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Centre for Trade Facilitation and Electronic Business  
(UN/CEFACT)

1 REGULATORY AND EBUSINESS PROGRAMME DEVELOPMENT AREA  
2 AGRICULTURE, AGRI-FOOD AND FISHERIES DOMAIN  
3  
4 BUSINESS REQUIREMENT SPECIFICATION  
5 TEXTILE AND LEATHER TRACEABILITY AND TRANSPARENCY  
6 PROCESS & CCBDA DATA MODEL  
7 (BRS TEXTILE AND LEATHER PROCESS AND CCBDA DATA MODEL v1.0)

**SOURCE:** Textile Project Team  
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11	<b>TABLE OF CONTENTS</b>	
12	<b>1 INTRODUCTION</b>	<b>3</b>
13	1.1 OBJECTIVE	3
14	1.2 REFERENCE DOCUMENTS	4
15	1.3 AUDIENCE	4
16	1.4 STATUS OF THIS DOCUMENT	4
17	1.5 DOCUMENT CONTEXT	4
18	1.6 REVISION HISTORY	5
19	<b>2 BUSINESS REQUIREMENT VIEW</b>	<b>6</b>
20	2.1 BUSINESS DOMAIN VIEW	6
21	2.2 BUSINESS REQUIREMENT LIST	6
22	2.3 BUSINESS PARTNER VIEW	7
23	2.4 BUSINESS ENTITY VIEW	8
24	2.5 BUSINESS TERMS	9
25	<b>3 BUSINESS CHOREOGRAPHY VIEW</b>	<b>11</b>
26	3.1 GENERIC TT USE CASE	11
27	3.2 BUSINESS TRANSACTION: TT EVENT USE CASES	11
28	3.3 BUSINESS PROCESS FLOW: DECLARE, SEARCH/REQUEST AND RESPONSE	13
29	3.4 BUSINESS TRANSACTION SEQUENCE TT EVENT USE CASE	14
30	3.5 BUSINESS TRANSACTION: TT ADDITIONAL INFORMATION USE CASE	14
31	3.6 BUSINESS FLOW	15
32	3.7 BUSINESS TRANSACTION SEQUENCE TT ADDITIONAL INFORMATION USE CASE	16
33	<b>4 BUSINESS INFORMATION VIEW</b>	<b>17</b>
34	4.1 TT EVENT DATA MODEL (EPCIS)	17
35	4.2 BUSINESS DOCUMENTS: TT EVENT DATA MESSAGE	18
36	4.2.1 <i>Business Information Entities</i>	18
37	4.2.2 <i>Example</i>	18
38	4.3 BUSINESS DOCUMENT: TT ADDITIONAL INFORMATION MESSAGE	18
39	4.4 BUSINESS DOCUMENTS: TT PRODUCT MESSAGE (FOCUS SUSTAINABILITY DATA)	19
40	4.4.1 <i>Business Information Entities</i>	19
41		
42	FIGURE 1-1 DOCUMENT CONTEXT	5
43	FIGURE 2-1 DOMAIN VIEW	6
44	FIGURE 2-2 BUSINESS PARTNER VIEW	7
45	FIGURE 2-3 BUSINESS ENTITY VIEW	8
46	FIGURE 2-4 BASIC EVENT INFORMATION AND ADDITIONAL INFORMATION	9
47	FIGURE 3-1 TT GENERIC USE CASE	11
48	FIGURE 3-2 TT EVENT USE CASES	12
49	FIGURE 3-3 TT EVENT DATA	12
50	FIGURE 3-4 DECLARE TT EVENT	13
51	FIGURE 3-5 SEARCH AND RESPONSE TT EVENT	13
52	FIGURE 3-6 BUSINESS TRANSACTION SEQUENCE TT EVENT USE CASE	14
53	FIGURE 3-7 TT ADDITIONAL INFORMATION USE CASES	15
54	FIGURE 3-8 ACTIVITY DIAGRAM TT ADDITIONAL INFORMATION	15
55	FIGURE 3-9 BUSINESS TRANSACTION SEQUENCE TT ADDITIONAL INFORMATION USE CASE	16
56	FIGURE 4-1 UN/CEFACT TT EVENT MESSAGE, BASED ON EPCIS 1.2	17
57	FIGURE 4-2 EXAMPLE TT PRODUCT, FOCUS SUSTAINABILITY INFORMATION	19
58		
59	TABLE 4-1 EVENT EXAMPLES (TEXT USED INSTEAD OF IDENTIFIERS FOR READABILITY)	18
60		
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# 63 1 Introduction

64 The UN/CEFACT Sustainable Textile and Leather Traceability and Transparency Project has  
65 developed a Recommendation, guidelines and electronic business standards on transparency and  
66 traceability for sustainable value chains in the textile and leather sector in support of more  
67 responsible production and consumption patterns, in line with relevant SDGs of Agenda 2030.

68  
69 The project has a very broad scope and will start sub projects designed to have a manageable scope.  
70 In the first stage, the focus will be on the products or product batches across the value chain and  
71 information about the way products are transformed, aggregated or disaggregated. In other words,  
72 from inputs to outputs, from trade item units to logistical units. By having this type of information  
73 linked, the history and origin of a product becomes visible across organizations and borders,  
74 including related information that supports a sustainability claim.

75  
76 The business case supported by these processes is:

- 77 • All business partners involved in the value chain record traceability information on products,  
78 product batches, their traded item units and logistic units in a traceability system (repository).
- 79 • A traceability information requestor (business partner or government) has a question about a  
80 product or product batches related to a party, location, transport movement, quantities, trade  
81 transaction, product and/or process characteristics, and requires an immediate answer.

82  
83 The traceability system retrieves the required information and sends it to the traceability information  
84 requestor. The term product or product batch refers to the type of product or -batch or even the  
85 individual product or -batch.

86  
87 Traceability and Transparency issues can be defined on 3 levels:

- 88 • Identifying the business partners who have the answers to particular traceability and  
89 transparency questions for the specified products(s) or -batches.
- 90 • Questions about related parties, locations, transport movements, quantities, trade transactions.
- 91 • Questions about cultivation, breeding, transformation processes, events, social, environmental  
92 and human health issues.

93  
94 The data models in this document can be used for:

- 95 • All textile and leather products
- 96 • Types of products/-batches as well as individual products/-batches.
- 97 • For identifying the parties involved in the value chain for specified products, in a generic  
98 standard supporting traceability and transparency for commodities of all kinds.

99  
100 The structure of this document is based on the structure of the UN/CEFACT Business Requirements  
101 Specification (BRS) document reference. This global traceability framework will give specific  
102 attention to tackling negative health, social and environmental impacts from textile and leather  
103 related operations.

## 104 1.1 Objective

105  
106 The objective of this document is to standardize the Business Processes, the Business Transactions  
107 and the Information Entities of the technical description and information for product traceability and  
108 transparency data exchange based on the ISO 19987 (EPCIS, Electronic Product Code Information  
109 Services 1.2) standard. The Business Process is the detailed description of the way partners intend to  
110 play their respective roles, establish business relationship and share responsibilities to interact  
111 efficiently with the support of their respective information systems. The business documents are  
112 composed of Business Information Entities (BIE) taken from the proposed Sustainable Development  
113 & Circular Economy Reference Data Model (SDCE RDM), which when available, will include  
114

115 existing and new Business Information Entities and which will be a view on the UN/CEFACT  
116 Buy/Ship/Pay International Supply Chain Reference Data Model (BSP RDM).  
117

## 118 **1.2 Reference Documents**

119  
120 Knowledge and application of the following documents is crucial for the development of the  
121 information entities specified in this document.

- 122 • UNECE Explanatory Note for the Business Process Analysis Activity and the Generic  
123 Traceability Model. Dated 2020.
- 124 • UNECE Policy Paper “Accelerating action for a sustainable and circular garment and  
125 footwear industry: which role for transparency and traceability of value chains? Dated 2020.
- 126 • UNECE TEXTILE4SDG12 “Transparency in textile value chains in relation to the  
127 environmental, social and human health impacts of parts, components and production  
128 processes”. Dated 2017.
- 129 • UNECE “Traceability for Sustainable Trade, a Framework to design Traceability Systems for  
130 Cross Border Trade”. Dated 2016
- 131 • ISO 19987 (EPCIS)
- 132 • UN/CEFACT Reference Data Model (RDM) Guideline (Draft, v1.0.0.2).
- 133 • UN/CEFACT Core Components Business Document Assembly Technical Specification  
134 (CCBDA) version 1.0 27 June 2012.
- 135 • UN/CEFACT BRS Textile & Leather High Level v1.0. Dated 2020.
- 136 • UNECE Glossary for the Textile and Leather sector. Dated 2020.

