Technical Guide for Logistics

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1 Document Control

1.1 Version History

Version	Date	Description of Change
0.1	27-Aug-2021	Initial Draft.
2.0	17-Mar-2022	Minor updates after MoHAP and 3PL review
3.0	30-May-2022	Additional features added.
4.0	20-Nov-2023	Removed (limited to MoHAP, only): • Sample; Block/Unblock for Inspection Added content for: • Destruction Initiate/Complete • Product Verification • Cancellation activities. • Corrected "Damaged" Event disposition to "damaged"

Table 1 Version History

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2 Introduction

The The UAE's Ministry of Health 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 of 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 product 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 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 logistics supply chain participants involved in the movement of medical products for the following processes:

1. Product transfer between stock holding owners and locations within the UAE.

2. Product hierarchy update within the UAE.

3. Product status update within the UAE.

4. Export of product from the UAE.

5. Destruction of product within the UAE.

These processes are the first draft of this technical guide, and it is expected that additional processes will be added in future versions of this document, as appropriate.

2.1.1 In Scope

This guide covers the technical onboarding of organizations to the Tatmeen solution.

2.1.2 Out of Scope

The guide makes reference to systems external to the Tatmeen system, and the onboarding to those external systems is not included in this guide.

Automatic processes within the Tatmeen solution are not covered within this guide.

2.2 Document Structure

The document follows the outline in Table 2.

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

Table 2 Document Structure

2.3 Target Participants

The following stakeholders / participants for the Section 2.1 in scope processes are responsible for collecting serialised product item traceability records during the storing and moving of pharmaceutical products within the UAE market.

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.
Dispenser	A partner providing pharmacy services to provide accurate, timely and qualitative medical product dispensing services to registered patients.
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.
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 3 Document Stakeholders

2.4 Prerequisites

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

• Product Registration:

All products subject to the UAE MoHAP legislation (registered drugs; unregistered drugs) should be known in the appropriate MoHAP / Federal system, and these should also be known in the GS1 BrandSync master data system. This product's information is synchronised between the BrandSync system and the Tatmeen solution.

- <u>Entity Registration</u>:
    - All Distributors (and relevant 3PLs) involved in the storage or distribution of medical products should be known as supply chain partners and should be 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 according to the following scenarios.

- Initial Receipt of Goods on importation to UAE.

- Product transfer between stock holding owners and locations within the UAE.

- Product hierarchy update within the UAE.

- Product status update within the UAE.

- Destruction of product within the UAE.

The following general principles for stakeholders in Section 2.3 reporting to the Tatmeen solution to meet the MoHAP legislation are:

- Logistics supply chain partners (Distributors) must report the relevant event serialisation information immediately when the physical event is completed.

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

- A single event activity is represented by a single GS1 event document with the exception of scenario of packing into a new SSCC parent.

3.1 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.

Note that according to the current MoHAP accepted practises, once the product is known at the first UAE location the products should not be shipped unless the market release is complete for that product.

3.1.1 Business Process Outline

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

1. The Distributor / storage partner 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 Distributor / storage partner (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.

3.1.2 Constraints and Validations

The Tatmeen solution expects to receive a message firstly from the SENDER Distributor / storage partner 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 Distributor / storage partner 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.
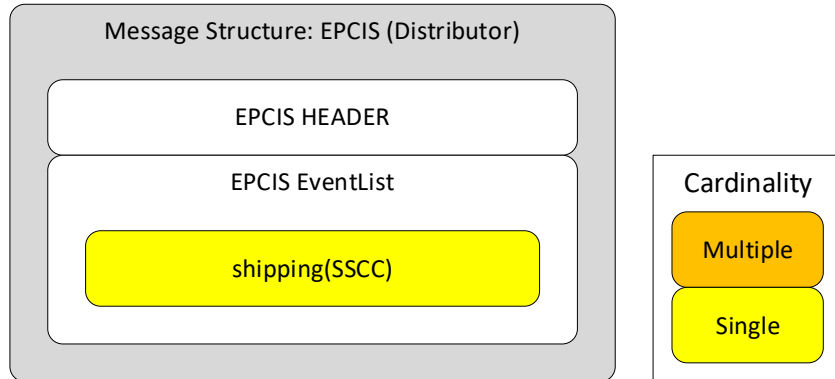
Figure 1 SENDER EPCIS Message Format

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. This also applies to the initial "receiving" event for goods originating from outside the UAE.
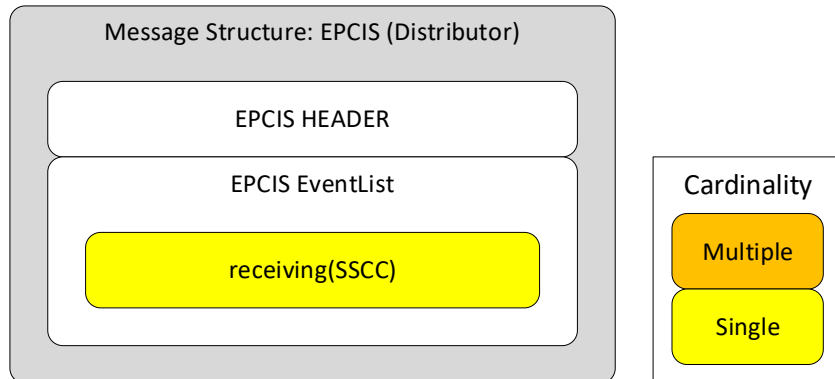
Figure 2 RECEIVER EPCIS Message Structure

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.

