representing the event activity (see Section 8 for overview).	<bizStep>urn:tatmeen:cbv:bizstep:**updating**</bizStep>
	<disposition>	Mandatory	Constant custom disposition value, "destroy_init_cancel", qualifying the	<disposition>urn:tatmeen:cbv:disp:**destroy_init_cancel**</disposition>

	Element	Occurrence & Format	Description	Example
			event activity (see Section 8 for overview).	
	\<readPoint\>	Mandatory	The read point must be the GLN in urn SGLN format where the stock is located and applies to all objects in the \<epcList\>.	\<readPoint\> \<id\>urn:epc:id:sgln:123456.789101.0 \</id\> \</readPoint\>
	\<bizLocation\>	Mandatory	The business location must be the same GLN in GS1 URN SGLN format as the \<readPoint\>.	\<bizLocation\> \<id\>urn:epc:id:sgln:123456.789101.0 \</id\> \</bizLocation\>
Extension	\<tatmeen:destroy_sgtin\>	Mandatory	Constant value "C" to set the sgtin destruction process "***initiation cancel***" status. This value is <u>mandatory</u>.	\<tatmeen:destroy_sgtin\>C\</tatmeen: destroy_sgtin\>
	\<tatmeen:destroy_sscc\>	Conditional	Constant value "C" to set the sscc destruction process "***initiation cancel***" status. This value is <u>mandatory</u> when the \<epcList\> contains any sscc objects.	\<tatmeen:destroy_sscc\>C\</tatmeen: destroy_sscc\>
	\<tatmeen:instanceIdentifierReference\>	Mandatory	Required message identifier of the originating ***initiation*** message to cancel with a reversal event.	\<tatmeen:instanceIdentifierReference\>**2f1bdabdfaee464c87e1aeb7e586e6ab**\</tatmeen:instanceIdentifierReference\>

Table 41 Destruction Attributes – Initiation Cancel Event

5.9.3 EPCIS Destruction Completion Attributes

The Destruction Completion event is the last user step in the product item destruction process. This process step cannot be reversed as the Tatmeen system closes out the process with post-event processing.

	Element	Occurrence & Format	Description	Example
Standard Fields	\<eventTime\>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS Capturing Applications asserts the event occurred.	\<eventTime\>2021-05-31T12:02:11.000Z\</eventTime\>
	\<eventTimeZoneOffset\>	Mandatory	The UTC time zone offset, including daylight saving considerations, in effect at the time and place the event occurred.	\<eventTimeZoneOffset\>+01:00\</eventTimeZoneOffset\>

Element	Occurrence & Format	Description	Example
<epcList>	Mandatory	A list of one or more EPCs naming specific objects to which the event pertained. Only the highest level aggregated EPCs in the hierarchy are listed here.	<epcList> <epc>urn:epc:id:sgtin: 123456.0202991.AFA0UM128F4C</epc> <epc>urn:epc:id:sscc:123456. 02029914567</epc> </epcList>
<action>	Mandatory	Constant Value "DELETE" from "xsd:schema" for the event type action (see Section 8 for overview).	<action>DELETE</action>
<bizStep>	Mandatory	Constant standard business step value, "destroying", representing the event activity (see Section 8 for overview).	<bizStep>urn:epcglobal:cbv:bizstep:**destroying**</bizStep>
<disposition>	Mandatory	Constant standard disposition value, "destroyed", qualifying the event activity (see Section 8 for overview).	<disposition>urn:epcglobal:cbv:disp:**destroyed**</disposition>
<readPoint>	Mandatory	The read point must be the GLN in urn SGLN format where the stock is located and applies to all objects in the <epcList>.	<readPoint> <id>urn:epc:id:sgln:123456.789101.0</id> </readPoint>
Extension <tatmeen:destroy_sgtin>	Mandatory	Constant value "X" to set the sgtin destruction process **completion** status. This value is <u>mandatory</u>.	<tatmeen:destroy_sgtin>X</tatmeen:destroy_sgtin>
<tatmeen:destroy_sscc>	Conditional	Constant value "X" to set the sscc destruction process **completion** status. This value is <u>mandatory</u> when the <epcList> contains any sscc objects.	<tatmeen:destroy_sscc>X</tatmeen:destroy_sscc>

Table 42 Destruction Attributes – Completion Event

5.10   EPCIS Message Technical Response

The following technical responses will provide immediate confirmation regarding delivery of the EPCIS event list message described in the previous sections, to the Tatmeen solution. The Tatmeen system returns standard HTTP / HTTPS codes to the MAH / Domestic Manufacturer (or relevant technical representative). The response codes follow the general standard where:

- 200-299 indicate success / information,

- 300-399 indicate redirection,

- 400-499 are technical errors, and

- 500-599 are application errors.

Solution example codes are shown in the table below with custom messages codes also provided for efficient error handling. Once the complete set of solution technical and application codes is finalised, this document shall be updated and reissued.

The messages detailing the errors and rejections on data will be sent from Tatmeen Systems to the manufacturer when using the message status query service.

Code	Message Code	Type	Action	Description
401	Standard	Auth Error	Retry	Authorization Error
404	Standard	Service Error	Retry	Service Not Found
202	I001	Information	N/A	OK
500	E001	Internal Error	Retry	Tatmeen applications not reachable
500	E002	Internal Error	No Retry	Invalid Import Permit
500	E003	Internal Error	No Retry	Message Validation Error

Table 43 Technical Acknowledgments

5.11   EPCIS: Examples

In this section, there are two examples with each example including the three types of events related to a specific shipment.

- Commissioning

- Aggregation

- Shipping

5.11.1 Importation into the UAE

The first example represents a registered partner initiating importation of goods into the UAE and is based on the Scenario 2 described in Section 3.1.

```
<epcis:EPCISDocument schemaVersion="1.2" creationDate="2021-05-31T15:12:05Z"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:cbvmda="urn:epcglobal:cbv:mda">
xmlns:tatmeen="http://tatmeen.ae/epcis/">
```

```
<EPCISHeader>
        <sbdh:StandardBusinessDocumentHeader>
                <sbdh:HeaderVersion>1.3</sbdh:HeaderVersion>
                <sbdh:Sender>
                        <sbdh:Identifier Authority="GS1">0123456789005</sbdh:Identifier>
                </sbdh:Sender>
                <sbdh:Receiver>
                        <sbdh:Identifier Authority="GS1">6297001273005</sbdh:Identifier>
                </sbdh:Receiver>
                <sbdh:DocumentIdentification>
                        <sbdh:Standard>EPCglobal</sbdh:Standard>
                        <sbdh:TypeVersion>1.0</sbdh:TypeVersion>

        <sbdh:InstanceIdentifier>2f1bdabdfaee464c87e1aeb7e586e6ab</sbdh:InstanceIdentifier>
                        <sbdh:Type>Events</sbdh:Type>
                        <sbdh:CreationDateAndTime>2021-05-
31T15:12:05.000Z</sbdh:CreationDateAndTime>
                </sbdh:DocumentIdentification>
        </sbdh:StandardBusinessDocumentHeader>
</EPCISHeader>
<EPCISBody>
        <EventList>
                <ObjectEvent>
                        <!--Commissioning of SGTIN's/PRODUCTS-->
                        <eventTime>2021-05-31T12:02:11.000Z</eventTime>
                        <eventTimeZoneOffset>+03:00</eventTimeZoneOffset>
                        <epcList>
                                <epc>urn:epc:id:sgtin:0123456.005512.01QA00001TY</epc>
                                <epc>urn:epc:id:sgtin:0123456.005512.011ABRG0001</epc>
                                <epc>urn:epc:id:sgtin:0123456.005512.01ASAS000Q1</epc>
                                <epc>urn:epc:id:sgtin:0123456.005512.01TDFFSF5RE</epc>
                                <epc>urn:epc:id:sgtin:0123456.005512.01GDGDGDG34</epc>
                                <epc>urn:epc:id:sgtin:0123456.005512.01100000003</epc>
                                <epc>urn:epc:id:sgtin:0123456.005512.01YUTTYYEQF</epc>
                                <epc>urn:epc:id:sgtin:0123456.005512.014545RF98F</epc>
                                <epc>urn:epc:id:sgtin:0123456.005512.01TYEWEW56E</epc>
                                <epc>urn:epc:id:sgtin:0123456.005512.01HNCEFGT33</epc>
                                <epc>urn:epc:id:sgtin:0123456.005512.01YIQWQWWG6</epc>
                                <epc>urn:epc:id:sgtin:0123456.005512.01RQYURTBHR</epc>
                                <epc>urn:epc:id:sgtin:0123456.005512.01RFFWEW557</epc>
                                <epc>urn:epc:id:sgtin:0123456.005512.01JFGSDFBNJ</epc>
                                <epc>urn:epc:id:sgtin:0123456.005512.01TRFDFFSDF</epc>
                                <epc>urn:epc:id:sgtin:0123456.005512.01TEFFEREFV</epc>
                        </epcList>
```

```
                                    <action>ADD</action>
                                    <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
                                    <disposition>urn:epcglobal:cbv:disp:active</disposition>
                                    <readPoint>
                                            <id>urn:epc:id:sgln:0123456.99999.0</id>
                                    </readPoint>
                                    <bizLocation>
                                            <id>urn:epc:id:sgln:0123456.99999.0</id>
                                    </bizLocation>
                                    <extension>
                                            <ilmd>
                                                    <cbvmda:lotNumber>LOT123456</cbvmda:lotNumber>
                                                    <cbvmda:itemExpirationDate>2023-02-28
                                                    </cbvmda:itemExpirationDate>
                                            </ilmd>
                                    </extension>
                                    <!—Additional attributes -->
                                    <tatmeen:lotManufacturingDate>2021-02-28
                                    </tatmeen:lotManufacturingDate>
                                    <tatmeen:manufacturingOrigin>I</tatmeen:manufacturingOrigin>
                                    <!-- Either Import Permit or Local Sales Permit in commissioning event -->
                                    <!—For importation, this example uses Import Permit -->
                                    <tatmeen:shipmentPermit>SHP/MP/48913/2020
                                    </tatmeen:shipmentPermit>
                            </ObjectEvent>
                            <ObjectEvent>
                                    <!-- COMMISSION EVENT FOR FULL SHIPPER CASE -->
                                    <eventTime>2021-05-31T12:02:15.000Z</eventTime>
                                    <eventTimeZoneOffset>+03:00</eventTimeZoneOffset>
                                    <epcList>
                                            <epc>urn:epc:id:sgtin:0123456.305512.Y4QOQBH0VVW1</epc>
                                            <epc>urn:epc:id:sgtin:0123456.305512.A4QIY780KL6M</epc>
                                    </epcList>
                                    <action>ADD</action>
                                    <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
                                    <disposition>urn:epcglobal:cbv:disp:active</disposition>
                                    <readPoint>
                                            <id>urn:epc:id:sgln:0123456.99999.0</id>
                                    </readPoint>
                                    <bizLocation>
                                            <id>urn:epc:id:sgln:0123456.99999.0</id>
                                    </bizLocation>
                                    <extension>
                                            <ilmd>
```

```
                                                <cbvmda:lotNumber>LOT123456</cbvmda:lotNumber>
                                                <cbvmda:itemExpirationDate>2023-02-28
                                                </cbvmda:itemExpirationDate>
                                </ilmd>
                        </extension>
                        <!—Additional attributes -->
                        <tatmeen:lotManufacturingDate>2021-02-28
                        </tatmeen:lotManufacturingDate>
                        <tatmeen:manufacturingOrigin>I</tatmeen:manufacturingOrigin>
                        <!-- Either Import Permit or Local Sales Permit in commissioning event -->
                        <!—For importation, this example uses Import Permit -->
                        <tatmeen:shipmentPermit>SHP/MP/48913/2020
                        </tatmeen:shipmentPermit>
                </ObjectEvent>
                <ObjectEvent>
                        <!--Commissioning of SSCC/PALLET-->
                        <eventTime>2021-05-31T12:02:20.000Z</eventTime>
                        <eventTimeZoneOffset>+03:00</eventTimeZoneOffset>
                        <epcList>
                                <epc>urn:epc:id:sscc:0123456.0001000516</epc>
                        </epcList>
                        <action>ADD</action>
                        <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
                        <disposition>urn:epcglobal:cbv:disp:active</disposition>
                        <readPoint>
                                <id>urn:epc:id:sgln:0123456.99999.0</id>
                        </readPoint>
                        <bizLocation>
                                <id>urn:epc:id:sgln:0123456.99999.0</id>
                        </bizLocation>
                </ObjectEvent>
                <AggregationEvent>
                        <!-- AGGREGATION OF 8 CARTONS INTO FULL CASE 01-->
                        <eventTime>2021-05-31T12:02:16.000Z</eventTime>
                        <eventTimeZoneOffset>+03:00</eventTimeZoneOffset>
                        <parentID>urn:epc:id:sgtin:0123456.305512.Y4QOQBH0VVW1</parentID>
                        <childEPCs>
                                <epc>urn:epc:id:sgtin:0123456.005512.01QA00001TY</epc>
                                <epc>urn:epc:id:sgtin:0123456.005512.011ABRG0001</epc>
                                <epc>urn:epc:id:sgtin:0123456.005512.01ASAS000Q1</epc>
                                <epc>urn:epc:id:sgtin:0123456.005512.01TDFFSF5RE</epc>
                                <epc>urn:epc:id:sgtin:0123456.005512.01GDGDGDG34</epc>
                                <epc>urn:epc:id:sgtin:0123456.005512.01100000003</epc>
                                <epc>urn:epc:id:sgtin:0123456.005512.01YUTTYYEQF</epc>
```

```
                    <epc>urn:epc:id:sgtin:0123456.005512.014545RF98F</epc>
            </childEPCs>
            <action>ADD</action>
            <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
            <readPoint>
                    <id>urn:epc:id:sgln:0123456.99999.0</id>
            </readPoint>
            <bizLocation>
                    <id>urn:epc:id:sgln:0123456.99999.0</id>
            </bizLocation>
    </AggregationEvent>
    <AggregationEvent>
            <!-- AGGREGATION OF 8 CARTONS INTO FULL CASE 02-->
            <eventTime>2021-05-31T12:02:17.000Z</eventTime>
            <eventTimeZoneOffset>+03:00</eventTimeZoneOffset>
            <parentID>urn:epc:id:sgtin:0123456.305512.A4QIY780KL6M</parentID>
            <childEPCs>
                    <epc>urn:epc:id:sgtin:0123456.005512.01TYEWEW56E</epc>
                    <epc>urn:epc:id:sgtin:0123456.005512.01HNCEFGT33</epc>
                    <epc>urn:epc:id:sgtin:0123456.005512.01YIQWQWWG6</epc>
                    <epc>urn:epc:id:sgtin:0123456.005512.01RQYURTBHR</epc>
                    <epc>urn:epc:id:sgtin:0123456.005512.01RFFWEW557</epc>
                    <epc>urn:epc:id:sgtin:0123456.005512.01JFGSDFBNJ</epc>
                    <epc>urn:epc:id:sgtin:0123456.005512.01TRFDFFSDF</epc>
                    <epc>urn:epc:id:sgtin:0123456.005512.01TEFFEREFV</epc>
            </childEPCs>
            <action>ADD</action>
            <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
            <readPoint>
                    <id>urn:epc:id:sgln:0123456.99999.0</id>
            </readPoint>
            <bizLocation>
                    <id>urn:epc:id:sgln:0123456.99999.0</id>
            </bizLocation>
    </AggregationEvent>
    <AggregationEvent>
            <!-- AGGREGATION OF 2 FULL CASES INTO A PALLET-->
            <eventTime>2021-05-31T12:02:22.000Z</eventTime>
            <eventTimeZoneOffset>+03:00</eventTimeZoneOffset>
            <parentID>urn:epc:id:sscc:0123456.0001000516</parentID>
            <childEPCs>
                    <epc>urn:epc:id:sgtin:0123456.305512.Y4QOQBH0VVW1</epc>
                    <epc>urn:epc:id:sgtin:0123456.305512.A4QIY780KL6M</epc>
            </childEPCs>
```

```
                                    <action>ADD</action>
                                    <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
                                    <readPoint>
                                            <id>urn:epc:id:sgln:0123456.99999.0</id>
                                    </readPoint>
                                    <bizLocation>
                                            <id>urn:epc:id:sgln:0123456.99999.0</id>
                                    </bizLocation>
                            </AggregationEvent>
                    </EventList>
            </EPCISBody>
</epcis:EPCISDocument>
```

