	Document Title			
AmerisourceBergen SPECIFICATIONS	AmerisourceBergen Serialized Data Exchange (EPCIS)			
	Document Number	**Version Number**	**Effective Date**	**Page**
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	Legacy Document: N/A			
	Content Owner: Manufacturer Operations, Ameer Ali			

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1.0 **Purpose**

The purpose of this document is to define the process and requirements for establishing inbound serialized data exchange, via EPCIS, with AmerisourceBergen and all its business units.

This procedure covers the following data exchange scenarios:

- Contract Manufacturers & Packagers – CMO/CPOs packaging on behalf of AmerisourceBergen businesses, required to exchange data to meet the 2017/2018 deadline.
- Saleable Returns – Manufacturers looking to test and exchange serial number data in order to support AmerisourceBergen's 2019 saleable returns requirements.
- TI, TS Exchange – Manufacturers looking to test and exchange unit or lot level serialized Transaction Information and Transaction Statementinformation.
- Pilot Testing – Any trading partner wanting to test and pilot in preparation for any of the above scenarios.

2.0 **Scope**

This procedure applies to all AmerisourceBergen business units. This includes Full-Line Distribution Services, Specialty Distribution (businesses D.B.A. as: ASD, Besse, Oncology, and ICS Title), American Health Packaging (AHP), BluePoint Laboratories, TheraCom Distribution, and MWI Animal Health and VetOne.

3.0 **Acronyms and Terms**

The following are acronyms associated with this document:

Acronym	Definition
AS2	Application Statement 2
ASN	EDI 856 Advanced Ship Notification
ATTP	SAP Advanced Track and Trace Platform
DSCSA	Drug Supply Chain Security Act
EPCIS	Electronic Product Code Information Services
GLN	Global Location Number

GTIN	Global Trade Item Number
GS1 US HC	Global Standards that define both the serialized barcode standards as well as serialized data exchange standards.
SGLN	Serialized Global Location Number
SOAP	Simple Object Access Protocol
SSCC	Serial Shipping Container Code
URI	Uniform Resource Identifier
URN	Uniform Resource Name

The following are terms associated with this document:

Term	Definition
GS1 US HC Guidelines	Global Standards that define both the serialized barcode standards as well as serialized data exchange standards.
Saleable Returns	A saleable return occurs when a pharmacy returns drug product to a wholesaler, and if there is evidence that the product has been handled properly, it can be re-sold.

4.0 Roles and Responsibilities

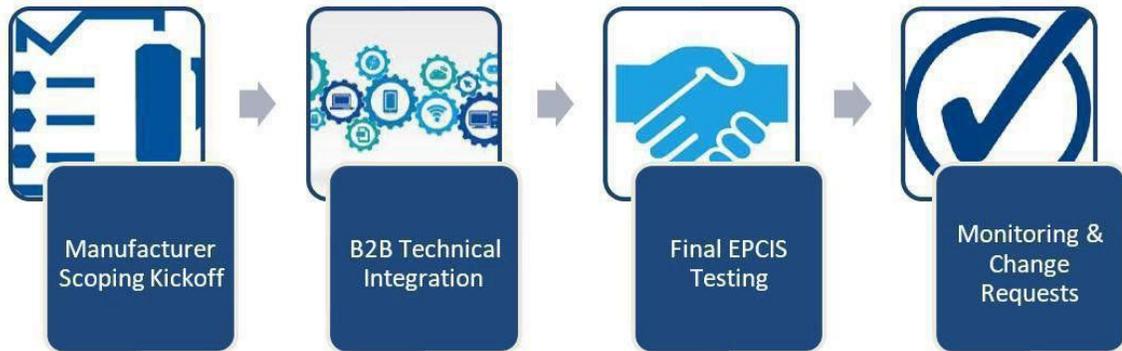The following are the roles and responsibilities outlined in this document:

Role	Responsibility
AmerisourceBergen Data Exchange Team	Technical team that manages any technical exchange issues between AB, SAP Information Collaboration Hub, and the Manufacturer Data Exchange Team.
AmerisourceBergen Manufacturer Operations Team	Manages the initial engagement, planning and tracking of all on-boarding activities. Once on-boarded to production, Manufacturer Operations monitors all the inbound EPCIS transactions.
Manufacturer Data Exchange Team	Manufacturer team responsible for working with SAP and AB to establish connection, successful data transmission, and processing.