3.2 Product Hierarchy Update Within UAE

A product hierarchy update consists of one of two possible operations at a Distributor / storage partner 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 Distributor / storage partner 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.

3.2.1 Pack New SSCC

3.2.1.1 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 Distributor / storage partner must capture the serialised product item serialised items (SGTIN / SSCC) that are associated with the top level identifier.

3. The Distributor / storage partner 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.

3.2.1.2 Constraints and Validations

1. The Distributor / storage partner 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 Distributor / storage partner and is used to identify each EPCIS message.

   b. The message creation date and time.

   c. The message sender information, i.e., the logistics Distributor / storage partner 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.
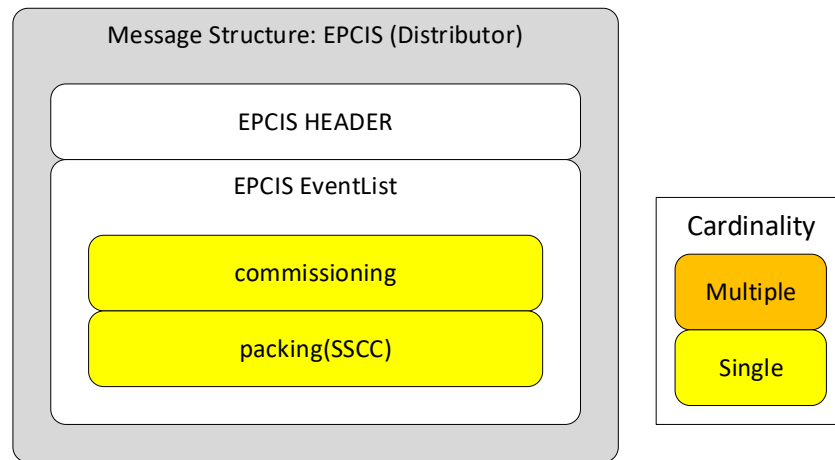
Figure 3 Pack to New SSCC – EPCIS Document Structure

3.2.2 Pack Into Existing SSCC

3.2.2.1 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 Distributor / storage partner must capture the serialised product item serialised items (SGTIN / SSCC) that are added to the logistics unit top level identifier.

3. The Distributor / storage partner 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.

3.2.2.2 Constraints and Validations

1. The Distributor / storage partner 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 Distributor / storage partner and is used to identify each EPCIS message.

b. The message creation date and time.

c. The message sender information, i.e., the logistics Distributor / storage partner 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.
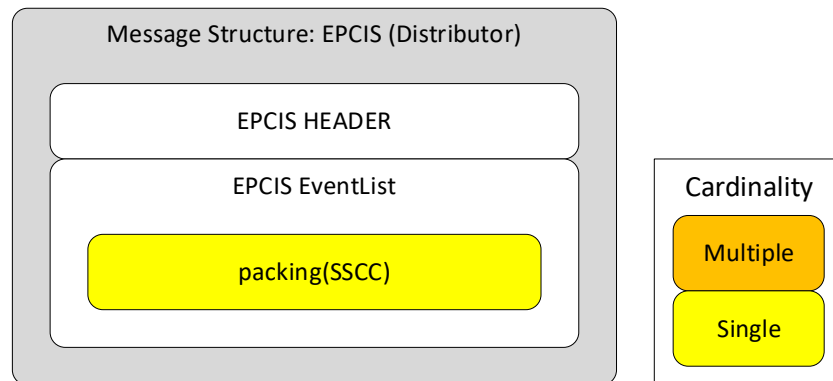
Figure 4 Pack to Existing SSCC – EPCIS Document Structure

3.2.3 Unpack Existing Hierarchy

3.2.3.1 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 Distributor / storage partner must capture the serialised product item identifier of the top level item.

2. The Distributor / storage partner 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.

3.2.3.2 Constraints and Validations

1. The Distributor / storage partner 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 Distributor / storage partner and is used to identify each EPCIS message.

    b. The message creation date and time.

    c. The message sender information, i.e., the logistics Distributor / storage partner 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.
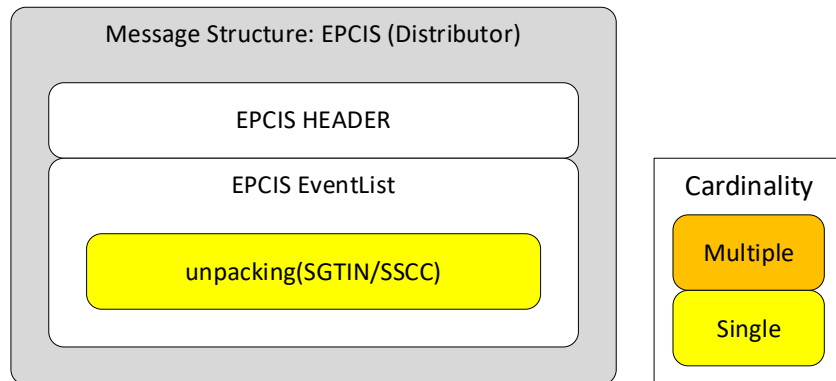
Figure 5 Unpack EPCIS Document Structure

3.3 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

3.3.1 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.