## 137 138 **1.3 Audience**

139  
140 The audience of this document is all users who are interested in information data exchange to support  
141 traceability and transparency for sustainable trade in the textile and leather value chains.  
142

## 143 **1.4 Status of this document**

144  
145 This document has been developed in accordance with the UN/CEFACT/TRADE/22 Open  
146 Development Process for Guidelines and approved for publication by the UN/CEFACT Bureau.  
147

## 148 **1.5 Document context**

149  
150 This document describes the business requirements for Textile and Leather Traceability &  
151 Transparency data exchange. The data exchange structures, also known as CCBDA structures will be  
152 derived from the Textile and Leather Process and Data Model. These derived structures are based on  
153 a uniform structure, as shown in relation to the Sustainable Development and Circular Economy  
154 Reference Data Model (RDM) architecture in Figure 1-1 below:  
155

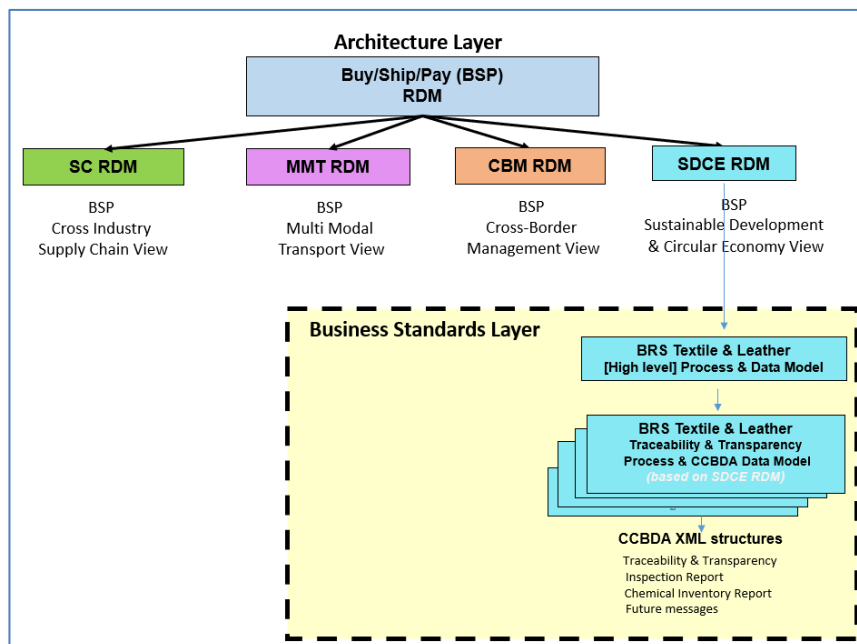


Figure 1-1 Document Context

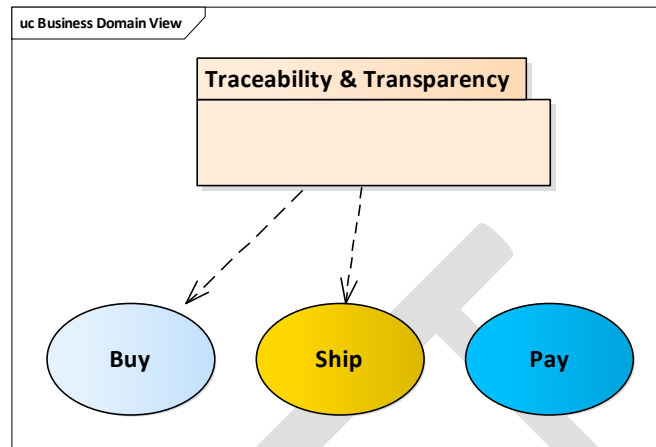
## 1.6 Revision history

Version	Release	Date	Comment
0.1	Internal draft	2020-October-05	ODP3: Initial
0.2	Internal draft	2020-October-05	ODP4: Internal Review
0.3	Internal draft	2020-October-20	OPD4: Updated; requirement List, IOT Sensor Data Events, Sequence diagram fig. 3.6, Added: Business Entity View, Event examples
0.4	Internal draft	2020-October-22	ODP4: Rearrange chapters/sections for readability, added activity diagrams
0.5	Public Review	2020-October-26	ODP5: Public Review version

## 163 2 Business Requirement View

### 164 2.1 Business Domain View

165  
166 This section describes the extent and limits of the business processes within the Textile and Leather  
167 Supply Chain being described in this document. The specific processes and use cases including the  
168 exchange of messages and content will be described.



169  
170  
171 **Figure 2-1 Domain View**

172 Textile and Leather domain focusses on the BUY and SHIP part of the Buy-Ship-Pay (BSP) model  
173 of UN/CEFACT (Figure 2-1)

174

Categories	Description and Values
Business Process	Textile and Leather Traceability and Transparency data exchange.
Product Classification	Textile and Leather Traceability and Transparency data.
Industry Classification	Textile and Leather
Geopolitical	Global
Official Constraint	European Regulations National regulations Local applicable regulations
Business Process Role	Exchange of Traceability and Transparency data
Supporting Role	None
System Capabilities	Agreed level of security to protect data integrity. Network of connected Traceability and Transparency databases. System of authorizations and keys for retrieving Traceability and Transparency information by Traceability and Transparency requesting parties.

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### 176 2.2 Business Requirement List

177

178 For Traceability and Transparency purposes a network of public and/or private databases could be  
179 used, in which cultivation, breeding, manufacturing, finishing and transport data can be registered,  
180 data can be searched and data can be retrieved. This data is not public information. The business  
181 partners maintain control over access to the data. The traceability and transparency data could also be  
182 sent between parties without using such databases. In the list below, business requirements are  
183 specified in addition to the ones described in the BRS for the Textile and Leather High Level Process  
184 & Data Model.

185

#	Business Requirement Statement	
B.1	Standardized data exchange structures	Traceability & Transparency data exchange structures (messages) must use existing standards and methods which allow the provision of needed information.
B.2	Additional information about the product (sustainability related).	Transparency data is obtained by sharing events across organizations using a traceability system. The needed additional information (e.g. sustainability data), when not provided by the shared events, can be exchanged between organizations, commonly triggered by (i.e. linked to) the event data. The traceability system should

#	Business Requirement Statement	
		provide instant visibility across organizations on products and processes for the whole value chain.
B.3	TT Events providing data on the 5 W's questions.	The traceability event data should answer the 5 W's: Why, What, Where, Who and When questions about a product or product batch and/or provide links to relevant additional information which is sustainability related.
B.4	Exchange of measurements of IOT sensors.	The requested additional information captured by IOT sensors can be exchanged between business partners and the traceability system or between business partners (such as measurements for humidity and temperature).
B.5	Exchange of sustainability data on key traceability entities.	The main purpose of transparency data is to verify sustainability claims which can relate to parties (such as brand owners, transporters), facilities, processes, locations, products, product batches, transport movements, etc. This information should be provided to the TT Information Requestor.
B.6	Transport movement events to support "Chain of Custody"	Transport movement events (shipping/receiving) should be provided in order to support "Chain of Custody". This includes information about the despatch and delivery date times, ship from/to party and logistics location. Other information such as identifiers of shipments, consignments, transport means, and transport equipment might be requested.
B.7	Traceability Repository access rights	The traceability system should be able to provide access to only a subset of information, depending on the identity of the TT Information Requestor.
B.8	Interoperability	Interoperability between different systems.
B.9	Independent, global	Independent of national and / or geographical locations.

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Product and -batch traceability and transparency data can be exchanged on a regular basis, e.g. for consumer information or on an ad hoc basis, e.g. on request.

### 2.3 Business Partner View

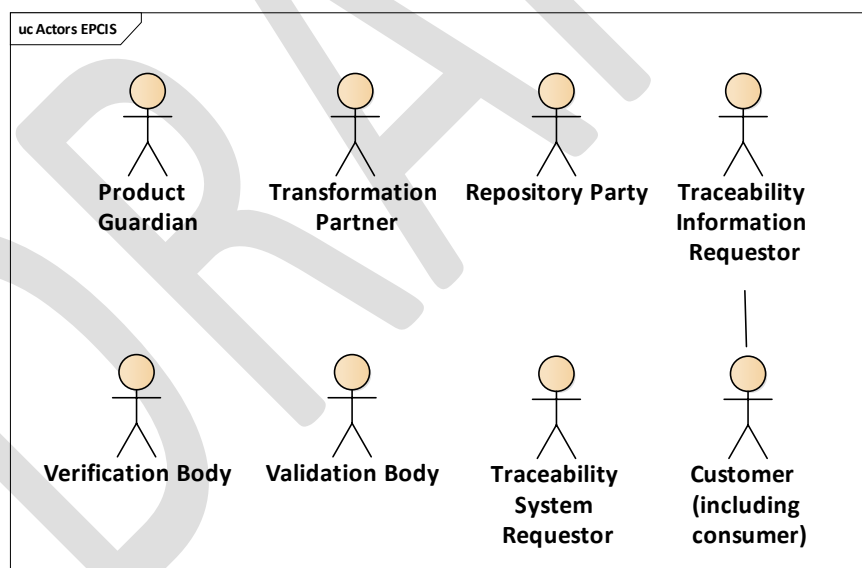


Figure 2-2 Business Partner View

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Actor	Definition
Customer (including consumer)	Customers are often the customers of the Traceability System Requestor but they can also be suppliers, so the customer could be the weaver who is buying "organic cotton thread" – in addition to, or instead of, the final customer who purchases the garment. In other words, it is whomever is purchasing goods based, at least in part, on a claim made by the seller.
Product Guardian	A party, such as a transporter, warehousing party, agent/trader, supplier, brand owner/retailer, consumer that makes no changes to a product or raw material, they only store, transport, sell, or purchase it. Their possession of the product is recorded in order to establish "chain of custody" since product contamination or substitution could take place during their custody.
Provider of IDs	A party that supplies identifiers. In order for a product or component to be traced it must have a unique identifier that cannot be duplicated or moved from one (compliant) product to another product (which may not be compliant). Parties and locations in the value chain also need to have unique IDs. This value-chain partner's role is to provide the identification. The role can be carried out by a