Role	Responsibility
SAP Information Collaboration Hub Onboarding Team	B2B solution provider that engages with each manufacturer data exchange teams to establish connections to the SAP Information Collaboration Hub.

5.0 Process Map for On-Boarding

6.0 **Procedure**

6.1 **Manufacturing Scoping and Kickoff**

6.1.1 AmerisourceBergen Manufacturer Operations team will work with each manufacturer, one on one, to understand their strategy for serialized data exchange and timing associated with that strategy.

6.1.2 As a pre-requisite for data exchange testing, the AmerisourceBergen Manufacturer Operations team will collect and track:

- Business and technical contacts (email, phone) third party solutions provider, estimated timing to test connectivity, estimated timing to do a file exchange test, and estimated timing for production cutover
- Required master data (GLNs, and GTINs); see Appendix 12.6 and 12.7 for templates
- Sample EPCIS file to manually review for EPCIS compliance

6.1.3 Once all the required data is collected, the Secure Supply Chain Analyst will initiate the technical integration process with AmerisourceBergen's data exchange and the SAP Information Collaboration Hub services team.

7.0 **B2B Technical Integration**

7.1 **Testing and Staging Environments**

For testing and data integrity purposes, AB recommends that manufacturers have one test/staging environment and one production environment be connected to the SAP Information Collaboration Hub.

7.2 **SAP Information CollaborationHub**

The SAP Information Collaboration Hub team shall kickoff the on-boarding effort with the identified trading partner technical contacts and AmerisourceBergen's Data Exchange team. Further process and technical requirements, such as approved certificates, will be communicated once confirmed that the manufacturer is ready for data exchange.

7.3 **Final EPCIS Testing**

7.3.1 Once connectivity is established with the SAP Information Collaboration Hub, AmerisourceBergen requires that a test file be sent and verified in our ATTP staging environment prior to cutover to production.

7.3.2 The AB Manufacturer Operations team will work with the manufacturer to resolve any issues found with the EPCIS file, data content and/or format.

7.3.3 Once agreed upon test files are successfully tested, the Manufacturer Operations team will coordinate with the manufacturer on the date to start sending data to AmerisourceBergen's production EPCIS repository.

7.3.4 The first production purchase order will be closely monitored and reviewed to ensure onboarding is successful and complete.
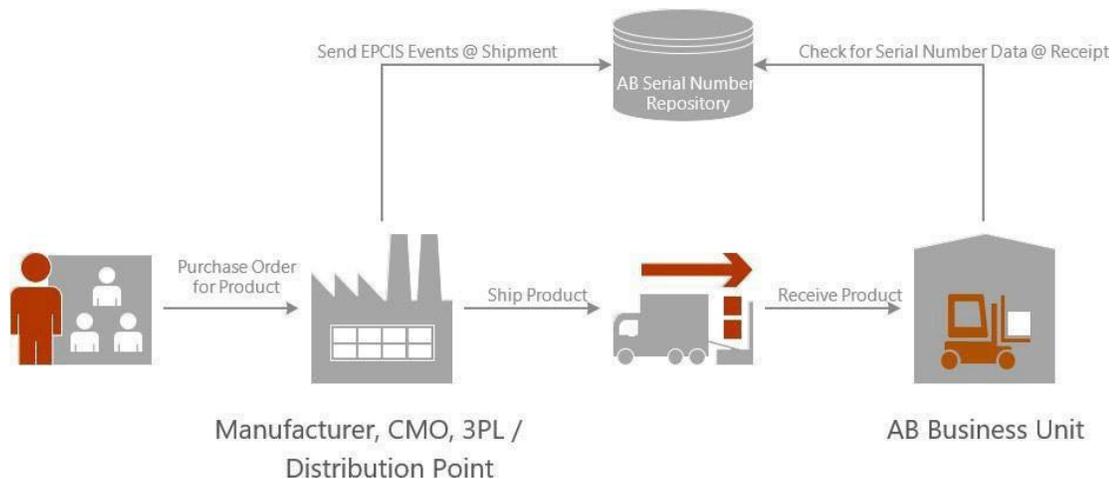
7.4 **Post Deployment Monitoring**

7.4.1 For those production deployments, AmerisourceBergen's Manufacturer Operations team will monitor daily receipt of EPCIS messages and work with each manufacturer on any issues that occur.