3.3.2 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 Distributor / storage partner 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 66.
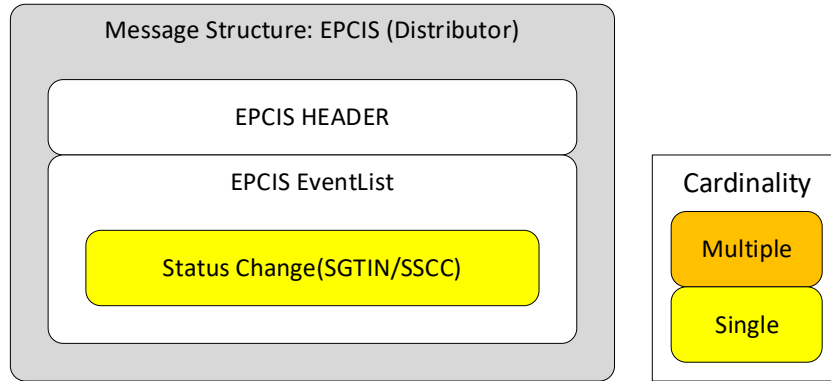
Figure 6 Status Change EPCIS Message Structure

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 (SGTIN/SSCC) are included in the status change message.

3.4 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.

3.4.1 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.
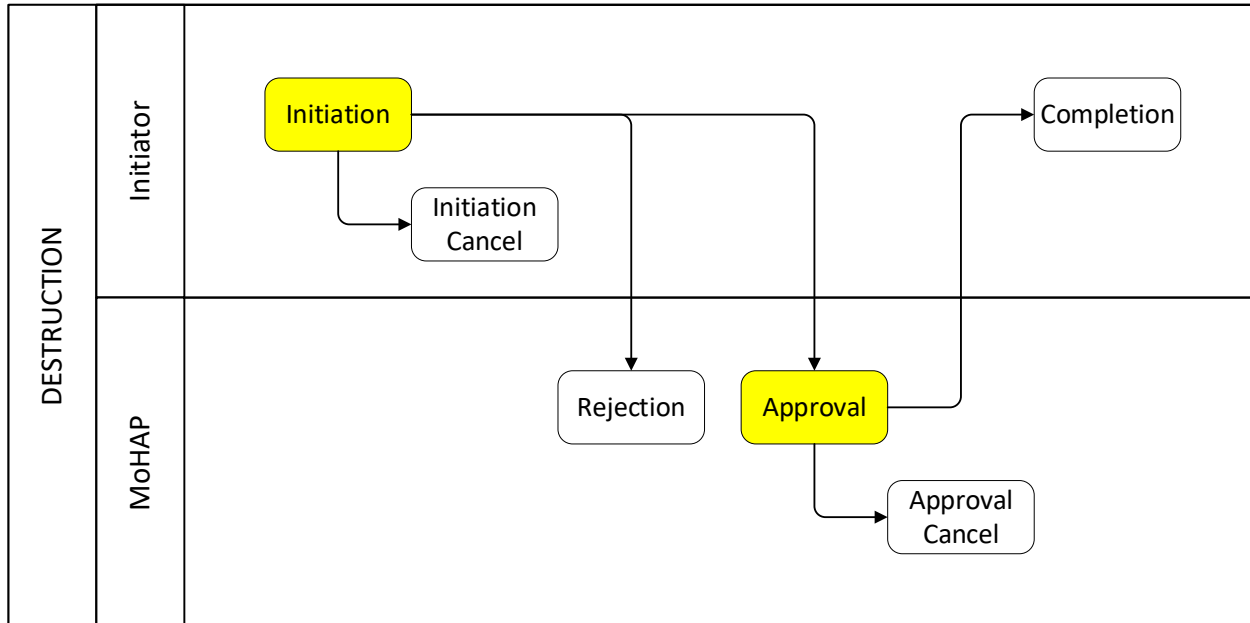
Figure 7 Destruction Process

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.

3.4.2 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 **Error! Reference source not found.** for event context) recorded in the document and follows the structure below.
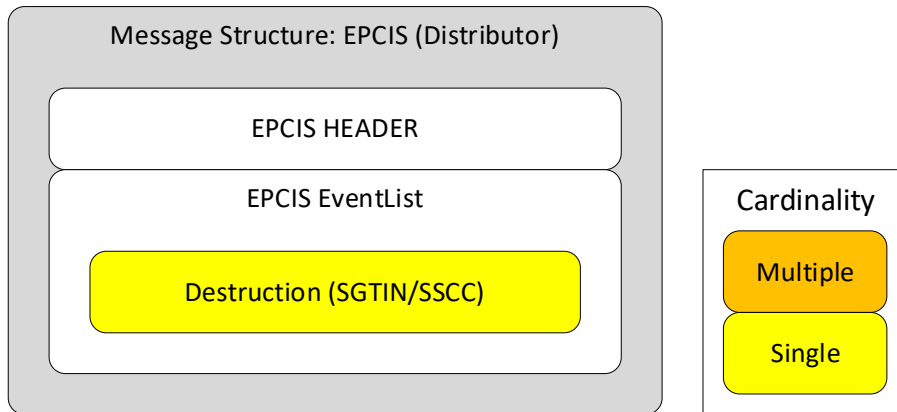
Figure 8 Destruction EPCIS Message Structure

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.

4 API Specification

During the business partner onboarding process, the 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 (Distributor / storage partner) SPOC must register a single technical user following the user 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. The SPOC provides these credentials to their technical team to subscribe to the Tatmeen APIs. 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 Tatmeen API Application Key and Tatmeen API Application Secret.

4.2.1 Staging Authentication Endpoints

The table below contains the current expected test endpoint. This section shall be updated once this detail is available for publication.

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

Table 6 Authentication Test Endpoints

4.2.2 Live Authentication Endpoints

The table below contains the current expected live endpoint. This section shall be updated once this detail is available for publication.