Table 44 EPCIS: Importation Example

5.11.2 Domestic Manufacture in the UAE

The second example represents a registered Domestic Manufacturer partner initiating local manufacture within the UAE and release of the goods into the UAE market and is based on Scenario 2 of Section 3.3.

```
<epcis:EPCISDocument schemaVersion="1.2" creationDate="2021-01-28T15:12:05Z"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:cbvmda="urn:epcglobal:cbv:mda">
xmlns:tatmeen="http://tatmeen.ae/epcis/">
        <EPCISHeader>
                <sbdh:StandardBusinessDocumentHeader>
                        <sbdh:HeaderVersion>1.3</sbdh:HeaderVersion>
                        <sbdh:Sender>
                                <sbdh:Identifier Authority="GS1">0123456789005</sbdh:Identifier>
                        </sbdh:Sender>
                        <sbdh:Receiver>
                                <sbdh:Identifier Authority="GS1">6297001273005</sbdh:Identifier>
                        </sbdh:Receiver>
                        <sbdh:DocumentIdentification>
                                <sbdh:Standard>EPCglobal</sbdh:Standard>
                                <sbdh:TypeVersion>1.0</sbdh:TypeVersion>

        <sbdh:InstanceIdentifier>2f1bdabdfaee464c87e1aeb7e586e6ab</sbdh:InstanceIdentifier>
                                <sbdh:Type>Events</sbdh:Type>
                                <sbdh:CreationDateAndTime>2021-05-
31T15:12:05.000Z</sbdh:CreationDateAndTime>
                        </sbdh:DocumentIdentification>
                </sbdh:StandardBusinessDocumentHeader>
```

```
        </EPCISHeader>
        <EPCISBody>
                <EventList>
                        <ObjectEvent>
                                <!--Commissioning of SGTIN's/PRODUCTS-->
                                <eventTime>2021-05-31T12:02:11.000Z</eventTime>
                                <eventTimeZoneOffset>+03:00</eventTimeZoneOffset>
                                <epcList>
                                        <epc>urn:epc:id:sgtin:0123459.005512.01QA00001TY</epc>
                                        <epc>urn:epc:id:sgtin:0123459.005512.011ABRG0001</epc>
                                        <epc>urn:epc:id:sgtin:0123459.005512.01ASAS000Q1</epc>
                                        <epc>urn:epc:id:sgtin:0123459.005512.01TDFFSF5RE</epc>
                                        <epc>urn:epc:id:sgtin:0123459.005512.01GDGDGDG34</epc>
                                        <epc>urn:epc:id:sgtin:0123459.005512.01100000003</epc>
                                        <epc>urn:epc:id:sgtin:0123459.005512.01YUTTYYEQF</epc>
                                        <epc>urn:epc:id:sgtin:0123459.005512.014545RF98F</epc>
                                        <epc>urn:epc:id:sgtin:0123459.005512.01TYEWEW56E</epc>
                                        <epc>urn:epc:id:sgtin:0123459.005512.01HNCEFGT33</epc>
                                        <epc>urn:epc:id:sgtin:0123459.005512.01YIQWQWWG6</epc>
                                        <epc>urn:epc:id:sgtin:0123459.005512.01RQYURTBHR</epc>
                                        <epc>urn:epc:id:sgtin:0123459.005512.01RFFWEW557</epc>
                                        <epc>urn:epc:id:sgtin:0123459.005512.01JFGSDFBNJ</epc>
                                        <epc>urn:epc:id:sgtin:0123459.005512.01TRFDFFSDF</epc>
                                        <epc>urn:epc:id:sgtin:0123459.005512.01TEFFEREFV</epc>
                                </epcList>
                                <action>ADD</action>
                                <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
                                <disposition>urn:epcglobal:cbv:disp:active</disposition>
                                <readPoint>
                                        <id>urn:epc:id:sgln:0123459.99999.0</id>
                                </readPoint>
                                <bizLocation>
                                        <id>urn:epc:id:sgln:0123459.99999.0</id>
                                </bizLocation>
                                <extension>
                                        <ilmd>
                                                <cbvmda:lotNumber>LOT123459</cbvmda:lotNumber>
                                                <cbvmda:itemExpirationDate>2023-02-28
                                                </cbvmda:itemExpirationDate>
                                        </ilmd>
                                </extension>
                                <!—Additional attributes -->
                                <tatmeen:lotManufacturingDate>2021-02-28
                                </tatmeen:lotManufacturingDate>
```

```
                        <tatmeen:manufacturingOrigin>L</tatmeen:manufacturingOrigin>
                        <!-- Either Import Permit or Local Sales Permit in commissioning event -->
                        <!—For local manufacture, this example uses Local Sales Permit -->
                        <tatmeen:localSalesPermit>LSAL/MP/9899/2021
                        </tatmeen:localSalesPermit>
            </ObjectEvent>
            <ObjectEvent>
                        <!-- COMMISSION EVENT FOR FULL SHIPPER CASE -->
                        <eventTime>2021-05-31T12:02:15.000Z</eventTime>
                        <eventTimeZoneOffset>+03:00</eventTimeZoneOffset>
                        <epcList>
                                    <epc>urn:epc:id:sgtin:0123459.305512.Y4QOQBH0VVW1</epc>
                                    <epc>urn:epc:id:sgtin:0123459.305512.A4QIY780KL6M</epc>
                        </epcList>
                        <action>ADD</action>
                        <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
                        <disposition>urn:epcglobal:cbv:disp:active</disposition>
                        <readPoint>
                                    <id>urn:epc:id:sgln:0123459.99999.0</id>
                        </readPoint>
                        <bizLocation>
                                    <id>urn:epc:id:sgln:0123459.99999.0</id>
                        </bizLocation>
                        <extension>
                                    <ilmd>
                                                <cbvmda:lotNumber>LOT123459</cbvmda:lotNumber>
                                                <cbvmda:itemExpirationDate>2023-02-28
                                                </cbvmda:itemExpirationDate>
                                    </ilmd>
                        </extension>
                        <!—Additional attributes -->
                        <tatmeen:lotManufacturingDate>2021-02-28
                        </tatmeen:lotManufacturingDate>
                        <tatmeen:manufacturingOrigin>L</tatmeen:manufacturingOrigin>
                        <!-- Either Import Permit or Local Sales Permit in commissioning event -->
                        <!—For local manufacture, this example uses Local Sales Permit -->
                        <tatmeen:localSalesPermit>LSAL/MP/9899/2021
                        </tatmeen:localSalesPermit>
            </ObjectEvent>
            <ObjectEvent>
                        <!--Commissioning of SSCC/PALLET-->
                        <eventTime>2021-05-31T12:02:20.000Z</eventTime>
                        <eventTimeZoneOffset>+03:00</eventTimeZoneOffset>
                        <epcList>
```

```
                                <epc>urn:epc:id:sscc:0123459.0001000516</epc>
                        </epcList>
                        <action>ADD</action>
                        <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
                        <disposition>urn:epcglobal:cbv:disp:active</disposition>
                        <readPoint>
                                <id>urn:epc:id:sgln:0123459.99999.0</id>
                        </readPoint>
                        <bizLocation>
                                <id>urn:epc:id:sgln:0123459.99999.0</id>
                        </bizLocation>
                </ObjectEvent>
                <AggregationEvent>
                        <!-- AGGREGATION OF 8 CARTONS INTO FULL CASE 01-->
                        <eventTime>2021-05-31T12:02:16.000Z</eventTime>
                        <eventTimeZoneOffset>+03:00</eventTimeZoneOffset>
                        <parentID>urn:epc:id:sgtin:0123459.305512.Y4QOQBH0VVW1</parentID>
                        <childEPCs>
                                <epc>urn:epc:id:sgtin:0123459.005512.01QA00001TY</epc>
                                <epc>urn:epc:id:sgtin:0123459.005512.011ABRG0001</epc>
                                <epc>urn:epc:id:sgtin:0123459.005512.01ASAS000Q1</epc>
                                <epc>urn:epc:id:sgtin:0123459.005512.01TDFFSF5RE</epc>
                                <epc>urn:epc:id:sgtin:0123459.005512.01GDGDGDG34</epc>
                                <epc>urn:epc:id:sgtin:0123459.005512.01100000003</epc>
                                <epc>urn:epc:id:sgtin:0123459.005512.01YUTTYYEQF</epc>
                                <epc>urn:epc:id:sgtin:0123459.005512.014545RF98F</epc>
                        </childEPCs>
                        <action>ADD</action>
                        <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
                        <readPoint>
                                <id>urn:epc:id:sgln:0123459.99999.0</id>
                        </readPoint>
                        <bizLocation>
                                <id>urn:epc:id:sgln:0123459.99999.0</id>
                        </bizLocation>
                </AggregationEvent>
                <AggregationEvent>
                        <!-- AGGREGATION OF 8 CARTONS INTO FULL CASE 02-->
                        <eventTime>2021-05-31T12:02:17.000Z</eventTime>
                        <eventTimeZoneOffset>+03:00</eventTimeZoneOffset>
                        <parentID>urn:epc:id:sgtin:0123459.305512.A4QIY780KL6M</parentID>
                        <childEPCs>
                                <epc>urn:epc:id:sgtin:0123459.005512.01TYEWEW56E</epc>
                                <epc>urn:epc:id:sgtin:0123459.005512.01HNCEFGT33</epc>
```

```
                    <epc>urn:epc:id:sgtin:0123459.005512.01YIQWQWWG6</epc>
                    <epc>urn:epc:id:sgtin:0123459.005512.01RQYURTBHR</epc>
                    <epc>urn:epc:id:sgtin:0123459.005512.01RFFWEW557</epc>
                    <epc>urn:epc:id:sgtin:0123459.005512.01JFGSDFBNJ</epc>
                    <epc>urn:epc:id:sgtin:0123459.005512.01TRFDFFSDF</epc>
                    <epc>urn:epc:id:sgtin:0123459.005512.01TEFFEREFV</epc>
            </childEPCs>
            <action>ADD</action>
            <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
            <readPoint>
                    <id>urn:epc:id:sgln:0123459.99999.0</id>
            </readPoint>
            <bizLocation>
                    <id>urn:epc:id:sgln:0123459.99999.0</id>
            </bizLocation>
    </AggregationEvent>
    <AggregationEvent>
            <!-- AGGREGATION OF 2 FULL CASES INTO A PALLET-->
            <eventTime>2021-05-31T12:02:22.000Z</eventTime>
            <eventTimeZoneOffset>+03:00</eventTimeZoneOffset>
            <parentID>urn:epc:id:sscc:0123459.0001000516</parentID>
            <childEPCs>
                    <epc>urn:epc:id:sgtin:0123459.305512.Y4QOQBH0VVW1</epc>
                    <epc>urn:epc:id:sgtin:0123459.305512.A4QIY780KL6M</epc>
            </childEPCs>
            <action>ADD</action>
            <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
            <readPoint>
                    <id>urn:epc:id:sgln:0123459.99999.0</id>
            </readPoint>
            <bizLocation>
                    <id>urn:epc:id:sgln:0123459.99999.0</id>
            </bizLocation>
    </AggregationEvent>
    <ObjectEvent>
            <!-- Shipping Event -->
            <eventTime>2021-05-31T12:02:25.000Z</eventTime>
            <eventTimeZoneOffset>+03:00</eventTimeZoneOffset>
            <epcList>
                    <epc>urn:epc:id:sscc:0123459.0001000516</epc>
            </epcList>
            <action>OBSERVE</action>
            <bizStep>urn:epcglobal:cbv:bizstep:shipping</bizStep>
            <disposition>urn:epcglobal:cbv:disp:in_transit</disposition>
```

```
                                    <readPoint>
                                            <id>urn:epc:id:sgln:0123459.99999.0</id>
                                    </readPoint>
                                    <bizTransactionList>
                                            <bizTransaction
type="urn:epcglobal:cbv:btt:desadv">urn:epcglobal:cbv:bt:0123459999999:0105</bizTransaction>
                                    </bizTransactionList>
                                    <extension>
                                            <sourceList>
                                                    <source
type="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:0123459.99999.0/source>
                                            </sourceList>
                                            <destinationList>
                                                    <destination
type="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:0333333.00000.0</destination>
                                                    <destination
type="urn:epcglobal:cbv:sdt:location">urn:epc:id:sgln:0356787.00040.0</destination>
                                            </destinationList>
                                    </extension>
                            </ObjectEvent>
                    </EventList>
            </EPCISBody>
</epcis:EPCISDocument>
```