Actor	Definition
	Transformation Partner, but it could also be done by a Certifier or an Inspection organization or an association that specializes in identifiers (such as GS1) or a government (for example, if a company is identified by its tax ID).
Traceability System Requestor	Requests that a traceability process be implemented. This could be any down-stream value-chain partner that wants to make a “claim” to its clients. Therefore, it could be the spinner, the weaver, the manufacturer, or a brand/retailer.
Transformation Partner	A party that processes or changes one or more inputs to create different outputs (i.e. farmer, ginner, spinner, weaver, dyer, manufacturer, subcontractor, tanner, recycler, etc.). Transformation Partners include those who undertake post-consumer recycling or re-use of products.
Validation Body	A party which inspects planned controls and verification measures in a value-chain and validates that they are appropriate and will meet the objectives that have been set. Validation Bodies are often the same organizations that undertake verification activities (see below).
Verification Body	A party that verifies that what has happened in the value-chain has taken place according to the rules agreed in advance. These bodies provide the data to prove that processes in the value chain have supported claims made about products or entities/organizations. In addition to auditors, these value-chain partners could include certifiers, inspectors, brand auditors or self-auditors.

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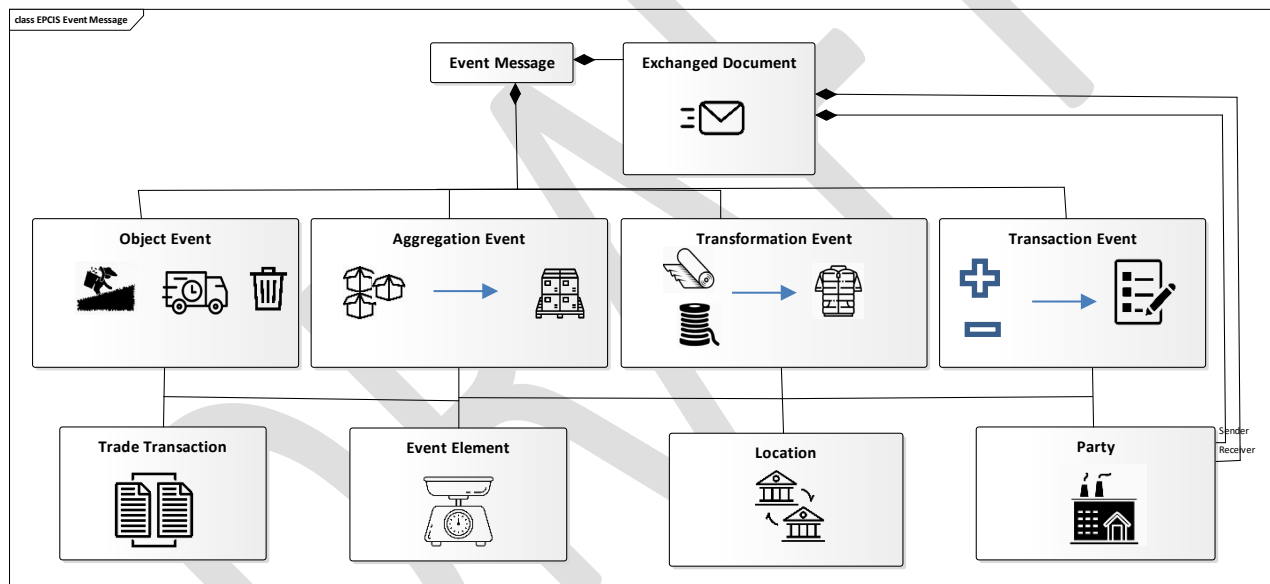
## 2.4 Business Entity View

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The conceptual model below represents the set of data for the traceability system, in particular the Traceability & Transparency (TT) events. The event message contains a number of events regarding a product or - batch.



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Figure 2-3 Business Entity View

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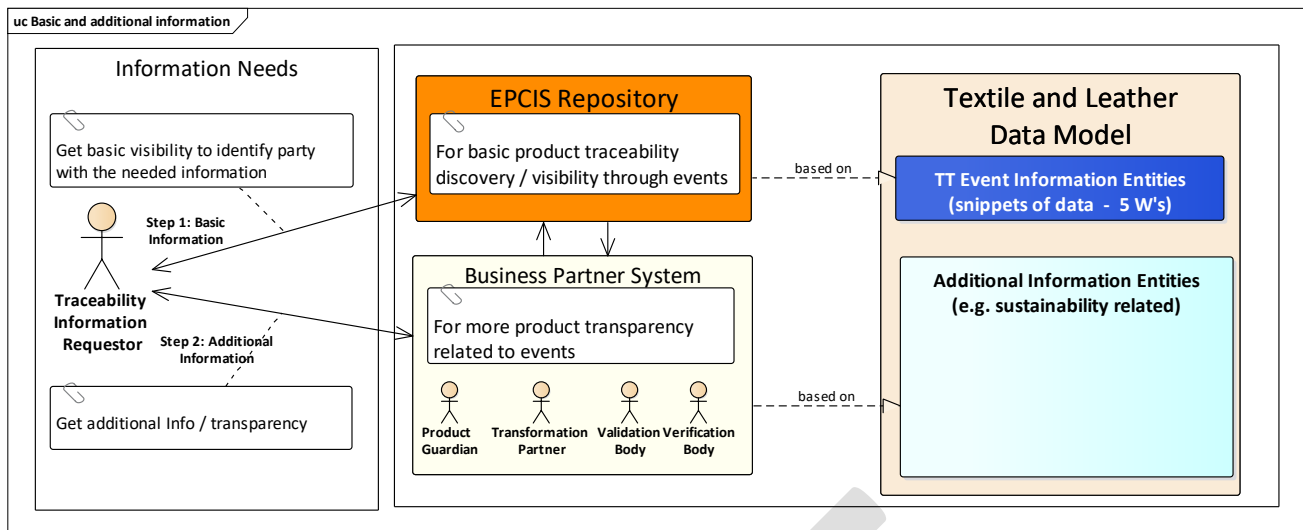
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In the Figure 2-4 below both the EPCIS Repository and the system of the business partners are using parts of the Textile and Leather Data Model. Depending on the information needs of the Traceability Information Requestor, either basic visibility information or additional information needs can be retrieved. The basic information needs will be retrieved from the EPCIS Repository and the additional information needs will be retrieved directly from relevant business partners. The implementation efforts regarding the exchange of information will be higher depending on the granularity of information. The basic and additional information requirements may differ among business partners. This document has described the information entities for exchanging basic visibility data (EPCIS TT Events). For any other data exchanges that are required, additional guides or updates of this document will be needed in order to support interoperability between business partners.





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**Figure 2-4 Basic Event Information and Additional Information**

219 The basic events of a traceability system are generic, for all types of products, over the whole product  
220 lifecycle, all processing steps from the raw material source up to the point-of-sale of the end product  
221 or the recycling of the used end product.  
222

223

Event Types	Description
Object Event	An event that happened to one or more objects. This is the simplest type of event, as well as the most commonly used.
Aggregation Event	An event that happened to one or more objects that are physically aggregated together or disaggregated from each other. This event contains the identifier of a parent object, and identifiers of one or more child objects.
Transformation Event	An event in which input objects are fully or partially consumed and output objects are produced. This event contains the identifier(s) of the output (parent) object and the identifiers of one or more child (input) objects
Transaction Event	An event in which one or more objects become associated or disassociated with one or more identified business transactions.