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

Table 7 Authentication Live Endpoints

4.3 Service APIs

The tables below (Table 8 and Table 9) provide the list of service URLs for the Distributor / storage partner 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*	*/MsgStatusQuery*	Check EPCIS Message Status
x.x.x.x	*https://stgapim.tatmeen.ae:443/v1*	*/VerifyProduct*	Product Verification Service

Table 8 Service Test Endpoints

4.3.2 Live Service Endpoints

IP Range	Service URL	Operations	Description
x.x.x.x	*https://apim.tatmeen.ae/v1*	*/epcisMsgAsync*	EPCIS Message Events
x.x.x.x	*https://apim.tatmeen.ae/v1*	*/MsgStatusQuery*	Check EPCIS Message Status
x.x.x.x	*https://apim.tatmeen.ae/v1*	*/VerifyProduct*	Product Verification Service

Table 9 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 Verification Query	OData Activity	Tatmeen OData API
EPCIS Message Status Query	Application/xml	Tatmeen xml

Table 10 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 documents and message events that must be sent by the Distributor participant to the Tatmeen system.

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.

Current messaging is defined in the section although there are additional messages anticipated for future scenarios. These shall be updated in future revisions of this document.

5.1 EPCIS: Custom Tatmeen Namespace

To allow custom Tatmeen vocabulary within the EPCIS messages, some 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/"

5.2 EPCIS: Header Attributes

All EPCIS messages originating from a Distributor / storage partner 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 registered Distributor / storage partner 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>

Element	Occurrence & Format	Description	Example
<Sender><Identifier>	Mandatory	The Authority is always "GS1", followed by the GLN representing the Sender Application or the GLN for the Distributor / storage location 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 12 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 Distributor / storage partner. This is limited to a maximum of 40 alphanumeric characters.	<sbdh:InstanceIdentifier>**e999f82e78 28a9633d977c64016a8f81**</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 11 EPCIS: Header Attributes

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

Environment	Tatmeen GLN
Pre-Production / Staging	6297001273005
PRODUCTION	6297001273036

Table 12 Tatmeen GLN Receiver Identifiers

5.3 EPCIS Commissioning / Decommissioning

5.3.1 EPCIS Commissioning Attributes

The EPCIS message attributes for the commissioning event for a logistics unit (SSCC) at a Distributor's / storage partner's location are listed below. The most common example of a logistics unit is a pallet. 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 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 SSCC EPC 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 (see Section 7 for overview).	\<action\>ADD\</action\>
	\<bizStep\>	Mandatory	Constant value that is the business step representing the event activity (see Section 7 for overview).	\<bizStep\>urn:epcglobal:cbv:bizstep:**commissioning**\</bizStep\>
	\<disposition\>	Mandatory	Constant value that qualifies the event activity (see Section 7 for overview).	\<disposition\>urn:epcglobal:cbv:disp:**active**\</disposition\>
	\<readPoint\>	Mandatory	The read point must be the GLN in GS1 URN SGLN format of the Distributor / storage partner.	\<readPoint\> \<id\>urn:epc:id:sgln:123456.789101.0\</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:123456.789101.0\</id\> \</bizLocation\>

Table 13 Commissioning – SSCC

5.3.2 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\>
	\<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 (see Section 7 for overview).	\<action\>DELETE\</action\>
	\<bizStep\>	Mandatory	Constant value that is the business step representing the event activity (see Section 7 for overview).	\<bizStep\>urn:epcglobal:cbv:bizstep:de**commissioning**\</bizStep\>
	\<disposition\>	Mandatory	Constant value that qualifies the event activity (see Section 7 for overview).	\<disposition\>urn:epcglobal:cbv:disp:**unknown**\</disposition\>
	\<readPoint\>	Mandatory	The read point must be the GLN in GS1 URN SGLN format of the Distributor / storage partner.	\<readPoint\> \<id\>urn:epc:id:sgln:123456.789101.0\</id\> \</readPoint\>

Table 14 Decommissioning

5.4 EPCIS for Hierarchy Update

5.4.1 EPCIS Aggregation Event: Packing Attributes

This section provides detailed information about the parent / child relationship between packaged product items as they progress through logistics preparation of being shipped to meet demand from customers or supply chain partners.

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 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:epc:id:sscc:0123456.0001000516</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:0123456.305513.NN2P266YLXPC</epc> <epc>urn:epc:id:sgtin:0123456.305513.NN2P266YYXX2</epc> </childEPCs>
	<action>	Mandatory	Constant Value from "xsd:schema" for the event type action (see Section 7 for overview).	<action>**ADD**</action>

Element	Occurrence & Format	Description	Example
<bizStep>	Mandatory	Constant value that is the business step representing the event activity (see Section 7 for overview).	<bizStep>urn:epcglobal:cbv:bizstep:**packing**</bizStep>
<readpoint>	Mandatory	The read point must be the GLN in GS1 URN SGLN format of the Distributor / storage partner.	<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 15 Aggregation Attributes

5.4.2 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.