Table 45 EPCIS Local Manufacture Example

5.11.3 Packing New SSCC Example

```
<epcis:EPCISDocument schemaVersion="1.2" creationDate="2021-01-28T07:21:26Z"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:cbvmda="urn:epcglobal:cbv:mda">
        <EPCISHeader>
                <sbdh:StandardBusinessDocumentHeader>
                        <sbdh:HeaderVersion>1.3</sbdh:HeaderVersion>
                        <sbdh:Sender>
                                <sbdh:Identifier Authority="GS1">0123456789005</sbdh:Identifier>
                        </sbdh:Sender>
                        <sbdh:Receiver>
                                <sbdh:Identifier Authority="GS1">6297001273005</sbdh:Identifier>
                        </sbdh:Receiver>
                        <sbdh:DocumentIdentification>
                                <sbdh:Standard>EPCglobal</sbdh:Standard>
                                <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
```

```
                <sbdh:InstanceIdentifier>2f1bdabdfaee464c87e1aeb7e586e6ab</sbdh:InstanceIdentifier>
                            <sbdh:Type>Events</sbdh:Type>
                            <sbdh:CreationDateAndTime>2021-05-
31T12:02:05.000Z</sbdh:CreationDateAndTime>
                        </sbdh:DocumentIdentification>
                </sbdh:StandardBusinessDocumentHeader>
        </EPCISHeader>
        <EPCISBody>
            <EventList>
                <ObjectEvent>
                        <!--Commissioning of SSCC/PALLET-->
                        <eventTime>2021-05-31T12:02:20.000Z</eventTime>
                        <eventTimeZoneOffset>+04:00</eventTimeZoneOffset>
                        <epcList>
                                <epc>urn:epc:id:sscc:0123456.0001000516</epc>
                        </epcList>
                        <action>ADD</action>
                        <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
                        <disposition>urn:epcglobal:cbv:disp:active</disposition>
                        <readPoint>
                                <id>urn:epc:id:sgln:0123456.99999.0</id>
                        </readPoint>
                        <bizLocation>
                                <id>urn:epc:id:sgln:0123456.99999.0</id>
                        </bizLocation>
                </ObjectEvent>
                <AggregationEvent>
                        <!-- AGGREGATION OF 2 FULL CASES INTO A PALLET-->
                        <eventTime>2021-05-31T12:02:22.000Z</eventTime>
                        <eventTimeZoneOffset>+04:00</eventTimeZoneOffset>
                        <parentID>urn:epc:id:sscc:0123456.0001000516</parentID>
                        <childEPCs>
                                <epc>urn:epc:id:sgtin:0123456.305512.Y4QOQBH0VVW1</epc>
                                <epc>urn:epc:id:sgtin:0123456.305512.A4QIY780KL6M</epc>
                        </childEPCs>
                        <action>ADD</action>
                        <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
                        <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
                        <readPoint>
                                <id>urn:epc:id:sgln:0123456.99999.0</id>
                        </readPoint>
                        <bizLocation>
                                <id>urn:epc:id:sgln:0123456.99999.0</id>
```

```
                                    </bizLocation>
                                </AggregationEvent>
                            </EventList>
                        </EPCISBody>
                    </epcis:EPCISDocument>
```

Table 46 EPCIS Packing New SSCC Example

5.11.4 Unpacking Parent Example

```
<epcis:EPCISDocument
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
                                    xmlns:epcis="urn:epcglobal:epcis:xsd:1"
                                    xmlns:cbvmda="urn:epcglobal:cbv:mda"
                                    schemaVersion="1.2" creationDate="2021-01-28T07:21:26Z">
        <EPCISHeader>
                <sbdh:StandardBusinessDocumentHeader>
                        <sbdh:HeaderVersion>1.3</sbdh:HeaderVersion>
                        <sbdh:Sender>
                                <sbdh:Identifier Authority="GS1">0123456789005</sbdh:Identifier>
                        </sbdh:Sender>
                        <sbdh:Receiver>
                                <sbdh:Identifier Authority="GS1">6297001273005</sbdh:Identifier>
                        </sbdh:Receiver>
                        <sbdh:DocumentIdentification>
                                <sbdh:Standard>EPCglobal</sbdh:Standard>
                                <sbdh:TypeVersion>1.0</sbdh:TypeVersion>

        <sbdh:InstanceIdentifier>2f1bdabdfaee464c87e1aeb7e586e6ab</sbdh:InstanceIdentifier>
                                <sbdh:Type>Events</sbdh:Type>
                                <sbdh:CreationDateAndTime>2020-05-
05T10:04:17Z</sbdh:CreationDateAndTime>
                        </sbdh:DocumentIdentification>
                </sbdh:StandardBusinessDocumentHeader>
        </EPCISHeader>
        <EPCISBody>
                <EventList>
                        <AggregationEvent>
                                <!--Unpacking Parent Event-->
                                <eventTime>2021-05-29T07:47:40.000Z</eventTime>
                                <eventTimeZoneOffset>+04:00</eventTimeZoneOffset>
                                <parentID>urn:epc:id:sscc:0123456.0001018244</parentID>
                                <childEPCs></childEPCs>
                                <action>DELETE</action>
```

```
                                    <bizStep>urn:epcglobal:cbv:bizstep:unpacking</bizStep>
                                    <readPoint>
                                            <id>urn:epc:id:sgln:0123456.99999.0</id>
                                    </readPoint>
                                    <bizLocation>
                                            <id>urn:epc:id:sgln:0123456.99999.0</id>
                                    </bizLocation>
                            </AggregationEvent>
                    </EventList>
            </EPCISBody>
</epcis:EPCISDocument>
```

Table 47 EPCIS Unpacking Parent Example

5.11.5 Unpacking Selected Objects Example

```
<epcis:EPCISDocument
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
                                        xmlns:epcis="urn:epcglobal:epcis:xsd:1"
                                        xmlns:cbvmda="urn:epcglobal:cbv:mda"
                                        schemaVersion="1.2" creationDate="2021-01-28T07:21:26Z">
        <EPCISHeader>
                <sbdh:StandardBusinessDocumentHeader>
                        <sbdh:HeaderVersion>1.3</sbdh:HeaderVersion>
                        <sbdh:Sender>
                                <sbdh:Identifier Authority="GS1">0123456789005</sbdh:Identifier>
                        </sbdh:Sender>
                        <sbdh:Receiver>
                                <sbdh:Identifier Authority="GS1">6297001273005</sbdh:Identifier>
                        </sbdh:Receiver>
                        <sbdh:DocumentIdentification>
                                <sbdh:Standard>EPCglobal</sbdh:Standard>
                                <sbdh:TypeVersion>1.0</sbdh:TypeVersion>

        <sbdh:InstanceIdentifier>2f1bdabdfaee464c87e1aeb7e586e6ab</sbdh:InstanceIdentifier>
                                <sbdh:Type>Events</sbdh:Type>
                                <sbdh:CreationDateAndTime>2020-05-
05T10:04:17Z</sbdh:CreationDateAndTime>
                        </sbdh:DocumentIdentification>
                </sbdh:StandardBusinessDocumentHeader>
        </EPCISHeader>
        <EPCISBody>
                <EventList>
                        <AggregationEvent>
```

```
                                <!--Unpacking Objects Event-->
                                <eventTime>2021-05-29T07:47:40.000Z</eventTime>
                                <eventTimeZoneOffset>+04:00</eventTimeZoneOffset>
                                <parentID>urn:epc:id:sscc:0123456.0001018244</parentID>
                                <childEPCs>
                                        <epc>urn:epc:id:sgtin:0123456.305513.NN2P266YLXPC</epc>
                                        <epc>urn:epc:id:sgtin:0123456.305513.NN2P266YYXX2</epc>
                                </childEPCs>
                                <action>DELETE</action>
                                <bizStep>urn:epcglobal:cbv:bizstep:unpacking</bizStep>
                                <readPoint>
                                        <id>urn:epc:id:sgln:0123456.99999.0</id>
                                </readPoint>
                                <bizLocation>
                                        <id>urn:epc:id:sgln:0123456.99999.0</id>
                                </bizLocation>
                        </AggregationEvent>
                </EventList>
        </EPCISBody>
</epcis:EPCISDocument>
```

Table 48 EPCIS Unpacking Selected Objects Example

5.11.6 Shipping Example

Note that this shipping event example, reflects the shipping event related to the example in section 5.11.1.

```
<epcis:EPCISDocument schemaVersion="1.2" creationDate="2021-01-28T07:21:26Z"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:cbvmda="urn:epcglobal:cbv:mda">
        <EPCISHeader>
                <sbdh:StandardBusinessDocumentHeader>
                        <sbdh:HeaderVersion>1.3</sbdh:HeaderVersion>
                        <sbdh:Sender>
                                <sbdh:Identifier Authority="GS1">0123456789005</sbdh:Identifier>
                        </sbdh:Sender>
                        <sbdh:Receiver>
                                <sbdh:Identifier Authority="GS1">6297001273005</sbdh:Identifier>
                        </sbdh:Receiver>
                        <sbdh:DocumentIdentification>
                                <sbdh:Standard>EPCglobal</sbdh:Standard>
                                <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
```

```
                <sbdh:InstanceIdentifier>2f1bdabdfaee464c87e1aeb7e586e6ab</sbdh:InstanceIdentifier>
                            <sbdh:Type>Events</sbdh:Type>
                            <sbdh:CreationDateAndTime>2021-05-
31T12:02:05.000Z</sbdh:CreationDateAndTime>
                        </sbdh:DocumentIdentification>
                </sbdh:StandardBusinessDocumentHeader>
        </EPCISHeader>
        <EPCISBody>
                <EventList>
                        <ObjectEvent>
                                <!-- Shipping Event -->
                                <eventTime>2021-05-31T12:02:25.000Z</eventTime>
                                <eventTimeZoneOffset>+03:00</eventTimeZoneOffset>
                                <epcList>
                                        <epc>urn:epc:id:sscc:0123456.0001000516</epc>
                                </epcList>
                                <action>OBSERVE</action>
                                <bizStep>urn:epcglobal:cbv:bizstep:shipping</bizStep>
                                <disposition>urn:epcglobal:cbv:disp:in_transit</disposition>
                                <readPoint>
                                        <id>urn:epc:id:sgln:0123456.99999.0</id>
                                </readPoint>
                                <bizTransactionList>
                                        <bizTransaction
type="urn:epcglobal:cbv:btt:desadv">urn:epcglobal:cbv:bt:0123456999995:0105</bizTransaction>
                                </bizTransactionList>
                                <extension>
                                        <sourceList>
                                                <source
type="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:0123456.99999.0</source>
                                        </sourceList>
                                        <destinationList>
                                                <destination
type="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:0333333.00000.0</destination>
                                                <destination
type="urn:epcglobal:cbv:sdt:location">urn:epc:id:sgln:0356787.00040.0</destination>
                                        </destinationList>
                                </extension>
                        </ObjectEvent>
                </EventList>
        </EPCISBody>
</epcis:EPCISDocument>
```