Related Entities	Description
Trade Transaction	Identifies one or more particular business transactions that are relevant to an event (type and name of business transaction).
Event Element	Identifies the number of objects in the object class event (e.g. number of products in a product batch).
Party	The party identifier that relinquishes ownership (source) or receives ownership (destination) of the objects as a result of the business transfer or takes possession as a result of other transfers, such as for storing goods in a warehouse.
Location	The location identifier from where (source) the objects are transferred or to where (destination) the objects are transferred (destination).

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**2.5 Business Terms**

Term	Business Requirement Statement
EPCIS	Electronic Product Code Information Services.
Event Registration (declaration)	An administration of event identifying information, which can be searched for traceability and transparency requests.
Location	An identified geographical point, place or area where an event related to product or -batch traceability occurs (e.g. an agricultural area, a location of a production unit etc.).
Party	An identified person, organization or authority.
Product Batch	An identified group of not individually identified products or the quantity of anything made in one operation or lot.
Registration	Administration of data according to a specific set of criteria. (e.g. product registrations and transport movement registrations).

Term	Business Requirement Statement
Sustainability	The manufacturing, marketing and use of garment, footwear and accessories, and its parts and components, taking into account the environmental, health, human rights and socio-economic impacts, and their continuous improvement through all stages of the product's life cycle. UNECE 2018
Traceability	The ability to identify and trace the history, application, location and distribution of products, parts and materials, to ensure the reliability of sustainability claims, in the areas of human rights, labour (including health and safety), the environment and anti-corruption" (UN Global Compact 2014 ); and "the process by which enterprises track materials and products and the conditions in which they were produced through the supply chain" OECD, 2018.
Traceability and Transparency Information Requesting party (TT Information Requestor)	Person, organization or authority needing traceability and transparency information on product(s) for their sustainability statement(s) (claims) regarding social, environment or human health. In the event that the traceability system is regulated, the data could also be used to verify compliance and enforce laws.
Transparency	Information being made available to all elements of the value chain in a standardized way, which allows common understanding, accessibility, clarity and comparison. European Commission 2017

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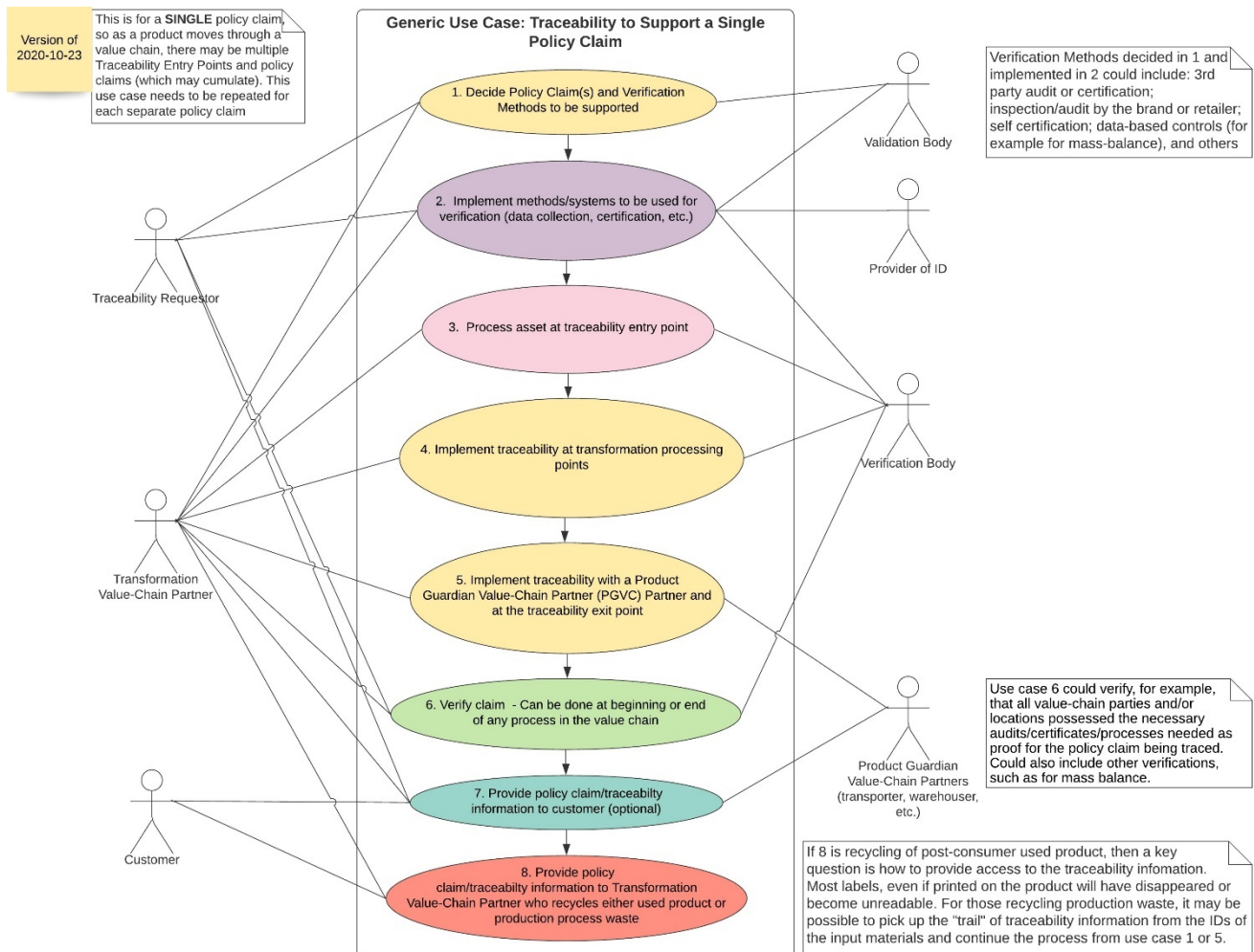
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## 229 3 Business Choreography View

### 230 3.1 Generic TT Use Case

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232 The purpose of the generic traceability and transparency use case diagram is to illustrate the principle  
 233 processes for establishing traceability which are applicable across different products – i.e. the model  
 234 should be good for cotton, wool, viscose, leather, etc. As currently drawn, there are seven kinds of  
 235 generic value-chain partner roles (some of which may be fulfilled by the same organization).  
 236  
 237



238  
 239 **Figure 3-1 TT Generic Use Case**

240

241 The use case for traceability and transparency is elaborated in Figure 3-2 - providing traceability –  
 242 with event (visibility) information and Figure 3-4 - providing transparency - with additional  
 243 information on products, -batches, transport movements, locations and/or business partners.  
 244

### 245 3.2 Business Transaction: TT Event Use Cases

246

247 In figure 3-2 below, a use case is shown for declaring product/- batch events and/or product/- batch  
 248 related events. The other use cases are about the search/request and response regarding the  
 249 traceability and transparency (TT) Event.