5.4.2.1 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>

	Element	Occurrence & Format	Description	Example
	\<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 7 for overview).	\<action\>**DELETE**\</action\>
	\<bizStep\>	Mandatory	Constant value. The business step representing the event activity (see Section 7 for overview).	\<bizStep\>urn:epcglobal:cbv:bizstep:**unpacking**\</bizStep\>
	\<readpoint\>	Mandatory	The read point must be the GLN in GS1 URN SGLN format of the Distributor / storage partner.	\<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\> \</bizLocation\>

Table 16 Aggregation – "Unpacking Parent" Attributes

5.4.2.2 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\>

Element	Occurrence & Format	Description	Example
<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 7 for overview).	<action>**DELETE**</action>
<bizStep>	Mandatory	Constant value. The business step representing the event activity (see Section 7 for overview).	<bizStep>urn:epcglobal:cbv:bizstep:**unpacking**</bizStep>
<readpoint>	Mandatory	The read point must be the GLN in GS1 URN SGLN format of the Distributor / storage partner.	<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> </bizLocation>

Table 17 Aggregation – "Unpacking Selected Objects" Attributes

5.5 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

5.5.1 EPCIS Shipping Event Attributes

The shipping event is used to control the flow of goods as they are shipped from one logistics partner to another logistics partner in the UAE. The products are packaged onto logistics units (SSCC), prior to shipping, to aid handling of units 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	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 7 for overview).	<action>OBSERVE</action>
	<bizStep>	Mandatory	Constant value that is the business step representing the event activity (see Section 7 for overview).	<bizStep>urn:epcglobal:cbv:bizstep:**shipping**</bizStep>
	<disposition>	Mandatory	Constant value that qualifies the event activity (see Section 7 for overview).	<disposition>urn:epcglobal:cbv:disp:**in_transit**</disposition>
	<readPoint>	Mandatory	The read point must be the GLN in GS1 URN SGLN format of the Distributor / storage partner.	<readPoint> <id>urn:epc:id:sgln:123456.789101.0</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 Distributor and the recipient. Only the "desadv" reference is expected to be recorded in the Tatmeen solution when provided within the message. Format is: **bt:<GLN>:<reference>** where <GLN> is the Distributors own GLN and the <reference> is the Distributors unique reference.	<bizTransaction type="urn:epcglobal:cbv:btt:desadv">urn:epcglobal:cbv:bt:0123456999995:0105</bizTransaction>
Extension	<extension><sourceList>	Mandatory	A list of Source elements that provide 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 GS1 URN SGLN format and represents to destination of the goods while in-transit.	<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 18 Shipping Attributes – Shipping Event

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

5.5.2 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 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 7 for overview).	\<action\>OBSERVE\</action\>
	\<bizStep\>	Mandatory	Constant value that is the business step representing the event activity (see Section 7 for overview).	\<bizStep\>urn:epcglobal:cbv:bizstep:**shipping**\</bizStep\>
	\<disposition\>	Mandatory	Constant value that qualifies the event activity (see Section 7 for overview).	\<disposition\>urn:epcglobal:cbv:disp:**returned**\</disposition\>
	\<readPoint\>	Mandatory	The read point must be the GLN in GS1 URN SGLN format of the Distributor / storage partner.	\<readPoint\>\<id\>urn:epc:id:sgln:0473456.00100.0\</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 and returns authorisation references between the Distributor and the recipient. The "desadv" reference and "rma" reference are expected to be recorded in the Tatmeen solution when provided within the message. Format is: **bt:<GLN>:<reference>** where <GLN> is the Distributors own GLN and the <reference> is the Distributors 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.	
	<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: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 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:reasonCode>	Mandatory	Custom reason code for shipping return. See Table 20 for possible codes.	<tatmeen:reasonCode>R01</tatmeen:reasonCode>

Table 19 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 Distributor 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 20 Shipping Return Reason Codes

5.5.3 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 Distributor 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>

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 (see Section 7 for overview).	<action>**OBSERVE**</action>
<bizStep>	Mandatory	Constant value that is the business step representing the event activity (see Section 7 for overview).	<bizStep>urn:epcglobal:cbv:bizstep:**receiving**</bizStep>
<disposition>	Mandatory	Constant value that qualifies the event activity (see Section 7 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 Distributor.	<readPoint> <id>urn:epc:id:sgln:0356787.00040.0</id> </readPoint>
<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 Distributor 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 Distributors own GLN and the <reference> is the Distributors unique reference.	<bizTransaction type="urn:epcglobal:cbv:btt:recadv">urn:epcglobal:cbv:bt: 0356787000406:GR8015694</bizTransaction>

Element	Occurrence & Format	Description	Example
\<extension>\<sourceList>	Optional	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_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 21 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 Distributor to track event records against their own business document references.

5.5.4 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 Distributor 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 7 for overview).	<action>**OBSERVE**</action>
	<bizStep>	Mandatory	Constant value that is the business step representing the event activity (see Section 7 for overview).	<bizStep>urn:epcglobal:cbv:bizstep:**receiving**</bizStep>
	<disposition>	Mandatory	Constant value that qualifies the event activity (see Section 7 for overview).	<disposition>urn:epcglobal:cbv:disp:**returned**</disposition>
	<readpoint>	Mandatory	The read point must be the GLN in GS1 URN SGLN format of the Distributor.	<readPoint> <id>urn:epc:id:sgln:0356787.00040.0</id> </readPoint>
	<bizLocation>	Mandatory	The business location must be the same SGLN 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 Distributor and the recipient.	<bizTransaction type="urn:epcglobal:cbv:btt:recadv">urn:epcglobal:cbv:bt:

Element	Occurrence & Format	Description	Example
		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 Distributors own GLN and the <reference> is the Distributors unique reference.	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>
<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:0473456.00001.0</destination> <destination type="urn:epcglobal:cbv:sdt:**location**">urn:epc:id:sgln:0473456.00100.0</destination>

Table 22 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 Distributor to track event records against their own business document references.

