

EAN.UCC XML Business Message Standard For

Catalogue Item Synchronisation

Version 1.3

July 2003



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Purpose

The purpose of this Business Message Standard is to provide the necessary information to implement this message as part of the EAN.UCC System. The information contained within this document is a direct result of the work conducted by the EAN.UCC's Plan Business Requirements Group.

The content of this document is actually a collection of material from several different sources to create a single source of information that will provide the necessary basics to understand and implement this EAN.UCC Business Message Standard. The core of this document originates from the Business Requirements Document that is created by the Business Requirements Groups to define the business needs that are to be addressed by this Message. The document then provides the technical details needed to implement the message: a report from the Global Data Dictionary, StyleSheet and Instance File.

This Business Message Standard is meant to be used in conjunction with the EAN.UCC XML Schemas that are available on the EAN and UCC websites. The implementer of these standards needs to be aware of the interrelationship amongst the XML Schemas and the importance of using only interoperable versions.

The reader will notice as they progress through this document that there are several different 'levels' of information that is presented. We begin with the business rationale for the message and then move into the technical details of how and what is needed to exchange this message. This design is deliberate to reach the broadest audience and to meet their needs. Based upon the reader's experience and intentions, specific sections of this document may be more valuable than others. This design and content of this document is based upon the direct feedback from our user community and as such, we are constantly revising and refining how and what we present.

Background

EAN.UCC Business Message Standard:	Catalogue Item Synchronisation	
Business Requirement Group:	Align	
Business Requirement Document:	Catalogue Item Synchronisation	
Business Requirements Group Manager:	Jack Eggert	Uniform Code Council
Global Data Dictionary:	EAN.UCC Global Data Dictionary v1.3	
Schemas:	EAN.UCC Schemas v1.3	
Schemas have been tested on Parser(s) and Version(s):	XML Spy Version 4.4, Xerces, XSV	

Business Requirements Document

Catalogue Item Synchronisation

Version 1.6

May 14, 2003



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Document Title	Catalogue Item Synchronisation
Owner	BRG: Align, Data Synchronisation Task Group Chairperson(s): Nadine Gits & Mike Merulla EAN.UCC BRG Manager: Jack Eggert
Status	<input type="checkbox"/> DRAFT <input checked="" type="checkbox"/> Approved

Document Change History

Date of Change	Version	Reason for Change	Summary of Change	Model Build #	CR #
Aug-27, 2002	0.1	Document Creation			
Aug-28, 2002	0.2	Additions to BRD	Added Requirements section		
Sep-26, 2002	0.3	Additions to BRD	Received Comments on v0.2		
Oct-1, 2002	0.4	Additions to BRD	Adjusted Sequence diagrams to reflect messages		
Dec-3, 2002	0.5	Comments to BRD and harmonization with Item BRD	Applied all comment resolutions		
Dec-10, 2002	0.6	Missing acknowledgement and Requirements table truncation problem.	Added Saliha Barlatey to Acknowledgement list and corrected the requirement description truncation on the Business Requirements section (2.1) for requirements numbered 12, 23, 41, 54, 90, 91, 93, 94, 99, 101, 104, 105, 106, 107, 108, 109, 112, 117, 121, 122, 130, 132, 149, 150, 152.		
Jan-01, 2003	1.0	Draft version 0.6 approved by Align BRG	Changed version number from 0.6 to 1.0, and document date from December 10, 2002 to January 18, 2003		
Jan-30 2003	1.1	Included messages harmonized with latest Item and Party BRDs.	Added Catalogue Item Sync messages to the TypedEntity class, renamed Item to TradelItem. Renamed CatalogueItemRegistrationAcknowledgement to CatalogueItemRegistrationRe		

Date of Change	Version	Reason for Change	Summary of Change	Model Build #	CR #
			sponse to reflect the true nature of the message.		
Mar-14 2003	1.2	Harmonisation and clarification	Replaced class diagrams with harmonized diagrams. Removed imbedded BRW for clarity.		
Mar-18, 2003	1.3	Harmonisation and clarification	Added Class Diagram for Catalogue Item Common		
Mar-27,2003	1.4	IUML Review	Added "NEW" to the state lists in the CatalogueItemNotification and RegistryCatalogueItem messages to accommodate the first time Catalogue Item information is sent or registered.		
April 21, 2003	1.5	XSD Review	Glossary & model update based on XSD development (mjs)		
May 14, 2003	1.6	ITRG Review	Changed role in CatalogueItemPublication from "publishedToGLN" to "publishToGLN" to conform to tense in other roles.		