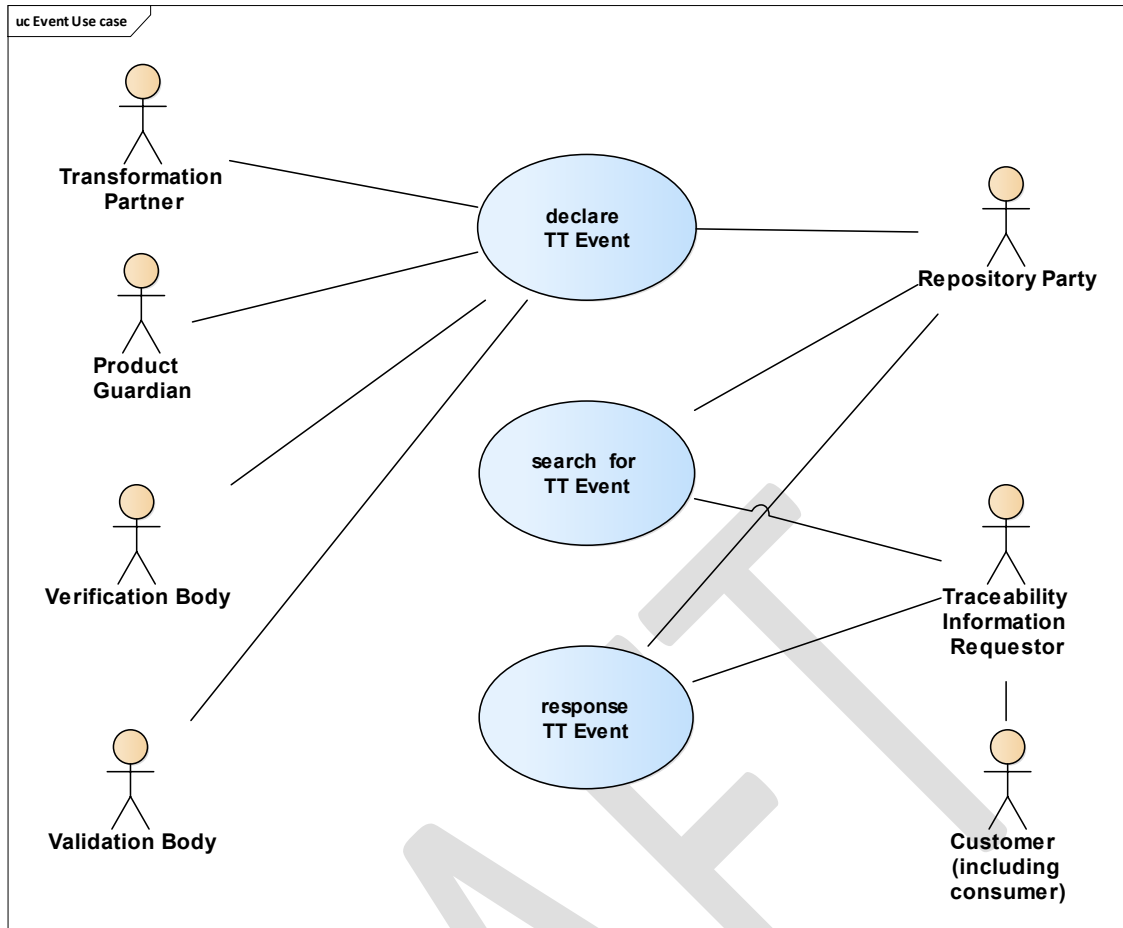


Figure 3-2 TT Event Use Cases

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The above figure illustrates the use case to perform three business steps:

- Declare a product/-batch events by Transformation Partners, Product Guardians or Validation/Verification Bodies.
- Search for a traceability event within the Traceability Repository by the TT Information Requestor.
- Response on a search request from the Traceability Repository system for the TT Information Requestor.

The main data for this use case is comprised of the date and time of the event, the product ID or -batch ID, quantities, party ID, location ID, shipment ID, process type. By this, answering the key traceability questions known as the 5 W's: what, who, where, why and when.

### Recording Data

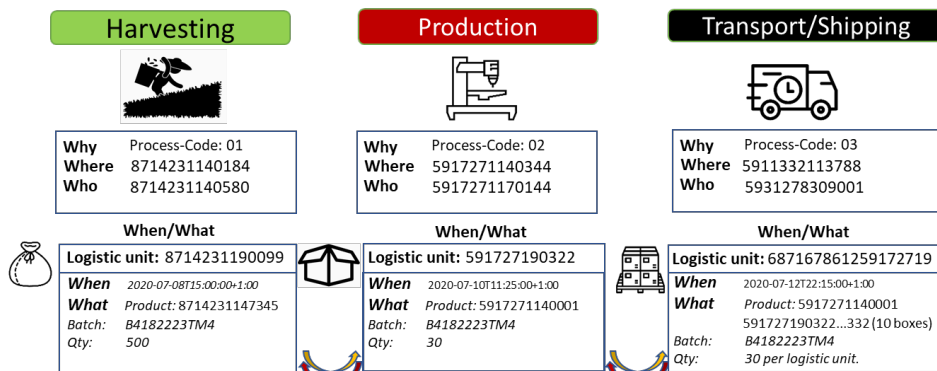


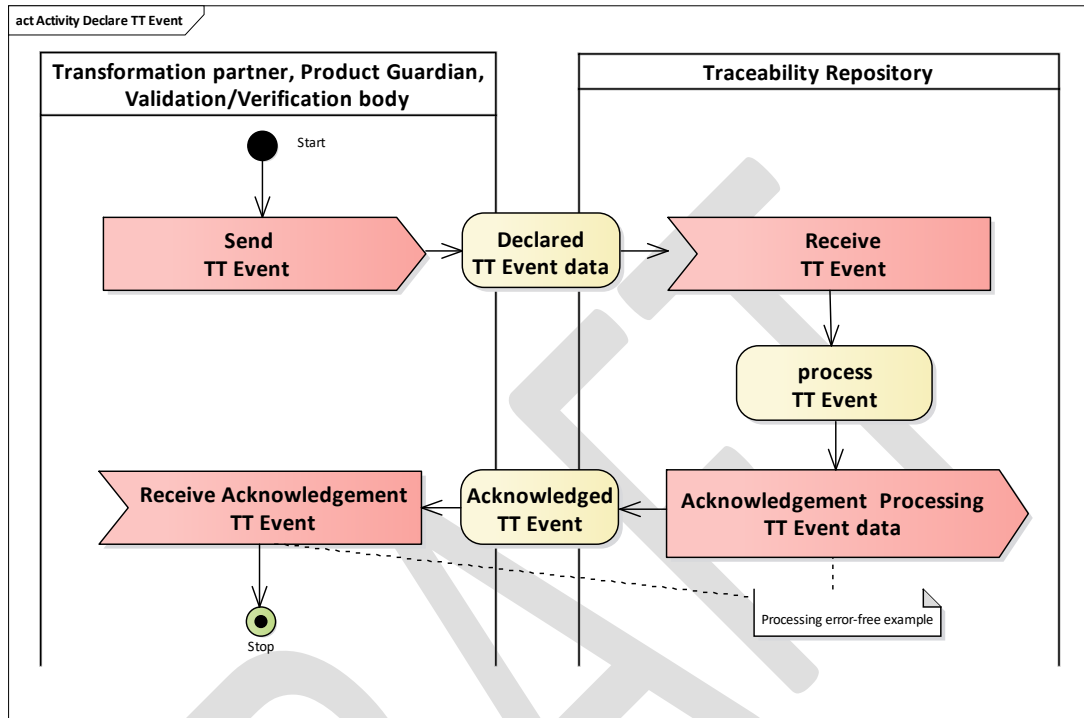
Figure 3-3 TT Event data

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### 3.3 Business Process flow: declare, search/request and response

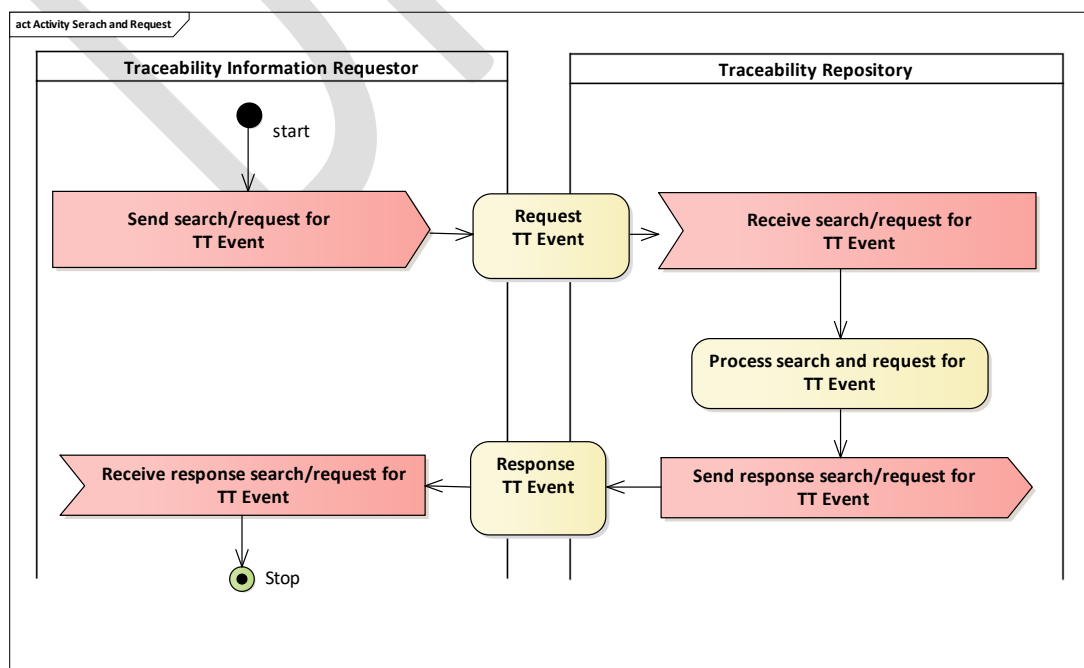
269 The Transformation Partner, Product Guardian or Validation/Verification Body sends a declaration for  
270 a TT Event to the Traceability Repository. The Traceability Repository receives and processes the TT  
271 Event and sends an acknowledgement to the Transformation Partner, Product Guardian or  
272 Validation/Verification Body. The acknowledgement message is generated by the Traceability  
273 Repository system. Once the acknowledgement message has been received and processed the activity  
274 ends.



275  
276

Figure 3-4 Declare TT Event

277 The TT Information Requestor sends a search/request for TT Event data to the Traceability Repository.  
278 The Traceability Repository processes the search/request and collects the requested TT Event data.  
279 This TT Event data will be sent to the TT Information Requestor. Once received by this party, the  
280 activity ends.