5.5.5 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

5.5.5.1 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 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:123456. 02029914567</epc> </epcList>
	<action>	Mandatory	Constant Value from "xsd:schema" for the event type action (see Section 7 for overview).	<action>OBSERVE</action>
	<bizStep>	Mandatory	Constant value that is the business step representing the event activity (see Section 7 for overview).	<bizStep>urn:epcglobal:cbv:bizstep:void_**shipping**</bizStep>
	<disposition>	Mandatory	Constant value that qualifies the event activity (see Section 7 for overview).	<disposition>urn:epcglobal:cbv:disp:**in_progress**</disposition>

	Element	Occurrence & Format	Description	Example
	\<readPoint\>	Mandatory	The read point must be the GLN in GS1 URN SGLN format of the Distributor.	\<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\>
	\<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 Distributor and the recipient. Only the "desadv" reference is expected to be recorded in the Tatmeen solution when provided within the message. Format is: **bt:\<GLN\>:\<reference\>** where \<GLN\> is the Distributors own GLN and the \<reference\> is the Distributors unique reference.	\<bizTransaction type="urn:epcglobal:cbv:btt:desadv"\>urn:epcglobal:cbv:bt:0123456999995:0105\</bizTransaction\>
Extension	\<extension\>\<sourceList\>	Optional	A list of Source elements that provide context about the originating endpoint.	
Extension	\<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:123456.789101.0\</source\>
Extension	\<destinationList \>	Optional	A list of Destination elements that provide context about the terminating endpoint of a business transfer.	
Extension	\<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\>

Element	Occurrence & Format	Description	Example
<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 23 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 Distributor to track event records against their own business document references.

5.5.5.2 EPCIS Shipping Return Event Cancellation 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 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 7 for overview).	<action>OBSERVE</action>

	Element	Occurrence & Format	Description	Example
	<bizStep>	Mandatory	Constant value. The business step representing the event activity (see Section 7 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 7 for overview).	<disposition>urn:epcglobal:cbv:disp:**returned**</disposition>
	<readPoint>	Mandatory	The read point must be the GLN in GS1 URN SGLN format of the Distributor.	<readPoint><id>urn:epc:id:sgln:0473456.00100.0</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>
	<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 and returns authorisation references between the Distributor and the recipient. The "desadv" reference and "rma" reference are expected to be recorded in the Tatmeen solution when provided within the message. Format is: **bt:<GLN>:<reference>** where <GLN> is the Distributors own GLN and the <reference> is the Distributors 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>	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_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 24 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 Distributor to track event records against their own business document references.

5.5.5.3 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 7 for overview).	\<action>**OBSERVE**\</action>
\<bizStep>	Mandatory	Constant value that is the business step representing the event activity (see Section 7 for overview).	\<bizStep>urn:epcglobal:cbv:bizstep:**void_receiving**\</bizStep>
\<disposition>	Mandatory	Constant value that qualifies the event activity (see Section 7 for overview).	\<disposition>urn:epcglobal:cbv:disp:**in _transit**\</disposition>
\<readpoint>	Mandatory	The read point must be the GLN in GS1 URN SGLN format of the Distributor.	\<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 Distributor 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 Distributors own GLN and the \<reference> is the Distributors unique reference.	\<bizTransaction type="urn:epcglobal:cbv:btt:recadv">urn:epcglobal:cbv:bt: 0356787000406:GR8015694\</bizTransaction>
\<extension>\<sourceList>	Optional	A list of Source elements that provide context about the originating endpoint.	

Element	Occurrence & Format	Description	Example
<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: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 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 Distributor to track event records against their own business document references.

5.5.5.4 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>

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: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 7 for overview).	<action>**OBSERVE**</action>
<bizStep>	Mandatory	Constant value that is the business step representing the event activity (see Section 7 for overview).	<bizStep>urn:epcglobal:cbv:bizstep:**void_receiving**</bizStep>
<disposition>	Mandatory	Constant value disposition that qualifies the event activity (see Section 7 for overview).	<disposition>urn:epcglobal:cbv:disp:**returned**</disposition>
<readpoint>	Mandatory	The read point must be the GLN in GS1 URN SGLN format of the Distributor.	<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 Distributor 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 Distributors own GLN and the <reference> is the Distributors unique reference.	<bizTransaction type="urn:epcglobal:cbv:btt:recadv">urn:epcglobal:cbv:bt: 0473456001004:GR8015694</bizTransaction>

	Element	Occurrence & Format	Description	Example
Extension	<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>
	<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:0473456.00001.0</destination><destination type="urn:epcglobal:cbv:sdt:**location**">urn:epc:id:sgln:0473456.00100.0</destination>
	<tatmeen:instanceIdentifierReference>	Mandatory	This is the message identifier reference from the original Receiving Return Event message that is being cancelled.	<tatmeen:instanceIdentifierReference>0kjulihdsafno5e2133s6uy</tatmeen:instanceIdentifierReference>

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 Distributor to track event records against their own business document references.