Table 49 EPCIS Shipping Example

5.11.7 Shipping Returns Example

```
<epcis:EPCISDocument schemaVersion="1.2" creationDate="2021-01-28T07:21:26Z"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:cbvmda="urn:epcglobal:cbv:mda"
xmlns:tatmeen="http://tatmeen.ae/epcis/">
        <EPCISHeader>
                <sbdh:StandardBusinessDocumentHeader>
                        <sbdh:HeaderVersion>1.3</sbdh:HeaderVersion>
                        <sbdh:Sender>
                                <sbdh:Identifier Authority="GS1">0123456789005</sbdh:Identifier>
                        </sbdh:Sender>
                        <sbdh:Receiver>
                                <sbdh:Identifier Authority="GS1">6297001273005</sbdh:Identifier>
                        </sbdh:Receiver>
                        <sbdh:DocumentIdentification>
                                <sbdh:Standard>EPCglobal</sbdh:Standard>
                                <sbdh:TypeVersion>1.0</sbdh:TypeVersion>

        <sbdh:InstanceIdentifier>2f1bdabdfaee464c87e1aeb7e586e6ab</sbdh:InstanceIdentifier>
                                <sbdh:Type>Events</sbdh:Type>
                                <sbdh:CreationDateAndTime>2021-05-
31T12:02:05.000Z</sbdh:CreationDateAndTime>
                        </sbdh:DocumentIdentification>
                </sbdh:StandardBusinessDocumentHeader>
        </EPCISHeader>
        <EPCISBody>
                <EventList>
                        <ObjectEvent>
                                <!--Shipping Returns Event-->
                                <eventTime>2021-05-31T12:02:25.000Z</eventTime>
                                <eventTimeZoneOffset>+03:00</eventTimeZoneOffset>
                                <epcList>
                                        <epc>urn:epc:id:sscc:0123456.0001000516</epc>
                                </epcList>
                                <action>OBSERVE</action>
                                <bizStep>urn:epcglobal:cbv:bizstep:shipping</bizStep>
                                <disposition>urn:epcglobal:cbv:disp:returned</disposition>
                                <readPoint>
                                        <id>urn:epc:id:sgln:0123456.99999.0</id>
                                </readPoint>
                                <bizTransactionList>
```

```
                              <bizTransaction
type="urn:epcglobal:cbv:btt:desadv">urn:epcglobal:cbv:bt:0123456999995:0105</bizTransaction>
                              <bizTransaction
type="urn:epcglobal:cbv:btt:rma">urn:epcglobal:cbv:bt:0123456999995:R0602</bizTransaction>
                        </bizTransactionList>
                        <extension>
                              <sourceList>
                                    <source
type="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:0123456.99999.1</source>
                              <destinationList>
                                    <destination
type="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:0333333.00000.0</destination>
                                    <destination
type="urn:epcglobal:cbv:sdt:location">urn:epc:id:sgln:0356787.00040.0</destination>
                              </destinationList>
                        </extension>
                        <tatmeen:reasonCode>R06</tatmeen:reasonCode>
                  </ObjectEvent>
            </EventList>
      </EPCISBody>
</epcis:EPCISDocument>
```

Table 50 EPCIS Shipping Returns Example

5.11.8 Receiving Example

```
<epcis:EPCISDocument schemaVersion="1.2" creationDate="2021-01-28T07:21:26Z"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:cbvmda="urn:epcglobal:cbv:mda">
      <EPCISHeader>
            <sbdh:StandardBusinessDocumentHeader>
                  <sbdh:HeaderVersion>1.3</sbdh:HeaderVersion>
                  <sbdh:Sender>
                        <sbdh:Identifier Authority="GS1">0123456789005</sbdh:Identifier>
                  </sbdh:Sender>
                  <sbdh:Receiver>
                        <sbdh:Identifier Authority="GS1">6297001273005</sbdh:Identifier>
                  </sbdh:Receiver>
                  <sbdh:DocumentIdentification>
                        <sbdh:Standard>EPCglobal</sbdh:Standard>
                        <sbdh:TypeVersion>1.0</sbdh:TypeVersion>

      <sbdh:InstanceIdentifier>2f1bdabdfaee464c87e1aeb7e586e6ab</sbdh:InstanceIdentifier>
                        <sbdh:Type>Events</sbdh:Type>
```

```
                              <sbdh:CreationDateAndTime>2021-05-
31T12:02:05.000Z</sbdh:CreationDateAndTime>
                    </sbdh:DocumentIdentification>
              </sbdh:StandardBusinessDocumentHeader>
        </EPCISHeader>
        <EPCISBody>
                <EventList>
                        <ObjectEvent>
                        <!-- Receiving Event-->
                                <eventTime>2019-12-19T11:50:09.000Z</eventTime>
                                <eventTimeZoneOffset>+03:00</eventTimeZoneOffset>
                                <epcList>
                                        <epc>urn:epc:id:sscc:0123456.0001000516</epc>
                                </epcList>
                                <action>OBSERVE</action>
                                <bizStep>urn:epcglobal:cbv:bizstep:receiving</bizStep>
                                <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
                                <readPoint>
                                        <id>urn:epc:id:sgln:0123456.99999.0</id>
                                </readPoint>
                                <bizLocation>
                                        <id>urn:epc:id:sgln:0123456.99999.0</id>
                                </bizLocation>
                                <bizTransactionList>
                                        <bizTransaction
type="urn:epcglobal:cbv:btt:recadv">urn:epcglobal:cbv:bt:0123456999995:GR1230105</bizTransaction>
                                </bizTransactionList>
                        <!—For Receiving Event, the source list and destination lists are optional-->
                        <!—In this example, they are shown-->
                                <extension>
                                        <sourceList>
                                                <source
type="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:0123456.99999.1</source>
                                        <destinationList>
                                                <destination
type="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:0333333.00000.0</destination>
                                                <destination
type="urn:epcglobal:cbv:sdt:location">urn:epc:id:sgln:0356787.00040.0</destination>
                                        </destinationList>
                                </extension>
                        </ObjectEvent>
                </EventList>
        </EPCISBody>
</epcis:EPCISDocument>
```

Table 51 EPCIS Receiving Example

5.11.9 Receiving Returns Example

```
<epcis:EPCISDocument schemaVersion="1.2" creationDate="2021-01-28T07:21:26Z"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:cbvmda="urn:epcglobal:cbv:mda">
        <EPCISHeader>
                <sbdh:StandardBusinessDocumentHeader>
                        <sbdh:HeaderVersion>1.3</sbdh:HeaderVersion>
                        <sbdh:Sender>
                                <sbdh:Identifier Authority="GS1">0123456789005</sbdh:Identifier>
                        </sbdh:Sender>
                        <sbdh:Receiver>
                                <sbdh:Identifier Authority="GS1">6297001273005</sbdh:Identifier>
                        </sbdh:Receiver>
                        <sbdh:DocumentIdentification>
                                <sbdh:Standard>EPCglobal</sbdh:Standard>
                                <sbdh:TypeVersion>1.0</sbdh:TypeVersion>

        <sbdh:InstanceIdentifier>2f1bdabdfaee464c87e1aeb7e586e6ab</sbdh:InstanceIdentifier>
                                <sbdh:Type>Events</sbdh:Type>
                                <sbdh:CreationDateAndTime>2021-05-
31T12:02:05.000Z</sbdh:CreationDateAndTime>
                        </sbdh:DocumentIdentification>
                </sbdh:StandardBusinessDocumentHeader>
        </EPCISHeader>
        <EPCISBody>
                <EventList>
                        <ObjectEvent>
                        <!-- Receiving Returns Event-->
                                <eventTime>2019-12-19T11:50:09.000Z</eventTime>
                                <eventTimeZoneOffset>+03:00</eventTimeZoneOffset>
                                <epcList>
                                        <epc>urn:epc:id:sscc:0123456.0001000516</epc>
                                </epcList>
                                <action>OBSERVE</action>
                                <bizStep>urn:epcglobal:cbv:bizstep:receiving</bizStep>
                                <disposition>urn:epcglobal:cbv:disp:returned</disposition>
                                <readPoint>
                                        <id>urn:epc:id:sgln:0123456.99999.0</id>
                                </readPoint>
                                <bizLocation>
```

```
                          <id>urn:epc:id:sgln:0123456.99999.0</id>
                      </bizLocation>
                      <bizTransactionList>
                          <bizTransaction
type="urn:epcglobal:cbv:btt:recadv">urn:epcglobal:cbv:bt:0123456999995:GR1230456</bizTransaction>
                      </bizTransactionList>
```
<!—For Receiving Returns Event, the source list and destination lists are optional-->
<!—In this example, they are omitted-->
```
                  </ObjectEvent>
              </EventList>
          </EPCISBody>
</epcis:EPCISDocument>
```

Table 52 EPCIS Receiving Returns Example

5.11.10 Shipping Cancellation Example

Note that this shipping event example, reflects the shipping event related to the example in section 5.11.1.

```
<epcis:EPCISDocument schemaVersion="1.2" creationDate="2021-01-28T07:21:26Z"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:cbvmda="urn:epcglobal:cbv:mda">
      <EPCISHeader>
              <sbdh:StandardBusinessDocumentHeader>
                      <sbdh:HeaderVersion>1.3</sbdh:HeaderVersion>
                      <sbdh:Sender>
                              <sbdh:Identifier Authority="GS1">0123456789005</sbdh:Identifier>
                      </sbdh:Sender>
                      <sbdh:Receiver>
                              <sbdh:Identifier Authority="GS1">6297001273005</sbdh:Identifier>
                      </sbdh:Receiver>
                      <sbdh:DocumentIdentification>
                              <sbdh:Standard>EPCglobal</sbdh:Standard>
                              <sbdh:TypeVersion>1.0</sbdh:TypeVersion>

      <sbdh:InstanceIdentifier>2f1bdabdfaee464c87e1aeb7e586e6ab</sbdh:InstanceIdentifier>
                              <sbdh:Type>Events</sbdh:Type>
                              <sbdh:CreationDateAndTime>2021-05-
31T12:02:05.000Z</sbdh:CreationDateAndTime>
                      </sbdh:DocumentIdentification>
              </sbdh:StandardBusinessDocumentHeader>
      </EPCISHeader>
      <EPCISBody>
```

```
                    <EventList>
                          <ObjectEvent>
                                    <!-- Shipping Cancellation Event -->
                                    <eventTime>2021-05-21T10:25:11.000Z</eventTime>
                                    <eventTimeZoneOffset>+03:00</eventTimeZoneOffset>
                                    <epcList>
                                            <epc>urn:epc:id:sscc:0471234.1001234567</epc>
                                            <epc>urn:epc:id:sscc:0471234.1001234569</epc>
                                    </epcList>
                                    <action>OBSERVE</action>
                                    <bizStep>urn:epcglobal:cbv:bizstep:void_shipping</bizStep>
                                    <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
                                    <readPoint>
                                            <id>urn:epc:id:sgln:0476543.00010.0</id>
                                    </readPoint>
                                    <bizLocation>
                                            <id>urn:epc:id:sgln:0476543.00010.0</id>
                                    </bizLocation>
                                    <bizTransactionList>
                                            <!-- Optional bizTransactions-->
                                            <bizTransaction
type="urn:epcglobal:cbv:btt:desadv">urn:epcglobal:cbv:bt:0476543000102:0105</bizTransaction>
                                            <bizTransaction
type="urn:epcglobal:cbv:btt:rma">urn:epcglobal:cbv:bt:0476543000102:R0105</bizTransaction>
                                    </bizTransactionList>
                                    <!—Mandatory reference-->

              <tatmeen:instanceIdentifierReference>0kjulihdsafno5e2133s6uy</tatmeen:instanceIdentifierReference>
                          </ObjectEvent>
                    </EventList>
              </EPCISBody>
       </epcis:EPCISDocument>
```