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Forward

The purpose of the Business Requirements Document is to document a process – to – data approach to standards development and maintenance using the Unified Modeling Language (UML) notation.

Introduction

Business Need

Over the past eighteen months there have been several industry standards groups and user groups developing requirements and processes for data synchronisation.

The business landscape has undergone a rapid and complicated transformation. Globalization, converging supply chains, and the rapid pace of technology have added new costs and complexity to the way business is conducted in every industry. These issues have added significant expense to the cost of doing business.

This makes standards, which bring order and efficiency to business processes more important and challenging than ever before. The success and growth of the EAN•UCC System has been based, in part, on its strong legacy in Catalogue Item identification, linking together the physical flow of a Catalogue Item with the corresponding flow of electronic information. In order to maintain the value of this system, EAN.UCC has embraced Simple eb (Simple e-Business), a business practice that streamlines and simplifies the flow of business trade information enabling more efficient and effective supply chains. As its name implies, Simple eb is focused on simplifying the underlying communication of information that is applicable across multiple business processes.

One of the premises of Simpl-eb is that EC constructs (data and data structures) that are common across multiple business processes must be aligned. Some of the Core Data must be synchronised so it need not be sent in each transaction and it has the same value in the trading partners systems; such data has been referred to as Master Data.

To put this in the context of the EAN•UCC system, the EAN•UCC Business Message Standards (XML), UCS EDI Standards, VICS EDI Standards, and EANCOM are electronic data carriers within the Simple eb framework. Simple eb is dependent on the alignment of core data and the Synchronisation of master data that is used in multiple business transactions. The most prevalent master data is Catalogue Item and party, which can be identified with EAN•UCC “Keys”, specifically the Global Trade Identification Number (GTIN) and Global Location Number (GLN).

The EAN•UCC system provides the standards to align data between trading partners; these are the foundation standards. The EAN•UCC system also defines a process by which trading partners can exchange this aligned data between them and synchronise master data across an entire community; these are the foundation processes.

This foundation allows for the simplification (Simple-eb) of the basic trade processes of Plan, Order, Delivery, and Pay, which in turn form the basis for more complex processes such as CPFR, Micro-Merchandising, Scan-Based Trading (SBT), and any other future initiative.

Problem Statement

Substantial effort has been made to develop a Global Data Synchronisation process because master data sharing between partners is both complex and fundamental to all supply chain processes. Integrity and timeliness of master data is critical to the flow of goods, services and information throughout the chain. Sharing data effectively and efficiently relies on access to common data definitions, data accuracy and agreement on the processes used to exchange data. This process is termed Master Data Synchronisation. Throughout 2000-2002, with increased emphasis on global commerce, electronic trading communities and evolving Internet technology, it became obvious that global master data standards and processes were essential to support simple e-Business transactions. As a precursor to the establishment of standards, GCI, UCC and EAN developed business requirements in parallel to address "What standard processes are required to enable Global Data Synchronisation?" In January 2002, EAN.UCC instituted the GSMP to create and maintain global standards. The GSMP Data Synchronisation team was formed to align all business requirements associated with the Data Synchronisation process, including the Global Registry.

Audience

The audience of this standard is any participant in the global supply chain. This includes retailers, manufacturers, service providers and other third parties.