8.0 **Requirements**

8.1 **General Process Flow**

This is a generic flow for product and serialized data.

8.2 General Requirements

8.2.1 All serialized data shall be transmitted via GS1 EPCIS Messaging formats, complying with GS1 US HC guidelines. ASNs will not be supported for serialized information exchange.

8.2.2 AS2 or Web Services (SOAP) interfaces shall be used to interface to SAP Information Collaboration Exchange.

8.2.3 All serialized data shall be transmitted at, or shortly after the point of shipment from the manufacturer or contracted 3rd party logistics company.

8.2.4 It is recommended when sending multiple events, that all events come through in one file versus a separate file for each individual event type.

8.3 Data Required for Serialized Exchange

Data requirements vary based on the intent and purpose of data exchange. Refer to the introduction for definition of all four scenarios.

8.3.1 Accepted EPCIS Versions

The following version of EPCIS will be accepted for the indicated scenarios:

Version	CMO/CPO	Saleable Returns	TI, TS Exchange	Pilot Testing
EPCIS 1.1	Accepted	Accepted	Not Accepted	Accepted
EPCIS 1.2*	Accepted	Accepted	Accepted	Accepted

* EPCIS 1.2 is the preferred EPCIS Schema for AB and is the minimum requirement for wholesale suppliers to meet DSCSA requirements for November 2023.

8.3.2 EPCIS Events

The following EPCIS events are required for each scenario:

Event	CMO/CPO	Saleable Returns	TI, TS Exchange	Pilot Testing
Commissioning	Required	Required	Required	Required
Packing	Required If Aggregating	Required If Aggregating	Required	Optional
Shipping	Recommended	Required	Required	Optional
Decommissioning	Required if Repackaging	N/A	N/A	N/A

8.3.3 Master Data Elements

The following elements of Master Data, contained in the EPCIS, are required for each scenario:

Event	CMO/CPO	Saleable Returns	TI, TS Exchange	Pilot Testing
Expire Date	Required	Required	Required	Required
Lot Number	Required	Required	Required	Required
DSCSA Product Master Data	Required	Optional	Required	Optional
Purchase Order	Required	Optional	Required	Optional
ASN (desadv)	Required	Optional	Required	Optional
Invoice	Recommended	Recommended	Recommended	Recommended
Source List (sold from)	Required	Recommended	Required	Optional
Source List (ship from)	Required	Recommended	Required	Optional
Destination List (sold to)	Required	Recommended	Required	Optional
Destination List (ship to)	Required	Recommended	Required	Optional
Transaction Statement	Optional	Optional	Required	Optional
Direct Purchase Statement	Optional	Optional	Required (exclusive distributor only)	Optional

8.3.4 GLN Identifiers

These are the required GLN/SGLN identifiers to be used in specific events and transactions.

8.3.4.1 EPCIS Header

These are the required SGLNs to be used in URN format, for the receiver SGLN. This drives our reporting and data management process.

Location Name	Division	Address	Company Prefix	GLN	SGLN
AmerisourceBergen Corporate[1]	Corporate	1 West First Avenue, Conshohocken, PA 19428	0087701	0087701000003	0087701.00000.0
American Health Packaging – Columbus[2]	American Health Packaging	2550-A John Glenn Ave, Columbus, OH 43217	0716163	0716163031019	0716163.03101.0
AHP ADR Blue Point Laboratories – Columbus[3]	BluePoint Laboratories	2550-A John Glenn Ave, Columbus, OH 43217	0716163	0716163041100	0716163.04110.0
MWI Corporate	MWI Corporate	3041 W Pasadena Dr. Boise, ID 83705	0386136	0386136000009	0386136.00000.0