Table 53 EPCIS Shipping Example

5.11.11 Shipping Returns Cancellation Example

```
<epcis:EPCISDocument schemaVersion="1.2" creationDate="2021-01-28T07:21:26Z"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:cbvmda="urn:epcglobal:cbv:mda">
       <EPCISHeader>
              <sbdh:StandardBusinessDocumentHeader>
                      <sbdh:HeaderVersion>1.3</sbdh:HeaderVersion>
                      <sbdh:Sender>
```

```
                              <sbdh:Identifier Authority="GS1">0123456789005</sbdh:Identifier>
                    </sbdh:Sender>
                    <sbdh:Receiver>
                              <sbdh:Identifier Authority="GS1">6297001273005</sbdh:Identifier>
                    </sbdh:Receiver>
                    <sbdh:DocumentIdentification>
                              <sbdh:Standard>EPCglobal</sbdh:Standard>
                              <sbdh:TypeVersion>1.0</sbdh:TypeVersion>

          <sbdh:InstanceIdentifier>2f1bdabdfaee464c87e1aeb7e586e6ab</sbdh:InstanceIdentifier>
                              <sbdh:Type>Events</sbdh:Type>
                              <sbdh:CreationDateAndTime>2021-05-
31T12:02:05.000Z</sbdh:CreationDateAndTime>
                    </sbdh:DocumentIdentification>
          </sbdh:StandardBusinessDocumentHeader>
     </EPCISHeader>
     <EPCISBody>
          <EventList>
               <ObjectEvent>
                              <!-- Shipping Returns Cancellation Event -->
                              <eventTime>2021-05-21T10:25:11.000Z</eventTime>
                              <eventTimeZoneOffset>+03:00</eventTimeZoneOffset>
                              <epcList>
                                   <epc>urn:epc:id:sscc:0471234.1001234567</epc>
                                   <epc>urn:epc:id:sscc:0471234.1001234569</epc>
                              </epcList>
                              <action>OBSERVE</action>
                              <bizStep>urn:epcglobal:cbv:bizstep:void_shipping</bizStep>
                              <disposition>urn:epcglobal:cbv:disp:returned</disposition>
                              <readPoint>
                                   <id>urn:epc:id:sgln:0476543.00010.0</id>
                              </readPoint>
                              <bizLocation>
                                   <id>urn:epc:id:sgln:0476543.00010.0</id>
                              </bizLocation>
                              <bizTransactionList>
                                        <!-- Optional bizTransactions-->
                                        <bizTransaction
type="urn:epcglobal:cbv:btt:desadv">urn:epcglobal:cbv:bt:0476543000102:0105</bizTransaction>
                                        <bizTransaction
type="urn:epcglobal:cbv:btt:rma">urn:epcglobal:cbv:bt:0476543000102:R0105</bizTransaction>
                              </bizTransactionList>
                              <!—Mandatory reference-->
```

```
                <tatmeen:instanceIdentifierReference>0kjulihdsafno5e2133s6uy</tatmeen:instanceIdentifierReference>
                        </ObjectEvent>
                </EventList>
        </EPCISBody>
</epcis:EPCISDocument>
```

<p align="center">*Table 54 EPCIS Shipping Returns Example*</p>

5.11.12 Receiving Cancellation Example

```
<epcis:EPCISDocument schemaVersion="1.2" creationDate="2021-01-28T07:21:26Z"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:cbvmda="urn:epcglobal:cbv:mda">
        <EPCISHeader>
                <sbdh:StandardBusinessDocumentHeader>
                        <sbdh:HeaderVersion>1.3</sbdh:HeaderVersion>
                        <sbdh:Sender>
                                <sbdh:Identifier Authority="GS1">0123456789005</sbdh:Identifier>
                        </sbdh:Sender>
                        <sbdh:Receiver>
                                <sbdh:Identifier Authority="GS1">6297001273005</sbdh:Identifier>
                        </sbdh:Receiver>
                        <sbdh:DocumentIdentification>
                                <sbdh:Standard>EPCglobal</sbdh:Standard>
                                <sbdh:TypeVersion>1.0</sbdh:TypeVersion>

        <sbdh:InstanceIdentifier>2f1bdabdfaee464c87e1aeb7e586e6ab</sbdh:InstanceIdentifier>
                                <sbdh:Type>Events</sbdh:Type>
                                <sbdh:CreationDateAndTime>2021-05-
31T12:02:05.000Z</sbdh:CreationDateAndTime>
                        </sbdh:DocumentIdentification>
                </sbdh:StandardBusinessDocumentHeader>
        </EPCISHeader>
        <EPCISBody>
                <EventList>
                        <ObjectEvent>
                        <!-- Receiving Cancellation Event-->
                                <eventTime>2021-12-19T11:53:09.000Z</eventTime>
                                <eventTimeZoneOffset>+03:00</eventTimeZoneOffset>
                                <epcList>
                                        <epc>urn:epc:id:sscc:0123456.0001007402</epc>
                                        <epc>urn:epc:id:sscc:0123456.0001007403</epc>
                                        <epc>urn:epc:id:sscc:0123456.0001007404</epc>
```

```
                              <epc>urn:epc:id:sscc:0123456.0001007405</epc>
                              <epc>urn:epc:id:sscc:0123456.0001007406</epc>
                    </epcList>
                    <action>OBSERVE</action>
                    <bizStep>urn:tatmeen:cbv:bizstep:void_receiving</bizStep>
                    <disposition>urn:epcglobal:cbv:disp:in_transit</disposition>
                    <readPoint>
                              <id>urn:epc:id:sgln:0123456.99999.0</id>
                    </readPoint>
                    <bizTransactionList>
                              <!-- Optional -->
                              <bizTransaction
type="urn:epcglobal:cbv:btt:recadv">urn:epcglobal:cbv:bt:0473456001004:0105</bizTransaction>
                              </bizTransactionList>
                              <!—Mandatory reference-->

          <tatmeen:instanceIdentifierReference>0kjulihdsafno5e2133s6uy</tatmeen:instanceIdentifierReference>
                    </ObjectEvent>
               </EventList>
          </EPCISBody>
</epcis:EPCISDocument>
```

Table 55 EPCIS Receiving Example

5.11.13 Receiving Returns Cancellation Example

```
<epcis:EPCISDocument schemaVersion="1.2" creationDate="2021-01-28T07:21:26Z"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:cbvmda="urn:epcglobal:cbv:mda">
     <EPCISHeader>
          <sbdh:StandardBusinessDocumentHeader>
                    <sbdh:HeaderVersion>1.3</sbdh:HeaderVersion>
                    <sbdh:Sender>
                              <sbdh:Identifier Authority="GS1">0123456789005</sbdh:Identifier>
                    </sbdh:Sender>
                    <sbdh:Receiver>
                              <sbdh:Identifier Authority="GS1">6297001273005</sbdh:Identifier>
                    </sbdh:Receiver>
                    <sbdh:DocumentIdentification>
                              <sbdh:Standard>EPCglobal</sbdh:Standard>
                              <sbdh:TypeVersion>1.0</sbdh:TypeVersion>

          <sbdh:InstanceIdentifier>2f1bdabdfaee464c87e1aeb7e586e6ab</sbdh:InstanceIdentifier>
                              <sbdh:Type>Events</sbdh:Type>
```

```
                              <sbdh:CreationDateAndTime>2021-05-
31T12:02:05.000Z</sbdh:CreationDateAndTime>
                        </sbdh:DocumentIdentification>
                  </sbdh:StandardBusinessDocumentHeader>
            </EPCISHeader>
            <EPCISBody>
                  <EventList>
                        <ObjectEvent>
                        <!-- Receiving Returns Cancellation Event-->
                              <eventTime>2019-12-19T11:50:09.000Z</eventTime>
                              <eventTimeZoneOffset>+03:00</eventTimeZoneOffset>
                              <epcList>
                                    <epc>urn:epc:id:sscc:0123456.0001000516</epc>
                              </epcList>
                              <action>OBSERVE</action>
                              <bizStep>urn:epcglobal:cbv:bizstep:void_receiving</bizStep>
                              <disposition>urn:epcglobal:cbv:disp:returned</disposition>
                              <readPoint>
                                    <id>urn:epc:id:sgln:0123456.99999.0</id>
                              </readPoint>
                              <bizTransactionList>
                                    <bizTransaction
type="urn:epcglobal:cbv:btt:recadv">urn:epcglobal:cbv:bt:0123456999995:GR1230456</bizTransaction>
                              </bizTransactionList>
                        <!—Mandatory reference-->

            <tatmeen:instanceIdentifierReference>0kjulihdsafno5e2133s6uy</tatmeen:instanceIdentifierReference>
                        </ObjectEvent>
                  </EventList>
            </EPCISBody>
</epcis:EPCISDocument>
```

Table 56 EPCIS Receiving Returns Example

5.11.14 Damaged Example

```
<epcis:EPCISDocument schemaVersion="1.2" creationDate="2021-01-28T07:21:26Z"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:cbvmda="urn:epcglobal:cbv:mda"
xmlns:tatmeen="http://tatmeen.ae/epcis/">
      <EPCISHeader>
            <sbdh:StandardBusinessDocumentHeader>
                  <sbdh:HeaderVersion>1.3</sbdh:HeaderVersion>
                  <sbdh:Sender>
```

```
                              <sbdh:Identifier Authority="GS1">0123456789005</sbdh:Identifier>
                    </sbdh:Sender>
                    <sbdh:Receiver>
                              <sbdh:Identifier Authority="GS1">6297001273005</sbdh:Identifier>
                    </sbdh:Receiver>
                    <sbdh:DocumentIdentification>
                              <sbdh:Standard>EPCglobal</sbdh:Standard>
                              <sbdh:TypeVersion>1.0</sbdh:TypeVersion>

        <sbdh:InstanceIdentifier>2f1bdabdfaee464c87e1aeb7e586e6ab</sbdh:InstanceIdentifier>
                              <sbdh:Type>Events</sbdh:Type>
                              <sbdh:CreationDateAndTime>2021-05-
31T12:02:05.000Z</sbdh:CreationDateAndTime>
                              </sbdh:DocumentIdentification>
                    </sbdh:StandardBusinessDocumentHeader>
          </EPCISHeader>
          <EPCISBody>
                    <EventList>
                              <ObjectEvent>
                              <!-- Decommission - Damaged -->
                              <eventTime>2021-05-31T12:02:11.000Z</eventTime>
                              <eventTimeZoneOffset>+04:00</eventTimeZoneOffset>
                              <epcList>
                                        <epc>urn:epc:id:sgtin:0123456.305512.NP2P22376C9A</epc>
                                        <epc>urn:epc:id:sgtin:0123456.305512.NP2P2236YDY7</epc>
                                        <epc>urn:epc:id:sscc:0123456.0001018329</epc>
                                        <epc>urn:epc:id:sscc:0123456.0001018330</epc>
                              </epcList>
                              <action>DELETE</action>
                              <bizStep>urn:epcglobal:cbv:bizstep:decommissioning</bizStep>
                              <disposition>urn:epcglobal:cbv:disp:damaged</disposition>
                              <readPoint>
                                        <id>urn:epc:id:sgln:0123456.99999.0</id>
                              </readPoint>
                              <tatmeen:reasonCode>D01</tatmeen:reasonCode>
                              </ObjectEvent>
                    </EventList>
          </EPCISBody>
</epcis:EPCISDocument>
```

Table 57 EPCIS Damaged Example

5.11.15 Stolen Example

```
<epcis:EPCISDocument schemaVersion="1.2" creationDate="2021-01-28T07:21:26Z"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:cbvmda="urn:epcglobal:cbv:mda"
xmlns:tatmeen="http://tatmeen.ae/epcis/">
        <EPCISHeader>
                <sbdh:StandardBusinessDocumentHeader>
                        <sbdh:HeaderVersion>1.3</sbdh:HeaderVersion>
                        <sbdh:Sender>
                                <sbdh:Identifier Authority="GS1">0123456789005</sbdh:Identifier>
                        </sbdh:Sender>
                        <sbdh:Receiver>
                                <sbdh:Identifier Authority="GS1">6297001273005</sbdh:Identifier>
                        </sbdh:Receiver>
                        <sbdh:DocumentIdentification>
                                <sbdh:Standard>EPCglobal</sbdh:Standard>
                                <sbdh:TypeVersion>1.0</sbdh:TypeVersion>

        <sbdh:InstanceIdentifier>2f1bdabdfaee464c87e1aeb7e586e6ab</sbdh:InstanceIdentifier>
                                <sbdh:Type>Events</sbdh:Type>
                                <sbdh:CreationDateAndTime>2021-05-
31T12:02:05.000Z</sbdh:CreationDateAndTime>
                        </sbdh:DocumentIdentification>
                </sbdh:StandardBusinessDocumentHeader>
        </EPCISHeader>
        <EPCISBody>
                <EventList>
                        <ObjectEvent>
                        <!-- Decommission - Stolen -->
                                <eventTime>2021-05-31T12:02:11.000Z</eventTime>
                                <eventTimeZoneOffset>+04:00</eventTimeZoneOffset>
                                <epcList>
                                        <epc>urn:epc:id:sgtin:0123456.305512.NP2P22376C9A</epc>
                                        <epc>urn:epc:id:sgtin:0123456.305512.NP2P2236YDY7</epc>
                                        <epc>urn:epc:id:sscc:0123456.0001018329</epc>
                                        <epc>urn:epc:id:sscc:0123456.0001018330</epc>
                                </epcList>
                                <action>DELETE</action>
                                <bizStep>urn:epcglobal:cbv:bizstep:decommissioning</bizStep>
                                <disposition>urn:epcglobal:cbv:disp:stolen</disposition>
                                <readPoint>
                                        <id>urn:epc:id:sgln:0123456.99999.0</id>
                                </readPoint>
```

```
                    </ObjectEvent>
              </EventList>
        </EPCISBody>
</epcis:EPCISDocument>
```