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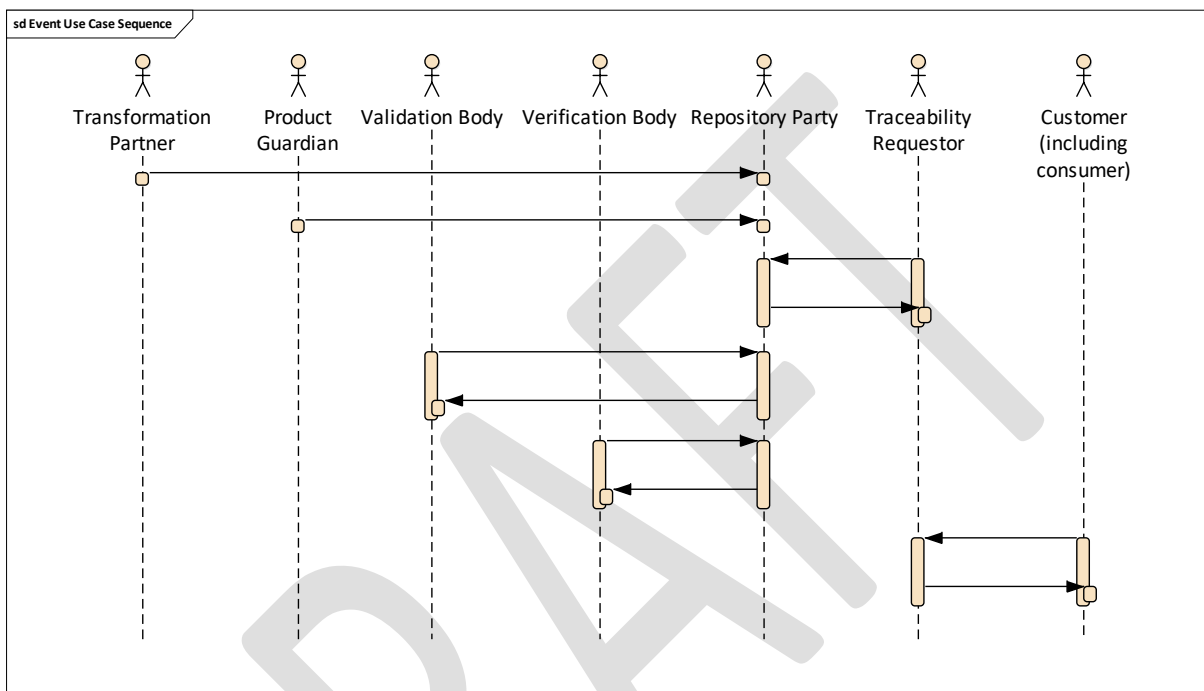
Figure 3-5 Search and Response TT Event

283

284 **3.4 Business Transaction Sequence TT Event Use Case**

285 The primary goal of this transaction use case is to declare/search/request TT events in the Traceability  
 286 Repository. Events will be declared by the Transformation Partner and Product Guardian, or  
 287 Validation/Verification Body such as declaring the creation of a product, the inputs/outputs of a  
 288 transformation process, transport movements, storage, disposal and so on. When all actors in the value  
 289 chain declare TT Events, visibility across the value chain becomes available. The TT Information  
 290 Requestor and Validation/Verification Body can request the Repository Party for TT event  
 291 information.

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Figure 3-6 Business Transaction Sequence TT Event Use Case

297 This use case is about the information exchanged *between* the business partners, identified with the  
 298 help of the Traceability Repository. In this use case the information exchange is based on a request  
 299 and response process. This use case can be commonly limited to sustainability related data about a  
 300 product, -batch, party, facility, process, location or transport movement. The implementation will  
 301 decide which Traceability & Transparency additional information will be required.

302

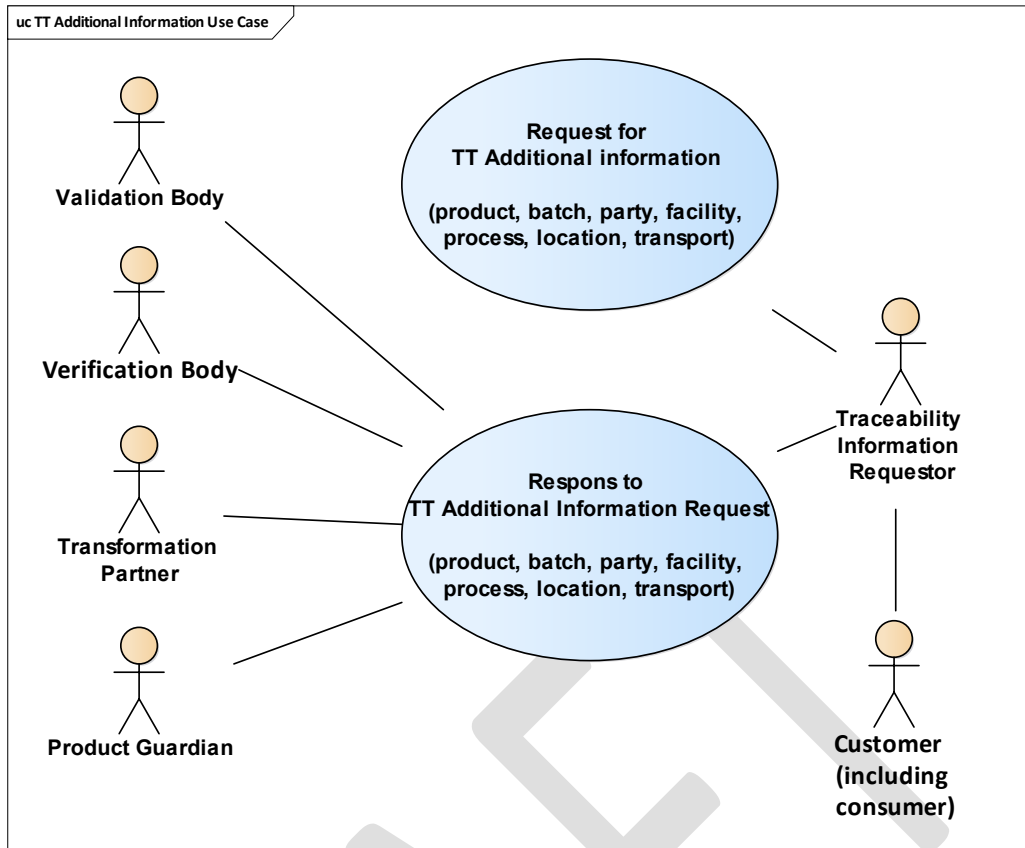


Figure 3-7 TT Additional Information Use Cases

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### 3.6 Business Flow

306 The TT Information Requestor sends a request for additional information about a product, -batch, party, facility, location or transport movement to the Transformation Partner, Product Guardian or Validation/Verification Body. These parties will process the request and will collect the requested additional information. This information will be sent to the TT Information Requestor. Once received by him, the activity ends.

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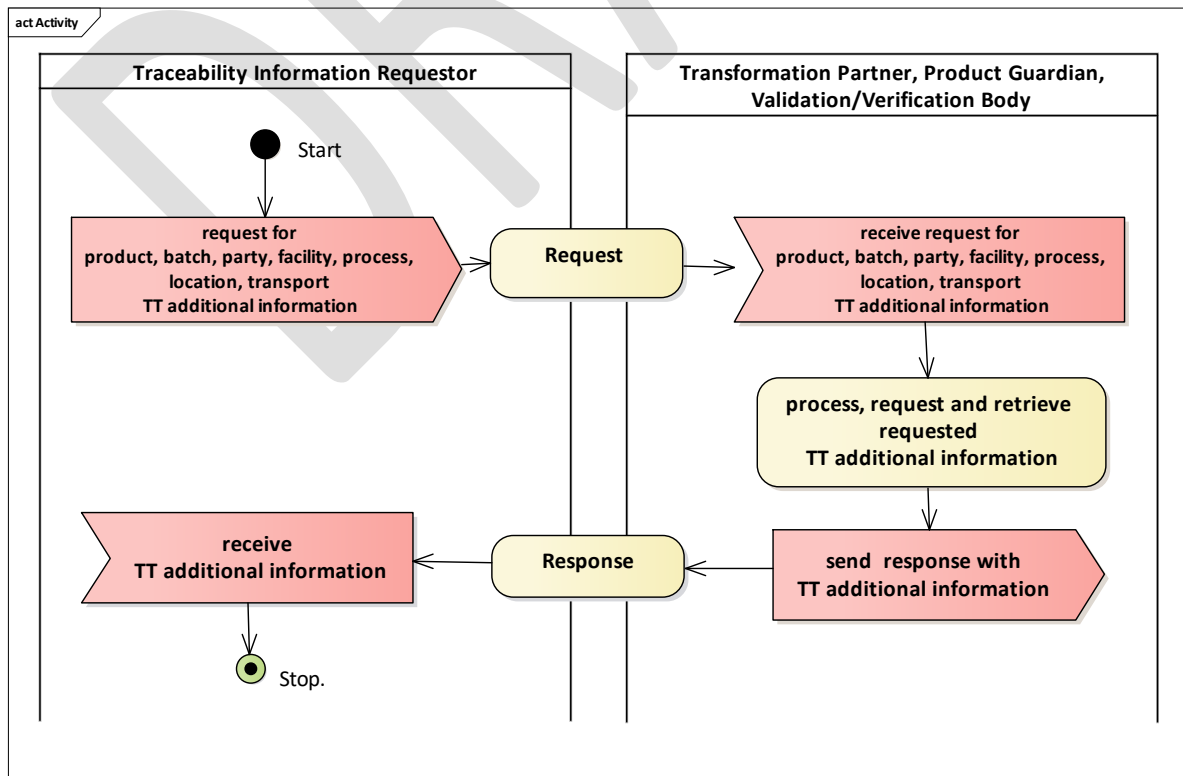