Example: AmerisourceBergen Corporate[1]

```
<sbdh:Sender>

<sbdh:IdentifierAuthority="SGLN">urn:epc:id:sgln:030000.000000.0</sbdh:Identifier>
</sbdh:Sender>
<sbdh:Receiver>
<sbdh:IdentifierAuthority="SGLN">urn:epc:id:sgln:0087701.00000.0</sbdh:Identifier>
</sbdh:Receiver>
```

8.3.4.2 Shipping Master Data

Destination List – It's required to use the ABC corporate SGLN, in URN format, for the sold-to "owning party" SGLN, not the actual physical ship-to location. The physical location Ship-To SGLN should be used for the Destination "location".
Example:

```
<destinationtype="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:0087701.
00000.0</destination>
<destinationtype="urn:epcglobal:cbv:sdt:location">urn:epc:id:sgln:0716163.0110
7.0</destination>
```

For Cencora Global Procurement (CGP) Destination List – It's required to use the CGP SGLN, in URN format, for the sold-to "owning party" SGLN, not the actual physical ship-to location. The physical location Ship-To SGLN should be used for the Destination "location".
Example:

```
<destinationtype="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:0087701.
50000.0</destination>
<destinationtype="urn:epcglobal:cbv:sdt:location">urn:epc:id:sgln:0716163.0110
7.0</destination>
```

8.3.4.3 Purchase Order

Required to use the AB Corporate GLN for all locations (Including BluePoint and AHP) as the prefix when sending PO Number in the BizTransaction.

Example:

```
<bizTransactiontype="urn:epcglobal:cbv:btt:po">urn:epcglobal:cbv:bt:008770100
0003:01045011</bizTransaction>
```

For a list of all AmerisourceBergen GLNs and SGLNs please visit:
http://publish.smartsheet.com/bea3b5e2e4d348328730ea21b552a24e

8.3.5   Decommissioning Events

For those doing contract packaging on behalf of American Health Packaging, a separate EPCIS file is required that contains the decommissioning events for those products that were consumed as part of the repackaging processes.

9.0 Revision History

Version Number	Effective Date	Revision Details
1.0	06-01-2017	Initial Publication
2.0	06-24-2017	Updated examples to use AB identifiers and clarified required events and master data
3.0	09-15-2017	Added decommissioning requirement
4.0	01-25-2018	Updated Shipping Event and PO requirement
5.0	01-25-2020	Edited Destination tables, clarified Event times and aggregation guidelines
6.0	10-08-2021	Reformatted to new rebranded template; added Acronym and Terms section; revised SSC Operations to Manufacturer Operations; removed reference to EPCIS Version 1.0; updated GLN with new AB address; added Approval section; updated Shipping Event Transaction Detail table in Appendix
6.2	07-15-2022	Added GLN/SGLN table and updated requirements; updated Approval section; included minor edits
6.3	11-10-2022	Replaced examples with links; updated scope and master data element requirements; added MWI Ship To, reformatted table of contents and bullets numbering; made other minor edits.

10.0 Approvals

Note: Approvals for FDA facing policies (DSCSA, REMS) will be signed via Pilgrim and a PDF uploaded into CompliancePoint.

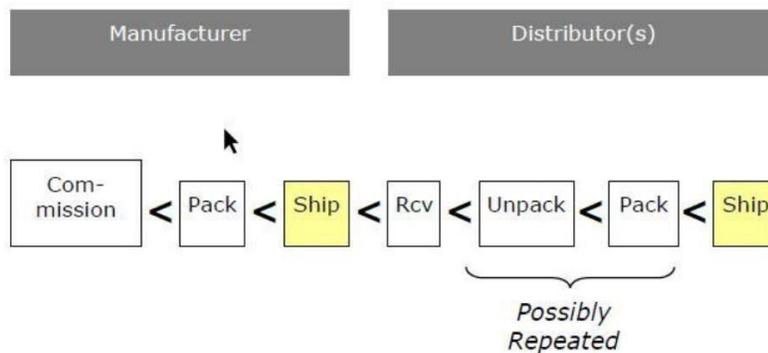| Name	Title
Gregg Gorniak	Sr Dir, Manufacturer Operations
Cathy Marcum	VP, Regulatory Affairs, U.S. Distribution
Neal Cooper	VP, Regulatory Affairs and Quality Systems
Johnnie Williams	VP, Enterprise Quality
Ameer Ali	Sr Dir, Manufacturer Operations

11.0   Appendix

11.1   EPCIS Data Elements

Below are the key EPCIS events and data elements for, both version 1.1 and 1.2, and which ones are required and when. Please refer to the GS1 US Healthcare implementation guidelines for more information.