Table 58 EPCIS Stolen Example

5.11.16 Exported Example

```
<epcis:EPCISDocument schemaVersion="1.2" creationDate="2021-01-28T07:21:26Z"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:cbvmda="urn:epcglobal:cbv:mda"
xmlns:tatmeen="http://tatmeen.ae/epcis/">
        <EPCISHeader>
              <sbdh:StandardBusinessDocumentHeader>
                    <sbdh:HeaderVersion>1.3</sbdh:HeaderVersion>
                    <sbdh:Sender>
                          <sbdh:Identifier Authority="GS1">0123456789005</sbdh:Identifier>
                    </sbdh:Sender>
                    <sbdh:Receiver>
                          <sbdh:Identifier Authority="GS1">6297001273005</sbdh:Identifier>
                    </sbdh:Receiver>
                    <sbdh:DocumentIdentification>
                          <sbdh:Standard>EPCglobal</sbdh:Standard>
                          <sbdh:TypeVersion>1.0</sbdh:TypeVersion>

        <sbdh:InstanceIdentifier>2f1bdabdfaee464c87e1aeb7e586e6ab</sbdh:InstanceIdentifier>
                          <sbdh:Type>Events</sbdh:Type>
                          <sbdh:CreationDateAndTime>2021-05-
31T12:02:05.000Z</sbdh:CreationDateAndTime>
                    </sbdh:DocumentIdentification>
              </sbdh:StandardBusinessDocumentHeader>
        </EPCISHeader>
        <EPCISBody>
              <EventList>
                    <ObjectEvent>
                    <!-- Decommission - Exported -->
                          <eventTime>2021-05-31T12:02:11.000Z</eventTime>
                          <eventTimeZoneOffset>+04:00</eventTimeZoneOffset>
                          <epcList>
                                <epc>urn:epc:id:sgtin:0123456.305512.NP2P22376C9A</epc>
                                <epc>urn:epc:id:sgtin:0123456.305512.NP2P2236YDY7</epc>
                                <epc>urn:epc:id:sscc:0123456.0001018329</epc>
                                <epc>urn:epc:id:sscc:0123456.0001018330</epc>
```

```
                                              </epcList>
                                              <action>DELETE</action>
                                              <bizStep>urn:epcglobal:cbv:bizstep:decommissioning</bizStep>
                                              <disposition>urn:epcglobal:cbv:disp:non_sellable_other</disposition>
                                              <readPoint>
                                                        <id>urn:epc:id:sgln:0123456.99999.0</id>
                                              </readPoint>
                                      </ObjectEvent>
                              </EventList>
                      </EPCISBody>
        </epcis:EPCISDocument>
```

Table 59 EPCIS Exported Example

5.11.17 Lost Example

```
<epcis:EPCISDocument schemaVersion="1.2" creationDate="2021-01-28T07:21:26Z"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:cbvmda="urn:epcglobal:cbv:mda"
xmlns:tatmeen="http://tatmeen.ae/epcis/">
        <EPCISHeader>
                <sbdh:StandardBusinessDocumentHeader>
                        <sbdh:HeaderVersion>1.3</sbdh:HeaderVersion>
                        <sbdh:Sender>
                                <sbdh:Identifier Authority="GS1">0123456789005</sbdh:Identifier>
                        </sbdh:Sender>
                        <sbdh:Receiver>
                                <sbdh:Identifier Authority="GS1">6297001273005</sbdh:Identifier>
                        </sbdh:Receiver>
                        <sbdh:DocumentIdentification>
                                <sbdh:Standard>EPCglobal</sbdh:Standard>
                                <sbdh:TypeVersion>1.0</sbdh:TypeVersion>

        <sbdh:InstanceIdentifier>2f1bdabdfaee464c87e1aeb7e586e6ab</sbdh:InstanceIdentifier>
                                <sbdh:Type>Events</sbdh:Type>
                                <sbdh:CreationDateAndTime>2021-05-
31T12:02:05.000Z</sbdh:CreationDateAndTime>
                        </sbdh:DocumentIdentification>
                </sbdh:StandardBusinessDocumentHeader>
        </EPCISHeader>
        <EPCISBody>
                <EventList>
                        <ObjectEvent>
                                <!-- Decommission Lost -->
```

```
                                    <eventTime>2021-05-31T12:02:11.000Z</eventTime>
                                    <eventTimeZoneOffset>+04:00</eventTimeZoneOffset>
                                    <epcList
                                            <epc>urn:epc:id:sgtin:0123456.305512.NP2P22376C9A</epc>
                                            <epc>urn:epc:id:sgtin:0123456.305512.NP2P2236YDY7</epc>
                                            <epc>urn:epc:id:sscc:0123456.0001018329</epc>
                                            <epc>urn:epc:id:sscc:0123456.0001018330</epc>
                                    </epcList>
                                    <action>DELETE</action>
                                    <bizStep>urn:epcglobal:cbv:bizstep:decommissioning</bizStep>
                                    <disposition>urn:epcglobal:cbv:disp:inactive</disposition>
                                    <readPoint>
                                            <id>urn:epc:id:sgln:0123456.99999.0</id>
                                    </readPoint>
                            </ObjectEvent>
                    </EventList>
            </EPCISBody>
    </epcis:EPCISDocument>
```

Table 60 EPCIS Lost Example

5.11.18 Batch Recall Initiation Example

```
<epcis:EPCISDocument schemaVersion="1.2" creationDate="2021-01-28T07:21:26Z"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:cbvmda="urn:epcglobal:cbv:mda"
xmlns:tatmeen="http://tatmeen.ae/epcis/">
        <EPCISHeader>
                <sbdh:StandardBusinessDocumentHeader>
                        <sbdh:HeaderVersion>1.3</sbdh:HeaderVersion>
                        <sbdh:Sender>
                                <sbdh:Identifier Authority="GS1">0123456789005</sbdh:Identifier>
                        </sbdh:Sender>
                        <sbdh:Receiver>
                                <sbdh:Identifier Authority="GS1">6297001273005</sbdh:Identifier>
                        </sbdh:Receiver>
                        <sbdh:DocumentIdentification>
                                <sbdh:Standard>EPCglobal</sbdh:Standard>
                                <sbdh:TypeVersion>1.0</sbdh:TypeVersion>

        <sbdh:InstanceIdentifier>2f1bdabdfaee464c87e1aeb7e586e6ab</sbdh:InstanceIdentifier>
                                <sbdh:Type>Events</sbdh:Type>
                                <sbdh:CreationDateAndTime>2021-05-
31T12:02:05.000Z</sbdh:CreationDateAndTime>
```

```
                    </sbdh:DocumentIdentification>
                </sbdh:StandardBusinessDocumentHeader>
        </EPCISHeader>
        <EPCISBody>
            <EventList>
                <ObjectEvent>
                <!— Batch Recall Initiation -->
                    <eventTime>2021-05-31T12:02:11.000Z</eventTime>
                    <eventTimeZoneOffset>+04:00</eventTimeZoneOffset>
                    <epcList/>
                    <action>OBSERVE</action>
                    <bizStep>urn:tatmeen:cbv:bizstep:updating</bizStep>
                    <disposition>urn:tatmeen:cbv:disp:recall_init</disposition>
                    <readPoint>
                        <id>urn:epc:id:sgln:0123456.99999.0</id>
                    </readPoint>
                    <extension>
                        <quantityList>
                            <quantityElement>

    <epcClass>urn:epc:class:lgtin:0123456.305512.LOTTEST1</epcClass>
                            </quantityElement>
                        </quantityList>
                    </extension>
                    <tatmeen:recalled>I</tatmeen:recalled>
                    <tatmeen:reference>MOHAP/O/22/0986478</tatmeen:reference>
                </ObjectEvent>
            </EventList>
        </EPCISBody>
</epcis:EPCISDocument>
```

Table 61 EPCIS Batch Recall Initiation Example

5.11.19 Batch Recall Initiation Cancel Example

```
<epcis:EPCISDocument schemaVersion="1.2" creationDate="2021-01-28T07:21:26Z"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:cbvmda="urn:epcglobal:cbv:mda"
xmlns:tatmeen="http://tatmeen.ae/epcis/">
    <EPCISHeader>
        <sbdh:StandardBusinessDocumentHeader>
            <sbdh:HeaderVersion>1.3</sbdh:HeaderVersion>
            <sbdh:Sender>
                <sbdh:Identifier Authority="GS1">0123456789005</sbdh:Identifier>
```

```
                                    </sbdh:Sender>
                                    <sbdh:Receiver>
                                            <sbdh:Identifier Authority="GS1">6297001273005</sbdh:Identifier>
                                    </sbdh:Receiver>
                                    <sbdh:DocumentIdentification>
                                            <sbdh:Standard>EPCglobal</sbdh:Standard>
                                            <sbdh:TypeVersion>1.0</sbdh:TypeVersion>

        <sbdh:InstanceIdentifier>2f1bdabdfaee464c87e1aeb7e586e6yt</sbdh:InstanceIdentifier>
                                            <sbdh:Type>Events</sbdh:Type>
                                            <sbdh:CreationDateAndTime>2021-05-
31T12:02:05.000Z</sbdh:CreationDateAndTime>
                                    </sbdh:DocumentIdentification>
                            </sbdh:StandardBusinessDocumentHeader>
                </EPCISHeader>
                <EPCISBody>
                        <EventList>
                                <ObjectEvent>
                                <!— Batch Recall Initiation Cancel -->
                                        <eventTime>2021-05-31T12:02:11.000Z</eventTime>
                                        <eventTimeZoneOffset>+04:00</eventTimeZoneOffset>
                                        <epcList/>
                                        <action>OBSERVE</action>
                                        <bizStep>urn:tatmeen:cbv:bizstep:updating</bizStep>
                                        <disposition>urn:tatmeen:cbv:disp:recall_init_cancel</disposition>
                                        <readPoint>
                                                <id>urn:epc:id:sgln:0123456.99999.0</id>
                                        </readPoint>
                                        <extension>
                                                <quantityList>
                                                        <quantityElement>

        <epcClass>urn:epc:class:lgtin:0123456.305512.LOTTEST1</epcClass>
                                                        </quantityElement>
                                                </quantityList>
                                        </extension>
                                        <tatmeen:recalled>C</tatmeen:recalled>

        <tatmeen:instanceIdentifierReference>2f1bdabdfaee464c87e1aeb7e586e6ab</tatmeen:instanceIdentifier
Reference>                              </ObjectEvent>
                        </EventList>
                </EPCISBody>
</epcis:EPCISDocument>
```

Table 62 EPCIS Batch Recall Initiation Cancel Example

5.11.20 Batch Recall Completion Example

```
<epcis:EPCISDocument schemaVersion="1.2" creationDate="2021-01-28T07:21:26Z"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:cbvmda="urn:epcglobal:cbv:mda"
xmlns:tatmeen="http://tatmeen.ae/epcis/">
        <EPCISHeader>
                <sbdh:StandardBusinessDocumentHeader>
                        <sbdh:HeaderVersion>1.3</sbdh:HeaderVersion>
                        <sbdh:Sender>
                                <sbdh:Identifier Authority="GS1">0123456789005</sbdh:Identifier>
                        </sbdh:Sender>
                        <sbdh:Receiver>
                                <sbdh:Identifier Authority="GS1">6297001273005</sbdh:Identifier>
                        </sbdh:Receiver>
                        <sbdh:DocumentIdentification>
                                <sbdh:Standard>EPCglobal</sbdh:Standard>
                                <sbdh:TypeVersion>1.0</sbdh:TypeVersion>

        <sbdh:InstanceIdentifier>2f1bdabdfaee464c87e1aeb7e586e6ab</sbdh:InstanceIdentifier>
                                <sbdh:Type>Events</sbdh:Type>
                                <sbdh:CreationDateAndTime>2021-05-
31T12:02:05.000Z</sbdh:CreationDateAndTime>
                        </sbdh:DocumentIdentification>
                </sbdh:StandardBusinessDocumentHeader>
        </EPCISHeader>
        <EPCISBody>
                <EventList>
                        <ObjectEvent>
                        <!— Batch Recall Completion -->
                                <eventTime>2021-05-31T12:02:11.000Z</eventTime>
                                <eventTimeZoneOffset>+04:00</eventTimeZoneOffset>
                                <epcList/>
                                <action>OBSERVE</action>
                                <bizStep>urn:tatmeen:cbv:bizstep:updating</bizStep>
                                <disposition>urn:epcglobal:cbv:disp:recalled</disposition>
                                <readPoint>
                                        <id>urn:epc:id:sgln:0123456.99999.0</id>
                                </readPoint>
                                <extension>
                                        <quantityList>
                                                <quantityElement>
```

```
              <epcClass>urn:epc:class:lgtin:0123456.305512.LOTTEST1</epcClass>
                                    </quantityElement>
                                  </quantityList>
                              </extension>
                              <tatmeen:recalled>X</tatmeen:recalled>
                        </ObjectEvent>
                  </EventList>
            </EPCISBody>
      </epcis:EPCISDocument>
```