Figure 3-8 Activity Diagram TT Additional Information

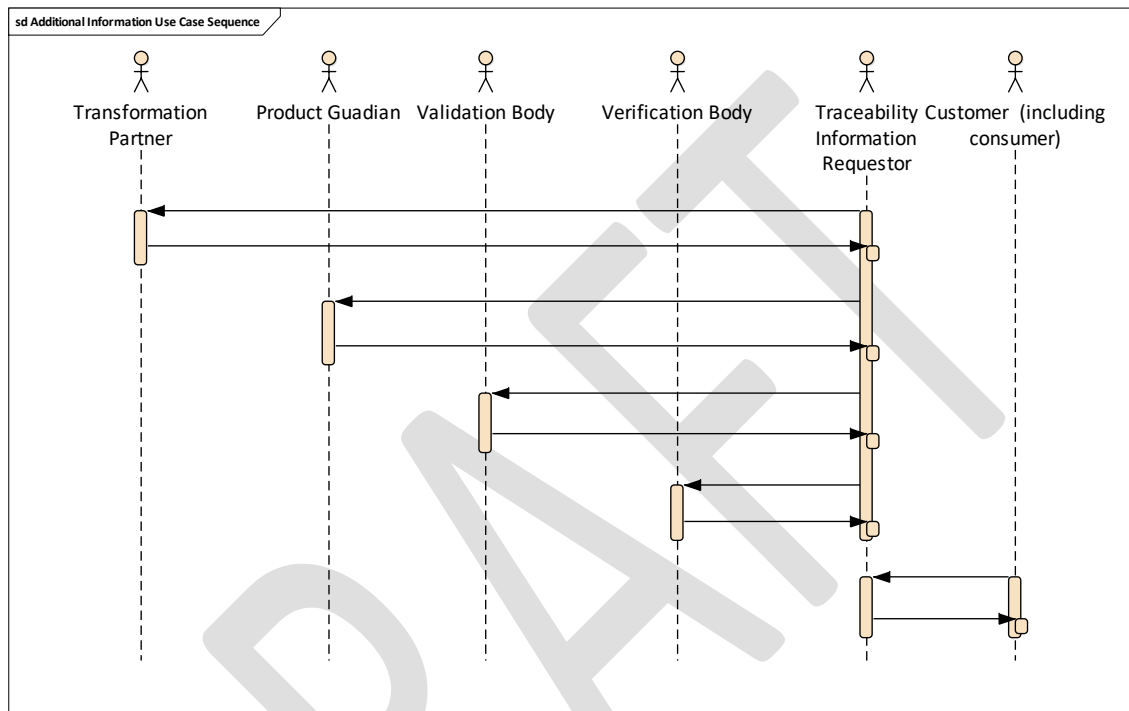
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315 **3.7 Business Transaction Sequence TT Additional Information Use Case**

316 The primary goal of this use case is to exchange additional information between business partners and  
 317 the TT Information Requestor. The identification of the Transformation Partner, Product Guardian or  
 318 Validation/Verification body can be retrieved with the help of the Traceability Repository. The  
 319 transaction sequence of this use case consists of only a request and a response. Based on the response  
 320 another iteration of a request and response can be performed. The customer (including the consumer)  
 321 can request additional information from the TT Information Requestor. In practice a consumer  
 322 probably will use a mobile phone app of the brand owner to collect additional information.

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**Figure 3-9 Business Transaction Sequence TT Additional Information Use Case**



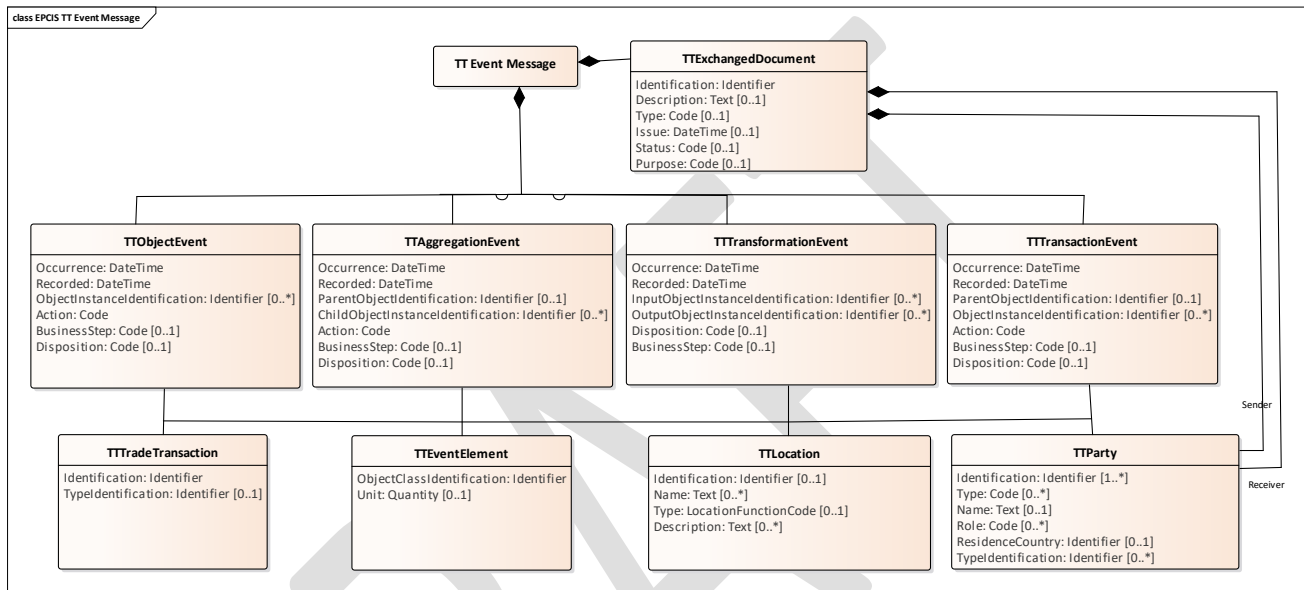
## 327 4 Business Information View

### 328 4.1 TT Event Data Model (EPCIS)

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330 The UN/CEFACT EPCIS based entities allow the tracing of an object (e.g. product/-batch/logistic unit)  
 331 backward/forward through the supply chain. A “Chain of Custody/Ownership” can be created by  
 332 tracing all partners that had physical possession of an object. In addition, by tracing all partners and  
 333 related locations, the origin and pedigree of an object can be determined. Visibility across the value  
 334 chain is obtained even more by data regarding the when, why, where of an object. Stock levels can be  
 335 optimized by capturing and analysing inventory inputs/outputs and stock taking. With the help of the  
 336 Traceability Repository, business partners can request TT additional information from their partners,  
 337 which would otherwise remain invisible.

338



339  
 340 **Figure 4-1 UN/CEFACT TT Event Message, based on EPCIS 1.2**

341

EPCIS Dimensions	Business Requirement Statement
What	Identifiers of the object(s) or other entities which are the subject of the event. EPCIS allows for two kinds of object identification: instance-level (each identifier is unique to a single object) and class-level (multiple objects carry the same identifier).
When	Date and time when the event took place, and the local time zone in effect. Date of event example: 2018-11-19, time of event example: 23:47:00, time zone in effect example: UTC +10:30
Where	Identifier of the location at which the event occurred, and identifier of the location where the object(s) are expected to be following the event. Besides the <i>Read Point</i> , this means the specific place where an event took place, uniquely identified (e.g. captured at loading dock II), and the business location (production facility B) of the object after the event, uniquely identified.
Why	Identifier of the <i>Business Step</i> (e.g. receiving), an identifier that indicates the business state of the object(s) following the event (e.g. destroyed), identifiers of the shipping and receiving parties, links to relevant business transaction documents (e.g. a purchase order, an invoice), instance- or lot-level master data, and/or other information defined via user extensions.  <i>Business Step:</i> business process context of event example: commissioning, manufacturing, packing, shipping, unpacking.  <i>Disposition:</i> status of object subsequent to event example: active, in transit, sold, expired, recalled.  <i>Business transaction:</i> link to transaction information. Source/Destination: transfer of ownership or possession.  <i>Source List and Destination List:</i>

EPCIS Dimensions	Business Requirement Statement
	to provide additional business context when an EPCIS event is part of a business transfer of ownership, responsibility or custody. A source or destination is identified by a pair of identifiers: the type and an identifier. Examples of type are owning party, possessing party and location.