In accordance with GS1 guidelines, the figure below illustrates the relationships of Event Times. The "<" symbol indicates that the first Event Time must be strictly less than the second Event Time. These relationships only apply to pairs of events that pertain to the same physical objects (SGTIN or SSCC).

11.1.1 Commissioning Events

11.1.1.1   Standard Commissioning Event Elements

Note: Group all serial numbers for unique combination of GTIN + LOT + Exp Date in a single commissioning event with single time stamp in a given EPCIS file to AB & do NOT create one event for one serial number.

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	Content Owner: Manufacturer Operations, Matt Sample			

Element	Type	Description	Example	CMO, Returns	TI, TS Exchange
eventTime	Timestamp	Timestamp of date/time when the event occurred. SHALL include a time zone indicator.	2013-10-01T22:08:02Z	Required	Required
eventTimeZoneOffset	String	Time zone offset where the event occurred	-04:00	Required	Required
recordTime	Timestamp	Date and time the event was recorded in an EPCIS repository.	2013-10-01T22:08:02Z	Optional	Optional
epcList	List of URI	EPC(s) of the commissioned item in EPC Pure Identity URI format. If more than one EPC is included, they should all have the same value for ILMD attributes defined below or should all require these attributes to be omitted. EPCs having different values for these attributes should be shared in different Commissioning events.	N/A	Required	Required
Action	String	ADD	Same as Desc	Required	Required
bizStep	URI	urn:epcglobal:cbv:bizstep:commissioning	Same as Desc	Required	Required
Disposition	URI	urn:epcglobal:cbv:disp:active	Same as Desc	Required	Required
readPoint	URI	EPC Pure Identity URI for the GLN of the location at which the event took place. Note this must be a SGLN, not just a GLN.	urn:epc:id:sgln:036800.111111.0	Optional	Optional
bizLocation	URI	EPC Pure Identity URI for the GLN of the location where the objects are presumed to be following the event Note this must be a SGLN, not just a GLN.	urn:epc:id:sgln:036800.111111.0	Required	Required

11.1.1.2 Instance / Lot Master Data

For EPCIS 1.2, The lotNumber and itemExpirationDate instance-level master data elements are now in the CBV standard namespace urn:epcglobal:cbv:mda, instead of the GS1US extension namespace: http://epcis.gs1us.org/hc/ns.

Element	Type	Description	Example	CMO, Returns	TI, TS Exchange
lotNumber	String	The lot or batch number for all of the EPCs in the epcList of the ObjectEvent.	AB1234	Required	Required
itemExpirationDate	Date	The expiration date for all of the EPCs in the epcList of the ObjectEvent, formatted as an xsd:date.	2019-03-31	Required	Required
tradeItemMasterData (EPCIS 1.1 ONLY)	Complex Type (see 6.2.3)	Use to capture DSCSA Master Data Elements	N/A	Optional	N/A – must use EPCIS 1.2

11.1.2 Trade Item Master Data

For EPCIS 1.2, the tradeItemMasterData instance-level master data element has been removed. Instead, product master data is carried in the EPCIS header rather than the Item/Lot Master Data (ILMD) section of the Commissioning event.