Table 63 EPCIS Batch Recall Completion Example

5.11.21 Destruction Initiation Example

```
<epcis:EPCISDocument schemaVersion="1.2" creationDate="2021-01-28T07:21:26Z"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:cbvmda="urn:epcglobal:cbv:mda"
xmlns:tatmeen="http://tatmeen.ae/epcis/">
      <EPCISHeader>
            <sbdh:StandardBusinessDocumentHeader>
                  <sbdh:HeaderVersion>1.3</sbdh:HeaderVersion>
                  <sbdh:Sender>
                        <sbdh:Identifier Authority="GS1">0123456789005</sbdh:Identifier>
                  </sbdh:Sender>
                  <sbdh:Receiver>
                        <sbdh:Identifier Authority="GS1">6297001273005</sbdh:Identifier>
                  </sbdh:Receiver>
                  <sbdh:DocumentIdentification>
                        <sbdh:Standard>EPCglobal</sbdh:Standard>
                        <sbdh:TypeVersion>1.0</sbdh:TypeVersion>

      <sbdh:InstanceIdentifier>2f1bdabdfaee464c87e1aeb7e586e6ab</sbdh:InstanceIdentifier>
                        <sbdh:Type>Events</sbdh:Type>
                        <sbdh:CreationDateAndTime>2021-05-
31T12:02:05.000Z</sbdh:CreationDateAndTime>
                  </sbdh:DocumentIdentification>
            </sbdh:StandardBusinessDocumentHeader>
      </EPCISHeader>
      <EPCISBody>
            <EventList>
                  <ObjectEvent>
                  <!— Destruction Initiation -->
                        <eventTime>2021-05-31T12:02:11.000Z</eventTime>
```

```
                              <eventTimeZoneOffset>+04:00</eventTimeZoneOffset>
                              <epcList>
                                      <epc>urn:epc:id:sgtin:0123456.305512.NP2P22376C9A</epc>
                                      <epc>urn:epc:id:sgtin:0123456.305512.NP2P2236YDY7</epc>
                                      <epc>urn:epc:id:sscc:0123456.0001018329</epc>
                                      <epc>urn:epc:id:sscc:0123456.0001018330</epc>
                              </epcList>
                              <action>OBSERVE</action>
                              <bizStep>urn:tatmeen:cbv:bizstep:updating</bizStep>
                              <disposition>urn:tatmeen:cbv:disp:destroy_init</disposition>
                              <readPoint>
                                      <id>urn:epc:id:sgln:0123456.99999.0</id>
                              </readPoint>
                              <bizLocation>
                                      <id>urn:epc:id:sgln:0123456.99999.0</id>
                              </bizLocation>
                              <tatmeen:destroy_sgtin>I</tatmeen:destroy_sgtin>
                              <tatmeen:destroy_sscc>I</tatmeen:destroy_sscc>
                              <tatmeen:reference>MOHAP/DNOTE/22/123456</tatmeen:reference>
                              <tatmeen:reasonCode>W02</tatmeen:reasonCode>
                      </ObjectEvent>
              </EventList>
      </EPCISBody>
</epcis:EPCISDocument>
```

Table 64 EPCIS Destruction Initiation Example

5.11.22 Destruction Initiation Cancel Example

```
<epcis:EPCISDocument schemaVersion="1.2" creationDate="2021-01-28T07:21:26Z"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:cbvmda="urn:epcglobal:cbv:mda"
xmlns:tatmeen="http://tatmeen.ae/epcis/">
        <EPCISHeader>
                <sbdh:StandardBusinessDocumentHeader>
                        <sbdh:HeaderVersion>1.3</sbdh:HeaderVersion>
                        <sbdh:Sender>
                                <sbdh:Identifier Authority="GS1">0123456789005</sbdh:Identifier>
                        </sbdh:Sender>
                        <sbdh:Receiver>
                                <sbdh:Identifier Authority="GS1">6297001273005</sbdh:Identifier>
                        </sbdh:Receiver>
                        <sbdh:DocumentIdentification>
                                <sbdh:Standard>EPCglobal</sbdh:Standard>
```

```
                              <sbdh:TypeVersion>1.0</sbdh:TypeVersion>

        <sbdh:InstanceIdentifier>2f1bdabdfaee464c87e1aeb7e586e9ba</sbdh:InstanceIdentifier>
                              <sbdh:Type>Events</sbdh:Type>
                              <sbdh:CreationDateAndTime>2021-05-
31T12:02:05.000Z</sbdh:CreationDateAndTime>
                        </sbdh:DocumentIdentification>
                </sbdh:StandardBusinessDocumentHeader>
        </EPCISHeader>
        <EPCISBody>
                <EventList>
                        <ObjectEvent>
                        <!— Destruction Initiation Cancel -->
                              <eventTime>2021-05-31T12:02:11.000Z</eventTime>
                              <eventTimeZoneOffset>+04:00</eventTimeZoneOffset>
                              <epcList>
                                      <epc>urn:epc:id:sgtin:0123456.305512.NP2P22376C9A</epc>
                                      <epc>urn:epc:id:sgtin:0123456.305512.NP2P2236YDY7</epc>
                                      <epc>urn:epc:id:sscc:0123456.0001018329</epc>
                                      <epc>urn:epc:id:sscc:0123456.0001018330</epc>
                              </epcList>
                              <action>DELETE</action>
                              <bizStep>urn:tatmeen:cbv:bizstep:updating</bizStep>
                              <disposition>urn:tatmeen:cbv:disp:destroy_init_cancel</disposition>
                              <readPoint>
                                      <id>urn:epc:id:sgln:0123456.99999.0</id>
                              </readPoint>
                              <bizLocation>
                                      <id>urn:epc:id:sgln:0123456.99999.0</id>
                              </bizLocation>
                              <tatmeen:destroy_sgtin>C</tatmeen:destroy_sgtin>
                              <tatmeen:destroy_sscc>C</tatmeen:destroy_sscc>

        <tatmeen:instanceIdentifierReference>2f1bdabdfaee464c87e1aeb7e586e6ab</tatmeen:instanceIdentifier
Reference>
                        </ObjectEvent>
                </EventList>
        </EPCISBody>
</epcis:EPCISDocument>
```

Table 65 EPCIS Destruction Initiation Cancel Example

5.11.23 Destruction Completion Example

```
<epcis:EPCISDocument schemaVersion="1.2" creationDate="2021-01-28T07:21:26Z"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:cbvmda="urn:epcglobal:cbv:mda"
xmlns:tatmeen="http://tatmeen.ae/epcis/">
        <EPCISHeader>
                <sbdh:StandardBusinessDocumentHeader>
                        <sbdh:HeaderVersion>1.3</sbdh:HeaderVersion>
                        <sbdh:Sender>
                                <sbdh:Identifier Authority="GS1">0123456789005</sbdh:Identifier>
                        </sbdh:Sender>
                        <sbdh:Receiver>
                                <sbdh:Identifier Authority="GS1">6297001273005</sbdh:Identifier>
                        </sbdh:Receiver>
                        <sbdh:DocumentIdentification>
                                <sbdh:Standard>EPCglobal</sbdh:Standard>
                                <sbdh:TypeVersion>1.0</sbdh:TypeVersion>

        <sbdh:InstanceIdentifier>2f1bdabdfaee464c87e1aeb7e586e6ab</sbdh:InstanceIdentifier>
                                <sbdh:Type>Events</sbdh:Type>
                                <sbdh:CreationDateAndTime>2021-05-
31T12:02:05.000Z</sbdh:CreationDateAndTime>
                        </sbdh:DocumentIdentification>
                </sbdh:StandardBusinessDocumentHeader>
        </EPCISHeader>
        <EPCISBody>
                <EventList>
                        <ObjectEvent>
                        <!—Destruction Completion -->
                                <eventTime>2021-05-31T12:02:11.000Z</eventTime>
                                <eventTimeZoneOffset>+04:00</eventTimeZoneOffset>
                                <epcList>
                                        <epc>urn:epc:id:sgtin:0123456.305512.NP2P22376C9A</epc>
                                        <epc>urn:epc:id:sgtin:0123456.305512.NP2P2236YDY7</epc>
                                        <epc>urn:epc:id:sscc:0123456.0001018329</epc>
                                        <epc>urn:epc:id:sscc:0123456.0001018330</epc>
                                </epcList>
                                <action>DELETE</action>
                                <bizStep>urn:epcglobal:cbv:bizstep:destroying</bizStep>
                                <disposition>urn:epcglobal:cbv:disp:destroyed</disposition>
                                <readPoint>
                                        <id>urn:epc:id:sgln:0123456.99999.0</id>
                                </readPoint>
```

```
                              <tatmeen:destroy_sgtin>X</tatmeen:destroy_sgtin>
                              <tatmeen:destroy_sscc>X</tatmeen:destroy_sscc>
                        </ObjectEvent>
                  </EventList>
            </EPCISBody>
      </epcis:EPCISDocument>
```

Table 66 EPCIS Destruction Completion Example

5.12   EPCIS Message Technical Response Examples

5.12.1 Success

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<Response>
   <statustype>I</statustype>
   <code>202</code>
   <date>2021-07-20T09:36:47.127Z</date>
   <messageid>660d45b4-360c-51b5-8645-1192e09ac44c</messageid>
   <status>
      <reason>Message accepted for Tatmeen Processing, the message status can be viewed in the message
status query</reason>
      <code>I001</code>
   </status>
</Response>
```

Table 67 Success Example

5.12.2 Connectivity Error

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<Response>
   <statustype>E</statustype>
   <code>500</code>
   <date>2021-07-20T09:36:47.127Z</date>
   <messageid>660d45b4-360c-51b5-8645-1192e09ac44c</messageid>
   <status>
      <reason>Tatmeen applications not reachable, try later</reason>
      <code>E001</code>
   </status>
</Response>
```

Table 68 Connectivity Error Example

5.12.3 System Error

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<Response>
  <statustype>E</statustype>
  <code>500</code>
  <date>2021-07-20T09:36:47.127Z</date>
  <messageid>660d45b4-360c-51b5-8645-1192e09ac44c</messageid>
  <status>
    <reason>Invalid Import Permit</reason>
    <code>E002</code>
  </status>
</Response>
```

Table 69 System Error Example

5.12.4 Mapping Error

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<Response>
  <statustype>E</statustype>
  <code>500</code>
  <date>2021-07-20T09:36:47.127Z</date>
  <messageid>660d45b4-360c-51b5-8645-1192e09ac49c</messageid>
  <status>
    <reason>Mandatory field GTIN – 6290000012347 length not valid</reason>
    <code>E003</code>
  </status>
</Response>
```

Table 70 Mapping Error Example

5.13   EPCIS Message Status Format

The intention is for the Tatmeen system to provide the message status for EPCIS messages technically accepted by Tatmeen.

The MAH (or their delegated technical partner) sends a query message to the Tatmeen solution to determine the status they have sent to the Tatmeen solution.

The response from the Tatmeen solution provides a series of system log entries that are shared with the technical user of the sending party.

The response is an overall status for the messages, followed by a list of the log responses from the Tatmeen solution. These responses are organised into a response list to publish the Tatmeen solution responses to the message received by that system.

There are two elements in each entry of the status log response:

- Log type
- Log Message

Type	Meaning
S	Successful
W	Successful with Warnings
E	Application Error
A	Technical Error
C	Cancelled
U	Unknown

Table 71 Message Status Query Types

5.13.1 Message Status Query

```xml
<?xml version="1.0" encoding="utf-8"?>
<tatmeenMsgStatusQuery>
  <language>E</language>
  <instanceIdentifier>52540081D8101edA8FA0FF68B3CA74E3</instanceIdentifier>
</tatmeenMsgStatusQuery>
```

Table 72 Message Status Query Example

5.13.2 Message Status Query Response

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<tatmeenResponse>
    <instanceIdentifier>52540081D8101edA8FA0FF68B3CA74E3</instanceIdentifier>
    <messagestatus>A  - Technical Error</messagestatus>
<logList>
    <log>
        <type>S</type>
        <message>Message (0022480D59801EEC92A4353791A4B3EB) processing started.</message>
    </log>
    <log>
```