5.6 EPCIS for Status Change

This section covers all update definitions:

- Damaged Goods Event
- Stolen Goods Event
- Exportation Event
- Lost/Missing Goods Event

5.6.1 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 7 for overview).	<action>**DELETE**</action>
	<bizStep>	Mandatory	Constant value. The business step representing the event activity (see Section 7 for overview).	For Inactive Case: <bizStep>urn:epcglobal:cbv:bizstep:d**ecommissioning**</bizStep>
	<disposition>	Mandatory	Constant Value (see Section 7 for overview).	<disposition>urn:epcglobal:cbv:disp:**damaged**</disposition>
	<readpoint>	Mandatory	The read point must be the GLN in GS1 URN SGLN format of the Distributor.	<readPoint> <id>urn:epc:id:sgln:123456.789101.0</id> </readPoint>
Ext.	<tatmeen:reasonCode>	Mandatory	Custom reason code for reported damage, see Table 28.	<tatmeen:reasonCode>D01</tatmeen:reasonCode>

Table 27 Damaged Attributes

Reason Code	Description
D01	Broken
D02	Unfolded

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

Table 28 Damage Reason Codes

5.6.2 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 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 7 for overview).	<action>**DELETE**</action>
	<bizStep>	Mandatory	Constant value that is the business step representing the event activity (see Section 7 for overview).	For Inactive Case: <bizStep>urn:epcglobal:cbv:bizstep:**decommissioning**</bizStep>
	<disposition>	Mandatory	Constant value that qualifies the event activity (see Section 7 for overview).	<disposition>urn:epcglobal:cbv:disp:**stolen**</disposition>

	Element	Occurrence & Format	Description	Example
	\<readpoint\>	Mandatory	The read point must be the GLN in GS1 URN SGLN format of the Distributor where the stock is located.	\<readPoint\>\<id\>urn:epc:id:sgln:123456.789101.0\</id\>\</readPoint\>

Table 29 Stolen Attributes

5.6.3 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 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 7 for overview).	\<action\>**DELETE**\</action\>
	\<bizStep\>	Mandatory	Constant value. The business step representing the event activity (see Section 7 for overview).	\<bizStep\>urn:epcglobal:cbv:bizstep:**decommissioning**\</bizStep\>
	\<disposition\>	Mandatory	Constant value that qualifies the event activity (see Section 7 for overview).	\<disposition\>urn:epcglobal:cbv:disp:**non_sellable_other**\</disposition\>
	\<readpoint\>	Mandatory	The read point must be the GLN in GS1 URN SGLN format of the Distributor where the stock is located.	\<readPoint\>\<id\>urn:epc:id:sgln:123456.789101.0\</id\>\</readPoint\>

Table 30 Export Attributes

5.6.4 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. 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 7 for overview).	<action>**DELETE**</action>
	<bizStep>	Mandatory	Constant value that is the business step representing the event activity (see Section 7 for overview).	For Inactive Case: <bizStep>urn:epcglobal:cbv:bizstep:**decommissioning**</bizStep>
	<disposition>	Mandatory	Constant value that qualifies the event activity (see Section 7 for overview).	<disposition>urn:epcglobal:cbv:disp:**inactive**</disposition>
	<readpoint>	Mandatory	The read point must be the GLN in GS1 URN SGLN format of the Distributor where the stock is located.	<readPoint> <id>urn:epc:id:sgln:123456.789101.0</id> </readPoint>

Table 31 Lost Attributes

5.7 EPCIS for Destruction

The Distributor / storage partner may be part of a product Destruction Process.

- Destruction Initiation
- Destruction Initiation Cancel

- Destruction Completion

5.7.1 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 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 7 for overview).	\<action\>OBSERVE\</action\>
	\<bizStep\>	Mandatory	Constant custom value, "updating". The business step representing the event activity (see Section 7 for overview).	\<bizStep\>urn:tatmeen:cbv:bizstep:**updating**\</bizStep\>
	\<disposition\>	Mandatory	Constant custom disposition value, "destroy_init", qualifying the event activity (see Section 7 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\>

	Element	Occurrence & Format	Description	Example
	\<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 "I" to set the sgtin destruction *initiation* status. This value is <u>mandatory</u>.	\<tatmeen:destroy_sgtin\>I\</tatmeen:destroy_sgtin\>
	\<tatmeen:destroy_sscc\>	Conditional	Constant value "I" to set the sscc destruction *initiation* status. This value is <u>mandatory</u> 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 33 for possible codes.	\<tatmeen:reasonCode\>**W02**\</tatmeen:reasonCode\>

Table 32 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 33 Destruction Reason Codes

5.7.2 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
Sta	\<eventTime\>	Mandatory	The date and time, in ISO 8601 standard UTC format, at which the EPCIS	\<eventTime\>2021-05-31T12:02:11.000Z\</eventTime\>

	Element	Occurrence & Format	Description	Example
			Capturing Applications asserts the event occurred.	
	\<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 7 for overview).	\<action\>OBSERVE\</action\>
	\<bizStep\>	Mandatory	Constant custom business step value, "updating", representing the event activity (see Section 7 for overview).	\<bizStep\>urn:tatmeen:cbv:bizstep:**updating**\</bizStep\>
	\<disposition\>	Mandatory	Constant custom disposition value, "destroy_init_cancel", qualifying the event activity (see Section 7 for overview).	\<disposition\>urn:tatmeen:cbv:disp:**destroy_init_cancel**\</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 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\>

Element	Occurrence & Format	Description	Example
<tatmeen:instanceIdentifierReference>	Mandatory	Required message identifier of the originating **initiation** message to cancel with a reversal event.	<tatmeen:instanceIdentifierReference>**2f1bdabdfaee464c87e1aeb7e586e6ab**</tatmeen:instanceIdentifierReference>

Table 34 Destruction Attributes – Initiation Cancel Event

5.7.3 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>
	<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 7 for overview).	<action>DELETE</action>
	<bizStep>	Mandatory	Constant standard business step value, "destroying", representing the event activity (see Section 7 for overview).	<bizStep>urn:epcglobal:cbv:bizstep:**destroying**</bizStep>
	<disposition>	Mandatory	Constant standard disposition value, "destroyed", qualifying the event activity (see Section 7 for overview).	<disposition>urn:epcglobal:cbv:disp:**destroyed**</disposition>

	Element	Occurrence & Format	Description	Example
Extension	<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>
	<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_ss cc>	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:d estroy_sscc>

Table 35 Destruction Attributes – Completion Event

5.8 EPCIS Message Technical Response Examples

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 Distributor. 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 are 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 Distributor when using the message status query service.