Element	Type	Description	Example	CMO, Returns	TI, TS Exchange
additionalTradeItemIdentification	String	The additional trade item identification associated with this GTIN.	68001012345	Optional	Required
additionalTradeItemIdentificationTypeCode	String	NDC in 11-digit format for DSCSA (New in EPCIS 1.2). AB will continue to support NDC442, NDC541, NDC532, NDC542	FDA_NDC_11	Optional	Required
regulatedProductName *(EPCIS 1.1 – drugName)*	String	The prescribed, regulated or generic product name or denomination that describes the true nature of the product and is sufficiently precise to distinguish it from other products according to country specific regulation.	GOODDRUG	Optional	Required
manufacturerOfTradeItemPartyName *(EPCIS 1.1 –manufacturerName)*	String	Party name information for the manufacturer of the trade item. For DSCSA, this should be the name of the NDAholder.	MY PHARMA	Optional	Required
dosageFormType (EPCIS 1.1 – dosageForm)	String	Standard forms of drugs (AEROSOL, CAPSULE,GEL, PILL, TABLET) as defined by the FDA. The FDA currently defines 143 dosage forms.	PILL	Optional	Required
strengthDescription (EPCIS 1.1 – strength)	String	Free text describing the strength or potency of the product, including the unit of measure (for example, 60 mg, 25 ml).	10mg	Optional	Required

Element	Type	Description	Example	CMO, Returns	TI, TS Exchange
netContentDescription (EPCIS 1.1 – containerSize)	String	Free text describing the number of units contained in a package of the product (for example, 60 Table, 100 ounces). This is also known as pack size.	500	Optional	Required

11.2 **Packing Events**

Element	Type	Description	Example	CMO, Returns	TI, TS Exchange
eventTime	Timestamp	Date and time of event. Must be later than the time reflected in the commissioning event. Date and Time must reflect chronological order of aggregation/packing events. Therefore, when an EPC is used as a parent and as a child, both events cannot reflect the same exact time stamp. For example, the time reflecting "eaches" being aggregated to a "case", shall be earlier than the eventTime this "case" is aggregated to a PalletSSCC.	2012-03-26T17:10:16Z	Required	Required
eventTimeZoneOffset	String	Time zone offset in effect at the time and place where the event occurred.	-05:00	Required	Required
recordTime	Timestamp	Date and time the event was recorded in an EPCIS repository.	2013-10-01T22:08:02Z	Optional	Optional
parentID	URI	EPC of the outer container in EPC Pure Identity URI format. Note: a parent cannot exist without children.	urn:epc:id:sgtin:036800.1012345.22222223333	Required	Required
childEPCs	List of URI	EPC(s) of the item(s) being packed into the parent presented in EPC Pure Identity URI format.	N/A	Required	Required
action	String	ADD	Same as Desc	Required	Required
bizStep	URI	urn:epcglobal:cbv:bizstep:packing	Same as Desc	Required	Required
disposition	URI	urn:epcglobal:cbv:disp:in_progress	Same as Desc	Required	Required

Element	Type	Description	Example	CMO, Returns	TI, TS Exchange
readPoint	URI	EPC Pure Identity URI for the GLN of the location at which the event took place.	urn:epc:id:sgln:036800.111111.0	Optional	Optional
bizLocation	URI	EPC Pure Identity URI for the GLN of the location where the objects are presumed to be following the event. Note this must be a SGLN, not just a GLN.	urn:epc:id:sgln:036800.111111.0	Required	Required

Note: Within multi-level aggregation event, packager shall follow below rules:

- Child to Parent aggregation event time must be LESS than Parent to Grand Parent aggregation event time
- In below example, EA -> Bundle aggregation time must be LESS than Bundle -> Case aggregation event time.
- Similarly, Bundle -> Case aggregation time must be LESS than Case -> SSCC aggregation event time