```
        <type>A</type>
        <message>Object Event failed, all changes in the event have been reverted</message>
    </log>
    <log>
        <type>E</type>
        <message>Event on 18.11.2021 12:02:11 failed. (1)</message>
    </log>
    <log>
        <type>E</type>
        <message>Activity Create /Commission is invalid as object exists already</message>
    </log>
    <log>
        <type>I</type>
        <message>Invalid object: 123456-3111113-ASADSFSDSRT(SGTIN)</message>
    </log>
</logList>
</tatmeenResponse>
```

Table 73 Message Query Response Example

6 OData Message Format

This section provides detailed information about the format of the OData Services and message events that must be sent by the MAH / Licensing Agent organisations to the Tatmeen system.

It is assumed that the recipient of this document is familiar with OData services and the technical details described in the subsequent sections.

6.1 OData Product Recall Properties

These OData services and properties cover the Product / GTIN Recall events as they are not covered by the EPCIS Message Formats. This event messaging manages all the Product Recall scenarios as follows:

- Product Recall Initiation (Initiation / Initiation Cancel).
- Product Recall Completion.

6.1.1 Product Recall Initiation

EntitySet	$filter	$expand	$format
/GTINRecallInitiateSet	See properties in Table 75 for filter parameters	NAVRETURN	JSON

Table 74 Product Recall Initiate – OData Entity Definition

Property	Occurrence & Format	Description	Example
Activity	Mandatory	Standard values for this API are: • 'PRD-INI' for Product Recall Initiation • 'PRD-CNC' for Product Recall Initiation Cancel	'PRD-INI' or 'PRD-CNC'
MsgGUID	Mandatory	(Message) Identifier A unique message identifier issued by the Customs business partner. This is limited to a maximum of 40 alphanumeric characters.	e999f82e7828a9633d977c64016a8f81
Language	Mandatory	This is the ISO two-character language identifier.	EN

Property	Occurrence & Format	Description	Example
GTIN	Mandatory	This GTIN is the lowest level product GTIN (UoM = EA) in 14-digit human readable format. This GTIN identifies the product that should be recalled.	00400001001233
GLN	Mandatory	This GLN in 13-digit human readable format and is the read point GLN of the MAH / Licensing Agent initiating the product recall.	1234567891019
Reason	Omitted	There are no reason codes for this process and the value is a blank value	' '
CircRef	Conditional	This is the Circular Reference from MoHAP for the Product Recall. • Mandatory when Activity = 'PRD_INIT' • Omitted when Activity = 'PRD-CNC'	• MOHAP/CR/22/1234 • ' '
RefMsgGUID	Conditional	Reference Message Identifier This reference is mandatory when the Activity = 'PRD-CNC' and contains the Identifier from the originating event that is being cancelled. This reference is blank when the Activity = 'PRD-INI'.	e999f82e7828a9633d977c64016a8f81 OR ' '.
EvtTime	Mandatory	Event Time This is the event time in standard ISO format.	2022-06-07T20:02:00.6090300Z

Table 75 Product Recall Initiate – Service Properties

6.1.2 Product Recall Completion

EntitySet	$filter	$expand	$format
/GTINRecallExeCompleteSet	See properties in Table 77 for filter parameters	NAVRETURN	JSON

Table 76 Product Recall Completion – Odata Entity Definition

Property	Occurrence & Format	Description	Example
Activity	Mandatory	Standard values for this API is 'PRD-COM'	'PRD-COM'
MsgGUID	Mandatory	(Message) Identifier A unique message identifier issued by the Customs business partner. This is limited to a maximum of 40 alphanumeric characters.	e999f82e7828a9633d977c64016a8f81
Language	Mandatory	This is the ISO two-character language identifier.	EN
GTIN	Mandatory	This GTIN is the lowest level product GTIN (UoM = EA) in 14-digit human readable format. This GTIN identifies the product that should be recalled.	00400001001233
GLN	Mandatory	This GLN in 13-digit human readable format and is the read point GLN of the MAH / Licensing Agent initiating the product recall.	1234567891019
EvtTime	Mandatory	Event Time This is the event time in standard ISO format.	2022-06-07T20:02:00.6090300Z

Table 77 Product Recall Completion – Service Properties

6.2 OData Schema

6.2.1 Product Recall Initiation Events

```
{
  "d": {
    "results": [
      {
        "Activity": "string",
        "MsgGUID": "string",
        "GLN": "string",
        "Language": "string",
        "GTIN": "string",
        "CircRef": "string",
        "Reason": "string",
        "RefMsgGUID": "string",
        "EvtTime": "string",
```

```
    "NAVRETURN": {
     "results": [
       {
         "Type": "string",
         "Id": "string",
         "Number": "string",
         "Message": "string",
         "LogNo": "string",
         "LogMsgNo": "string",
         "MessageV1": "string",
         "MessageV2": "string",
         "MessageV3": "string",
         "MessageV4": "string",
         "Parameter": "string",
         "Row": 0,
         "Field": "string",
         "System": "string"
       }
     ]
    }
   }
  ]
 }
}
```

Table 78 OData Schema Example (Success)

6.2.2 Product Recall Completion Event

```
{
 "d": {
  "results": [
   {
     "Activity": "string",
     "MsgGUID": "string",
     "GLN": "string",
     "Language": "string",
     "GTIN": "string",
     "EvtTime": "string",
     "NAVRETURN": {
      "results": [
        {
         "Type": "string",
```

```
        "Id": "string",
        "Number": "string",
        "Message": "string",
        "LogNo": "string",
        "LogMsgNo": "string",
        "MessageV1": "string",
        "MessageV2": "string",
        "MessageV3": "string",
        "MessageV4": "string",
        "Parameter": "string",
        "Row": 0,
        "Field": "string",
        "System": "string"
      }
    ]
   }
  }
 ]
 }
}
```

Table 79 OData Schema Example (Success)

6.2.3 Product Recall Error Response

```
{
 "error": {
  "code": "string",
  "message": {
    "lang": "string",
    "value": "string"
  },
  "innererror": {}
 }
}
```

Table 80 OData Schema Example (4xx Error)

7 SOAP Message Format

This section provides detailed information about the format of the SOAP Services and message events that must be sent by the MAH / Licensing Agent organisations to the Tatmeen system.

It is assumed that the recipient of this document is familiar with SOAP services and the technical details described in the subsequent sections.

7.1 Product Verification Service

The Tatmeen system provides a product verification service where the MAH / Domestic Manufacturer / Licensing Agent sends a query message to the Tatmeen solution to determine the status of an object (SGTIN or SSCC) that are located at the MAH / Domestic Manufacturer / Licensing Agent's facility.

The response from the Tatmeen solution provides a confirmation of the object ID and the current status of the successfully queried object.

7.1.1 SGTIN Product Verification Query

```
<env:Envelope xmlns:env="http://www.w3.org/2003/05/soap-envelope">
    <env:Header/>
    <env:Body>
            <ProductVerificationRequest>
                    <GeoLatitude/>
                    <GeoLongitude/>
                    <Language>E</Language>
                    <ProductID>urn:epc:id:sgtin:6295000041.055.01118926886313825</ProductID>
            </ProductVerificationRequest>
    </env:Body>
</env:Envelope>
```

Table 81 SGTIN Product Verification Query Example

7.1.2 SSCC Product Verification Query

```
<env:Envelope xmlns:env="http://www.w3.org/2003/05/soap-envelope">
    <env:Header/>
    <env:Body>
            <ProductVerificationRequest>
                    <GeoLatitude/>
                    <GeoLongitude/>
```

```
                        <Language>E</Language>
                        <ProductID>urn:epc:id:sscc:6033923.1189268863</ProductID>
                </ProductVerificationRequest>
        </env:Body>
</env:Envelope>
```

Table 82 SGTIN Product Verification Query Example

7.1.3 Product Verification Success Response

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Header/>
  <soap:Body>
    <ProductVerificationResponse>
      <ProductDetails>
        <ProductID>(01)06295000041557(21)01118926886313825</ProductID>
        <GLN>6295000041663</GLN>
        <LocationName>AL Taweelah Medical Center</LocationName>
        <LocationNumber>
          <RegulationAuthority>DHCC</RegulationAuthority>
          <RegulationLicense>132</RegulationLicense>
        </LocationNumber>
        <GeoLongitude>25.111144586569</GeoLongitude>
        <GeoLatitude>55.280821232987</GeoLatitude>
        <ProductDescription>LacArte    Splash    EDO    100mg    LacArte    Splash    EDO
100mg</ProductDescription>
        <LotNumber>PKY11417</LotNumber>
        <DateOfManufacture>2023-05-24</DateOfManufacture>
        <DateOfExpiry>2022-01-15</DateOfExpiry>
      </ProductDetails>
      <ProductStatusList>
        <ProductStatus>
          <Status>Active</Status>
        </ProductStatus>
        <ProductStatus>
          <Status>Status 2</Status>
        </ProductStatus>
      </ProductStatusList>
    </ProductVerificationResponse>
  </soap:Body>
</soap:Envelope>
```

Table 83 Product Verification Success Response Example

7.1.4 Product Verification Error Response

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
   <soap:Header/>
   <soap:Body>
      <ProductVerificationResponse>
         <LogList>
            <Log>
               <Type>E</Type>
               <code>E016</code>
               <Message>ID urn:epc:id:sgtin:6295000041.055.01118926886314825 is not verified
successfully!.</Message>
            </Log>
         </LogList>
      </ProductVerificationResponse>
   </soap:Body>
</soap:Envelope>
```

Table 84 Product Verification Error Response Example

8 EPCIS Message Summary

Activity	Field	Event Type	Action Type	EPC(List)	Business Step	Disposition	Business Transaction Type	Read Point	Business Location
	XML Tag	variable	<action>	variable	<bizstep>	<disposition>	<bizTransactionType>	<readPoint>	<bizLocation>
	Dimension	**EVENT**		**WHAT**	**WHY**			**WHERE**	
Registering serialised object	<ObjectEvent>	ADD	<epc> sgtin; sscc	commissioning	active		sgln	sgln
Deactivate serialised object	<ObjectEvent>	DELETE	<epc> sgtin; sscc	decommissioning	unknown		sgln	
Aggregation - packing	<AggregationEvent>	ADD	<parentID> sgtin; sscc <epc> sgtin; sscc	packing			sgln	sgln
Aggregation - unpacking	<AggregationEvent>	DELETE	<parentID> sgtin; sscc <epc> null	unpacking			sgln	sgln
Shipping	<ObjectEvent>	OBSERVE	<epc> sgtin; sscc	shipping	in_transit	desadv	sgln	
Shipping Cancellation	<ObjectEvent>	OBSERVE	<epc> sgtin; sscc	void_shipping	in_progress	desadv	sgln	sgln
Shipping Return	<ObjectEvent>	OBSERVE	<epc> sgtin; sscc	shipping	returned	desadv rma	sgln	
Shipping Return Cancellation	<ObjectEvent>	OBSERVE	<epc> sgtin; sscc	void_shipping	returned	desadv	sgln	sgln
Receiving	<ObjectEvent>	OBSERVE	<epc> sgtin; sscc	receiving	in_progress	recadv	sgln	sgln

Activity	Field	Event Type	Action Type	EPC(List)	Business Step	Disposition	Business Transaction Type	Read Point	Business Location
	XML Tag	variable	<action>	variable	<bizstep>	<disposition>	<bizTransactionType>	<readPoint>	<bizLocation>
	Dimension	EVENT		WHAT	WHY			WHERE	
Receiving Cancellation	<ObjectEvent>	OBSERVE		<epc> sgtin; sscc	void_receiving	in_transit	recadv	sgln	
Receiving Return	<ObjectEvent>	OBSERVE		<epc> sgtin; sscc	receiving	returned	recadv	sgln	sgln
Receiving Return Cancellation	<ObjectEvent>	OBSERVE		<epc> sgtin; sscc	void_receiving	returned	recadv	sgln	
Damaged	<ObjectEvent>	DELETE		<epc> sgtin; sscc	decommissioning	damaged		sgln	
Stolen	<ObjectEvent>	DELETE		<epc> sgtin; sscc	decommissioning	stolen		sgln	
Export	<ObjectEvent>	DELETE		<epc> sgtin; sscc	decommissioning	non_sellable_other		sgln	
Lost	<ObjectEvent>	DELETE		<epc> sgtin; sscc	decommissioning	inactive		sgln	
Destruction Initiation	<ObjectEvent>	OBSERVE		<epc> sgtin; sscc	updating	destroy_init		sgln	sgln
Destruction Initiation Cancellation	<ObjectEvent>	OBSERVE		<epc> sgtin; sscc	updating	destroy_init_cancel		sgln	sgln
Destruction Completion	<ObjectEvent>	DELETE		<epc> sgtin; sscc	destroying	destroyed		sgln	
Batch Recall Initiation	<ObjectEvent>	OBSERVE		<epcClass> lgtin	updating	recall_init		sgln	

Activity	Field	Event Type	Action Type	EPC(List)	Business Step	Disposition	Business Transaction Type	Read Point	Business Location
	XML Tag	variable	<action>	variable	<bizstep>	<disposition>	<bizTransactionType>	<readPoint>	<bizLocation>
	Dimension	EVENT		WHAT	WHY			WHERE	
Batch Recall Initiation Cancellation		<ObjectEvent>	OBSERVE	<epcClass> lgtin	updating	recall_init_cancel		sgln	
Batch Recall Completion		<ObjectEvent>	OBSERVE	<epcClass> lgtin	updating	recalled		sgln	

Table 85 Summary of EPCIS Message Constant Values

NOTES:

1. The Action Types apply to the actions being applied to the EPCs in the 'WHAT' dimension above.

2. The 'WHEN' and 'EXTENSION' dimensions are omitted from this table for simplicity.

9 Glossary

General short terms and abbreviations can be found in the Global Glossary (see Section **Error! Reference source not found.**, Reference Documents).

Short Term	Description
3PL	3rd Party Logistics
API	Application Programming Interface
BE-2-CS	The aggregation hierarchy where packaged "bundles" are packed into a "case".
EA-2-BE	The aggregation hierarchy where secondary packaged items, i.e., "eaches" are packed into a "bundle".
EPCIS	Electronic Product Code Information Services
ESB	Enterprise Service Bus
GTIN	Global Trade Item Number
HTTP(s)	Hypertext Transfer Protocol
ILMD	Item Level Master Data is the GS1 EPCIS master data extension segment within the product item commissioning event.
MAH	Marketing Authorization Holder
REST	Representational State Transfer
SC	Supply Chain
SGTIN	Serialized Global Trade Item Number
SHP	Shipping Import Permit, the UAE document for importing pharmaceutical products into the UAE.
SPOC	Single Point of Contact, being the individual in a business partner organisation responsible for managing the interactions with the Tatmeen system.
SSCC	Serial Shipping Container Code
URN	Uniform Resource Name, is a Uniform Resource Identifier (URI) that uses the urn scheme. URNs are globally unique persistent identifiers assigned within defined namespaces.
UTC	Coordinated Universal Time, which is the time standard commonly used across the world.
VPN	Virtual Private Network

Short Term	Description
WSDL	Web Service Definition Language
XML	Extensible Markup Language

Table 86 Glossary