Code	Message Code	Type	Action	Description
404	Standard	Service Error	Retry	Service Not Found
401	Standard	Auth Error	Retry	Authorization Error
202	I001	Information	N/A	OK

Code	Message Code	Type	Action	Description
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 36 Technical Acknowledgments

5.9 EPCIS: Examples

This following examples include the possible supply chain logistic operations.

5.9.1 Packing New SSCC Example

```xml
<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 37 EPCIS Packing New SSCC Example

5.9.2 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 38 EPCIS Unpacking Parent Example

5.9.3 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 39 EPCIS Unpacking Selected Objects Example

5.9.4 Shipping 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 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 40 EPCIS Shipping Example

5.9.5 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>
```

```xml
<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 41 EPCIS Shipping Returns Example

5.9.6 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>
                            <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 42 EPCIS Receiving Example

5.9.7 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>
                          <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 43 EPCIS Receiving Returns Example

5.9.8 Shipping Cancellation Example

Note that this shipping event example, reflects the shipping event related to the example in section 5.9.4.

```
<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>
                                            <!-- Optional source/destination lists omitted-->
                                            <!—Mandatory reference-->

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

Table 44 EPCIS Shipping Example

5.9.9 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 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>
                                <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>
                                <!-- Optional source/destination lists omitted-->
                                <!—Mandatory reference-->

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

Table 45 EPCIS Shipping Returns Example

5.9.10 Receiving Cancellation Example

```xml
<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>
                                <!-- Optional source/destination lists omitted-->


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

Table 46 EPCIS Receiving Example

5.9.11 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>
                                    <!-- Optional source/destination lists omitted-->

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

Table 47 EPCIS Receiving Returns Example

5.9.12 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 48 EPCIS Damaged Example

5.9.13 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 49 EPCIS Stolen Example

5.9.14 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 50 EPCIS Exported Example

5.9.15 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 51 EPCIS Lost Example

5.9.16 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 52 EPCIS Destruction Initiation Example

5.9.17 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 53 EPCIS Destruction Initiation Cancel Example

5.9.18 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 54 EPCIS Destruction Completion Example

5.10 EPCIS Message Technical Response Examples

5.10.1 Success

```
<?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 55 Success Example

5.10.2 Connectivity Error

```
<?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 56 Connectivity Error Example

5.10.3 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>E003</code>
    </status>
</Response>
```

Table 57 System Error Example

5.10.4 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-51b5-8645-1192e09ac44c</messageid>
    <status>
        <reason>Message Validation Error</reason>
        <code>E003</code>
    </status>
    <status>
        <reason>Mandatory field SSCC – XXXX length not valid</reason>
        <code>E003</code>
    </status>
</Response>
```

Table 58 Mapping Error Example

5.11 EPCIS Message Query Status

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

The Distributor 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 response 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 59 Message Status Query Types

5.11.1 Message Status Query

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

Table 60 Message Status Query Example

5.11.2 Message Status Query Response

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<tatmeenResponse>
    <instanceIdentifier>52540081D8101edA8FA0FF68B3CA74E3</instanceIdentifier>
    <messagestatus>A  - Technical Error</messagestatus>
<logList>
    <log>
        <type>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 packing is invalid as object does not exist</message>
            </log>
            <log>
                <type>I</type>
                <message>Invalid object: 123456.3111113.ASADSFSDSRT(SGTIN)</message>
            </log>
        </logList>
    </tatmeenResponse>
```

Table 61 Message Query Response Example

6 SOAP Message Format

This section provides detailed information about the format of the SOAP Services and message events that may be sent by the logistics partner 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.

6.1 Product Verification Service

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

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

6.1.1 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 62 SGTIN Product Verification Query Example

6.1.2 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 63 SGTIN Product Verification Query Example

6.1.3 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 64 Product Verification Success Response Example

6.1.4 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 65 Product Verification Error Response Example

7 EPCIS Message Summary

Activity	Field / XML Tag / Dimension	Event Type variable EVENT	Action Type \<action\>	EPC(List) variable WHAT	Business Step \<bizstep\> WHY	Disposition \<disposition\>	Business Transaction Type \<bizTransactionType\>	Read Point \<readPoint\> WHERE	Business Location \<bizLocation\>
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	

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	
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
Receiving Cancellation	\<ObjectEvent\>	OBSERVE	\<epc\> sgtin; sscc	void_receiving	in_transit	recadv	sgln	
Receiving Returns	\<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	

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	
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	

Table 66 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.

8 Glossary

General short terms and abbreviations can be found in the Global Glossary (see references).

Short Term	Description
3PL	3rd Party Logistics
API	Application Programming Interface
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
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
UTC	Coordinated Universal Time, which is the time standard commonly used across the world.
VPN	Virtual Private Network
WSDL	Web Service Definition Language
XML	Extensible Markup Language

Table 67 Glossary