11.3 Shipping Events

11.3.1 Standard Shipping Events

Element	Type	Description	Example	CMO, Returns	TI, TS Exchange
eventTime	Timestamp	Date and time of event. Please note that the Time stamp in Shipping Event cannot be earlier than Aggregation or Commissioning Event. Also, Time stamp in Shipping Event cannot be greater than current system time.	2012-03-26T17:10:16Z	Required	Required
eventTimeZone Offset	String	Time zone offset in effect at the time and place where the event occurred.	-05:00	Required	Required
recordTime	Timestamp	Date/ time event was recorded in an EPCIS repository.	2013-10-01T22:08:02Z	Optional	Optional
epcList	List of URI	The EPC(s) of the outermost containers in the packaging hierarchy. Most likely, SSCCs of Cases or Pallets.	N/A	Required	Required
action	String	OBSERVE	Same as Desc	Required	Required
bizStep	URI	urn:epcglobal:cbv:bizstep:shipping	Same as Desc	Required	Required
disposition	URI	urn:epcglobal:cbv:disp:in_transit	Same as Desc	Required	Required
readPoint	URI	EPC Pure Identity URI for the GLN of the location at which the event took place.	urn:epc:id:sgln:036800.111111.0	Optional	Optional
bizTransaction List	List of biz transactions	Business transactions governing this Shipping event, which may include a purchase order or an invoice.	N/A	Required	Required

Element	Type	Description	Example	CMO, Returns	TI, TS Exchange
sourceList	List of sources	Each source in the sourceList is a pair of URIs: one URI for the type and one URI for the value. The sourceList shall include one source of type urn:epcglobal:cbv:sdt:owning_party whose value is the EPC Pure Identity URI for the GLN of the transferring party. If the ship-from GLN is different from the transferring party's GLN, sourceList shall also include a second source of type urn:epcglobal:cbv:sdt:location whose value is the EPC Pure Identity URI of the ship-from GLN. Each GLN URI must match one of the companies in the company master data list.	urn:epc:id:sgln:036800.111111.0 (see appendix for full XML example)	Optional	Required

Element	Type	Description	Example	CMO, Returns	TI, TS Exchange
destinationList	List of destinations	Each destination in the destinationList is a pair of URIs: one URI for the type and one URI for the value. The destinationList shall include one destination of type urn:epcglobal:cbv:sdt:owning_party whose value is the EPC Pure Identity URI for the GLN of transfer-to party. If ship-to GLN is different from the transferto party's GLN, destinationList shall also include a second destination of type urn:epcglobal:cbv:sdt:location whose value is EPC Pure Identity URI of ship-to GLN. Each GLN URI must match one of the companies in the company master data list.	urn:epc:id:sgln:0087701.00000.0 (see appendix for full XML example)	Optional	Required

11.3.2 Shipping Event Extension (Direct Purchase)

Element	Type	Description	Example	CMO, Returns	TI, TS Exchange
transactionDate	Timestamp	The date in which the transfer of ownership occurred. Due to operational differences, it is possible for the shipping date (event time) to be different than the transaction date	2012-03-27T17:10:16Z	Optional	Required
directPurchase	Complex Type	Used to indicate if products were purchased directly from the manufacturer, from the exclusive distributor of the manufacturer, or from a repackager that purchased directly from the manufacturer. - If the directPurchaseEPCs sub-element is omitted, the directPurchase field applies to all products in the shipment, including product contained inside the packages listed explicitly in the shipping event. - If directPurchaseEPCs sub-element is included, the directPurchase field applies only to those products whose identifiers are explicitly listed in the directPurchaseEPCs sub- element, including product contained inside packages listed explicitly in directPurchaseEPCs.	N/A	Optional	Required
@value	Boolean	True if products were purchased directly from the manufacturer, from the exclusive distributor of the manufacturer, or from a repackager that purchased directly from the manufacturer.	True	Optional	Optional

Element	Type	Description	Example	CMO, Returns	TI, TS Exchange
directPurchaseEPCs	List of URI	If specified, limits the applicability of the directPurchase statement to the specified products or packages, including product contained inside any specified package. Each EPC shall either be: - an EPC listed in the main epcList of this Shipping event, or - an EPC that is aggregated to one of the EPCs listed in the main epcList of this Shipping event. If omitted, the directPurchase statement applies to all products in this Shipping event.	EPC list	Optional	Required

11.3.3 Shipping Event Master Data

For EPCIS 1.2, the **companyMasterData** extension element has been removed. Instead, company master data is carried in the EPCIS header rather than as an event-level extension of the *Shipping* event. This avoids repetition when the same company appears in multiple *Shipping* events within the same EPCIS document.