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## 4.2 Business Documents: TT Event Data Message

Entity	Min	Max	Name	
Entity			TT Event Message	Event information exchanged between parties involved in a track and trace process.
Assoc	0	1	Exchanged Document Context	The scenario or setting of an exchanged document, such as its business process application context.
Assoc	1	1	TT Exchanged Document	A collection of data for a piece of written, printed or electronic matter that is exchanged between two or more parties.
Assoc	1	Unbounded	TT Object Event	Object event details for this event message.
Assoc	1	Unbounded	TT Transformation Event	Transformation event details for this event message.
Assoc	1	Unbounded	TT Aggregation Event	Aggregation event details for this event message.
Assoc	1	Unbounded	TT Transaction Event	Transaction event details for this event message.

### 4.2.1 Business Information Entities

345  
346 More information on the above listed information entities can be found within the Textile and Leather  
347 Traceability and Transparency Data Model, as these EPCIS information entities will not be restricted  
348 at message level.

### 4.2.2 Example

349 Use case: Shipping – Receiving - Shipping

351 Facility A is producing “*Product 1*” and selling it to Facility B. Facility B is distributing (selling) “*Product 1*” to  
352 facility C. Shipping and receiving events are generating TT event data. The information is structured as  
353 presented in above class diagram and available as TT information entities within the Textile and Leather Process  
354 and Data Model (see also BRS Textile & Leather High level v1.0).

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Table 4-1 Event examples (text used instead of identifiers for readability)

Dimension	Data Element	Event01	Dimension	Data Element	Event02	Dimension	Data Element	Event03
	EventType	Object Event		EventType	Object Event		EventType	Object Event
	Action	OBSERVE		Action	OBSERVE		Action	OBSERVE
What	EPCList	Product 1	What	EPCList	Product 1	What	EPCList	Product 1
		Batch 1			Batch 1			Batch 1
		10 PCS			10 PCS			3 PCS
When	Event Time	14-9-2020 12:00	When	Event Time	16-10-2020 12:00	When	Event Time	19-10-2020 12:00
Where	Read Point	Facility A - Loc 2	Where	Read Point	Facility B - Loc 3	Where	Read Point	Facility B - Loc 4
	Business Loc	Facility A		Business Loc	Facility B		Business Loc	Facility B
Why	Business Step	Shipping	Why	Business Step	Receiving	Why	Business Step	Shipping
	Disposition	Active		Disposition	Active		Disposition	Active
	Business Transaction List	Invoice Facility_A-01		Business Transaction List	P.Order Facility_B-P0.01		Business Transaction List	P.Order Facility_B-P0.01
					Invoice Facility_A-01			Invoice Facility_C-01
Who	Source List	Facility A	Who	Source List	Facility A	Who	Source List	Facility B
	Destination List	Facility B		Destination List	Facility B		Destination List	Facility C
How	(Sensor data)	Temperature 18cel.	How	(Sensor data)	Temperature 18cel.	How	(Sensor data)	Temperature 18cel.

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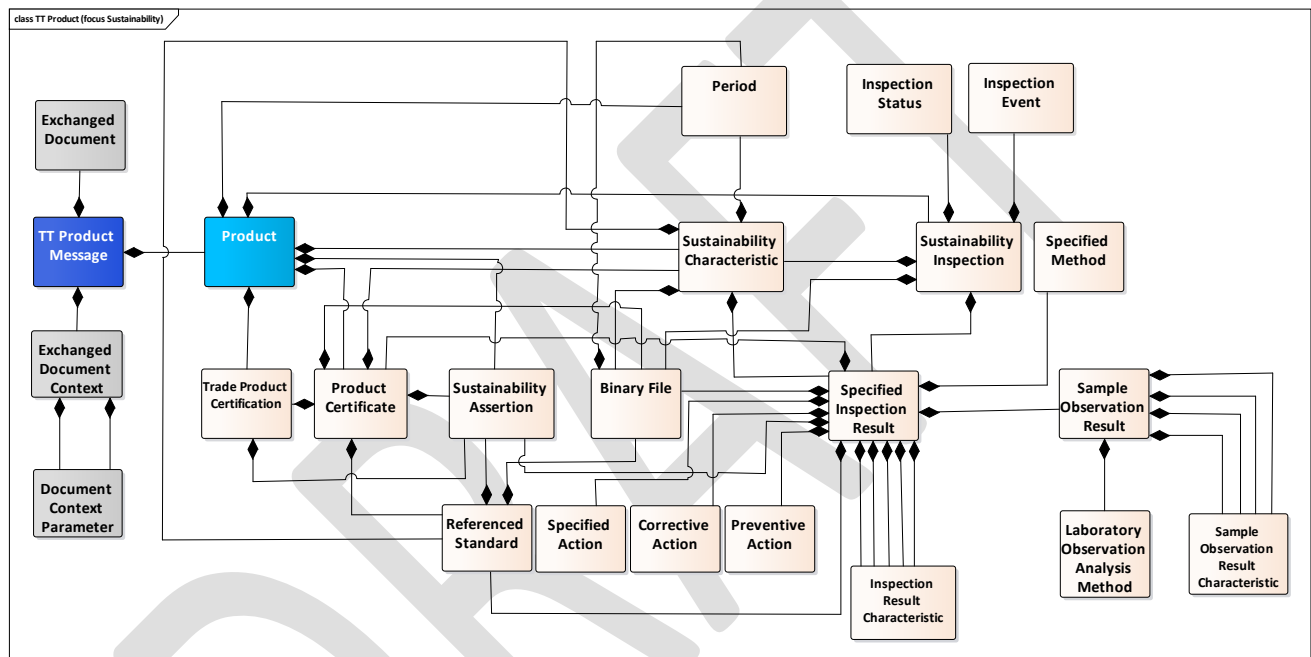
## 4.3 Business Document: TT Additional Information Message

361 The Textile and Leather High-Level Process and Data Model contains rich information entities which  
362 allow retrieving additional information (e.g. sustainability data). The key traceability information  
363 entities are included in the *master message structure* of the Textile and Leather High-Level Process

364 and Data Model, which means that each of the following key information entities might become part  
 365 of a TT Additional Information Message.  
 366

Key Traceability Information Entities
Product/-Batch
Party
Production Facility
Production Process
Location
Trade Delivery
Consignment (Transport Movement)

367  
 368 As an example, the TT Additional Information Message, here named TT Product Message, contains  
 369 the Product information entity as a root element. From this root element a number of associations lead  
 370 to relevant sustainability information entities.



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 372 **Figure 4-2 Example TT Product, focus sustainability information**  
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#### 374 4.4 Business Documents: TT Product Message (focus sustainability data)

Entity	Min	Max	Name	
Message			Product Message request/response	Product/- Batch information exchanged between parties involved in a track and trace process.
Assoc	0	1	Exchanged Document Context	The scenario or setting of an exchanged document, such as its business process application context.
Assoc	1	1	Exchanged Document	A collection of data for a piece of written, printed or electronic matter that is exchanged between two or more parties.
Assoc	1	Unbounded	Product	Product details for this product message.

##### 376 4.4.1 Business Information Entities

377 In the list below of information entities for the root element Product, only a Global ID attribute is  
 378 present, though many more could be made available. A full list of the product attributes and available  
 379 associations can be found within the published Textile and Leather High Level Process & Data  
 380 Model BRS.

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**Note:** As the key traceability information entities are quite extensive, the need for a restricted common user profile is evident. At this moment, the way these restrictions should be applied is not yet set, but this will be done within a sector implementation guideline.

Entity	Trade Product	Any tangible output or service produced by human or mechanical effort or by a natural process for trade purposes.	Min	Max
Attr.	Global ID	A unique global identifier for this trade product.	0	1
Assoc.	Certification	A certification applicable to this trade product.	0	unbounded
Assoc.	Product Certificate	A product certificate specified for this trade product.	0	unbounded
Assoc.	Specified Period	A period applicable for this product.	0	unbounded
Assoc.	Sustainability Characteristic	A sustainability characteristic applicable for this trade product.	0	unbounded
Assoc.	Sustainability Inspection	A sustainability inspection specified for this trade product.	0	unbounded
Assoc.	Sustainability Assertion	A sustainability assertion specified for this trade product.	0	unbounded

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