Element	Type	Description	Example	CMO, Returns	TI, TS Exchange
Name (EPCIS 1.1 – companyName)	String	The name of the location or party expressed in text	My Pharma LLC	Optional	Required
streetAddressOne (EPCIS 1.1 – street1)	String	The first line of the street address.	3575 Zumstein Ave	Optional	Required
streetAddressTwo (EPCIS 1.1 – street2)	String	The second line of the street address.	Suite 101	Optional	Optional
streetAddressThree (EPCIS 1.1 – Did not exist, new in 1.2)	String	The third line of the street address.		Optional	Optional
City	String	The city.	Washington	Optional	Required
State (EPCIS 1.1 –stateOrRegion)	String	The state, province, or region using the standard two-letter abbreviation specified in ISO 31662:1998 country subdivision code.	PA	Optional	Required
postalCode	String	The ZIP or other postal code.	12345-6789	Optional	Required
countryCode (EPCIS 1.1 – country)	String	The country using the standard two-letter abbreviation specified in ISO 3166-1alpha2:1997 country code.	US	Optional	Required

11.3.4 Shipping Event Transaction Detail (Multiple POs) - EPCIS 1.2 Only

Event extensions transactionDate and directPurchase are added for DSCSA data requirements, specifically the ability to capture multiple POs on a shipment.

Element	Type	Description	Example	CMO, Returns	TI, TS Exchange
eventTime	Timestamp	Date and time of event. This should match the date and time of the corresponding Shipping event. Please note that the Time stamp in Shipping Event cannot be earlier than Aggregation or Commissioning Event. Also, Time stamp in Shipping Event cannot be greater than current system time.	2012-03-26T17:10:16Z	Required	Required
eventTimeZoneOffset	String	Time zone offset in effect at the time and place where the event occurred.	-05:00	Required	Required
recordTime	Timestamp	Date/ time event was recorded in an EPCIS repository.	2013-10-01T22:08:02Z	Optional	Optional
epcList	List of URI	- EPC Pure Identity URI for each object associated with the business transactions listed in this event. - If the EPC of a container is indicated, all of its contents are associated with the business transaction.	EPC List	Required	Required
action	String	ADD	Same is Desc	Required	Required
bizStep	URI	urn:epcglobal:cbv:bizstep:shipping	Same is Desc	Required	Required
disposition	URI	urn:epcglobal:cbv:disp:in_transit	Same is Desc	Required	Required
readPoint	URI	EPC Pure Identity URI for the GLN of the location at which the event took place. This should match the readPoint of the corresponding *Shipping* event.	urn:epc:id:sgln: 036800.111111.0	Optional	Optional

Element	Type	Description	Example	CMO, Returns	TI, TS Exchange
bizTransaction List	List of biz transactions	Business transactions governing this Shipping Business Transaction Detail event, which may include a purchase order or an invoice. Each transaction is represented as a pair of URIs: one URI for the type and one URI for the value.	N/A	Required	Required

11.4   EPCIS 1.2 file Examples:

https://www.amerisourcebergen.com/manufacturer-solutions/maufacturer-operations-and-replenishment#anchor5

11.5   Product Information Template: Email SecureSupplyChain@AmerisourceBergen.com to request a master data template file.

GTIN	GTIN Check	GS1 Company Prefix	UoM (Each, Inner Pack, Case, Etc)	Quantity	Drug Name/Description (21 USC 352(e)(3)	Packaging Type	Dose Form	Strength	NDC Code (11)
00300123000018	valid	0300123	Each	1	Latinlikename	Bottle	Tablet	150 mg	12345012916
30300123000012	valid	0300123	Inner Pack	10	Latinlikename	Bottle	Tablet	150 mg	12345012916
40300123000013	valid	0300123	Case	30	Latinlikename	Bottle	Tablet	150 mg	12345012916

11.6   Location Information Template

GLN	GS1 Company Prefix	GLN Name	Sold From or Ship From	Address	City	State	Zip Code
0087701000003	0087701	AmerisourceBergen Corporate	Sold From	1 West First Avenue	Conshohocken	PA	19428
0716163011363	0716163	AB Full Line Amityville	Ship From	5500 New Horizons Blvd	Amityville	NY	11701