References

- GCI – Global Master Data Synchronisation Process, Business Requirements, Vision, Concept and Recommendations, Version V1.0, December 14, 2002
- GCI - Global Master Data Synchronisation Process, Detailed Specifications of Global Registry, Global Search Functions and Flow of Messages, Version V0.4, December 14, 2002
- GCI – Global Data Dictionary
- Business Requirements Document for Core Item (EAN / UCC)
- Business Requirements Document for Core Party (EAN / UCC)
- Business Requirements Document for Core Price (EAN / UCC)

- Business Requirements Document for Fast Moving Consumer Goods Item Extension (EAN / UCC)
- EAN / UCC Report: Global Data Alignment System (GDAS) – 21st January 2000
- GCI Document: Amendment to GDAS – 31st July 2000
- ECR Europe Report: Inter-Operability of EAN Compliant Data Pools – March 1999
- What is Data Synchronisation?, Version 1.1, EAN/UCC – February 14, 2002
- Simpl-eb Implementation Guide, EAN.UCC, Version 1.0, July 1st, 2001
- EAN.UCC Business Message Standards Version 1.0 dated July 2001
- Detailed Specifications of Global Registry, Global Search Function and Flow of Messages; Report 2 – Version 0.4 dated 14 December 2001
- Global Master Data Synchronisation: Business Requirements, Vision, Concept and Recommendations; Report 1 – Version 1.0 dated 14 December 2001
- Supporting material for GSMP CR 89 (UCCnet Synchronisation flow and DTDs)
- The Unified Modeling Language User Guide, Booch, Rumbaugh and Jacobson, Addison-Wesley Longman, Inc. Copyright 1999. ISBN 0-201-57168-4
- GCI, GTIN Guidelines
- UCC –12 Guidelines
- TIIC Guidelines
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Anarkat, Dipan	Uniform Code Council

The GSMP Global Data Synchronization team would also like to acknowledge all those individuals who participated in both GCI-GDS and UCCnet teams whose hard work and documentation were invaluable to this team.

Business Requirements

Requirements

Note: “xx” denotes that the requirement has a primary effect on the listed Use Case, while “x” denotes the requirement as being a secondary effect on the Use Case.

Req ID	Business Requirement Description	UC-3 Add Catalogue Item Hierarchy	UC-4 Change Catalogue Item Hierarchy	UC-5 Correct Catalogue Item Hierarchy	UC-6 Discontinue Catalogue Item	UC-25 Delete Catalogue Item Hierarchy	UC-7 Cancel Catalogue Item	UC-18 Register Catalogue Item	UC-19 Change Registered Catalogue Item	UC-20 Correct Registered Catalogue Item	UC-21 Delete Registered Catalogue Item	UC-23 Manage Catalogue Item Distribution Criteria	UC-24 Publish Catalogue Item Data	UC-34 Stop Publishing Catalogue Item Data	UC-27 Subscribe to Catalogue Item Data	UC-28 Remove Catalogue Item Subscription	UC-35 Distribute Subscription Data	UC-43 Distribute Confirmation Data	UC-37 Distribute Catalogue Item Data from SDP to RDP	UC-38 Distribute Catalogue Item Data from RDP to Recipient	UC-32 Validate Data Pool	UC-33 Validate Catalogue Item Data for Global Registry	UC-31 Global Search
1	Party data must exist prior to a Catalogue Item is being registered.	x					xx																
2	Catalogue Item data must be validated prior to registration.	x					xx														x		
3	Data Source must be able to add a Catalogue Item to the Source Data Pool.	xx																					
4	Data Source must be able to change Catalogue Item data in the Source Data Pool.	x						xx															

[illegible]

[illegible]

	exception of not getting the initial load.																					
153	The Global Registry and the data pools should be able to process current and previous versions of the Catalogue Item Synchronisation messages. The Global Registry and the data pools should also be able to process a new version within a certain time frame.																			xx		
154	The Global Registry shall send only once a subscription to a Source Data Pool.											x	x	x	x	xx	x					

Relationship to the General Business Model

Business Process View

This diagram illustrates the position of the Catalogue Item Synchronisation Use Case within the overall EAN.UCC General Business Model.

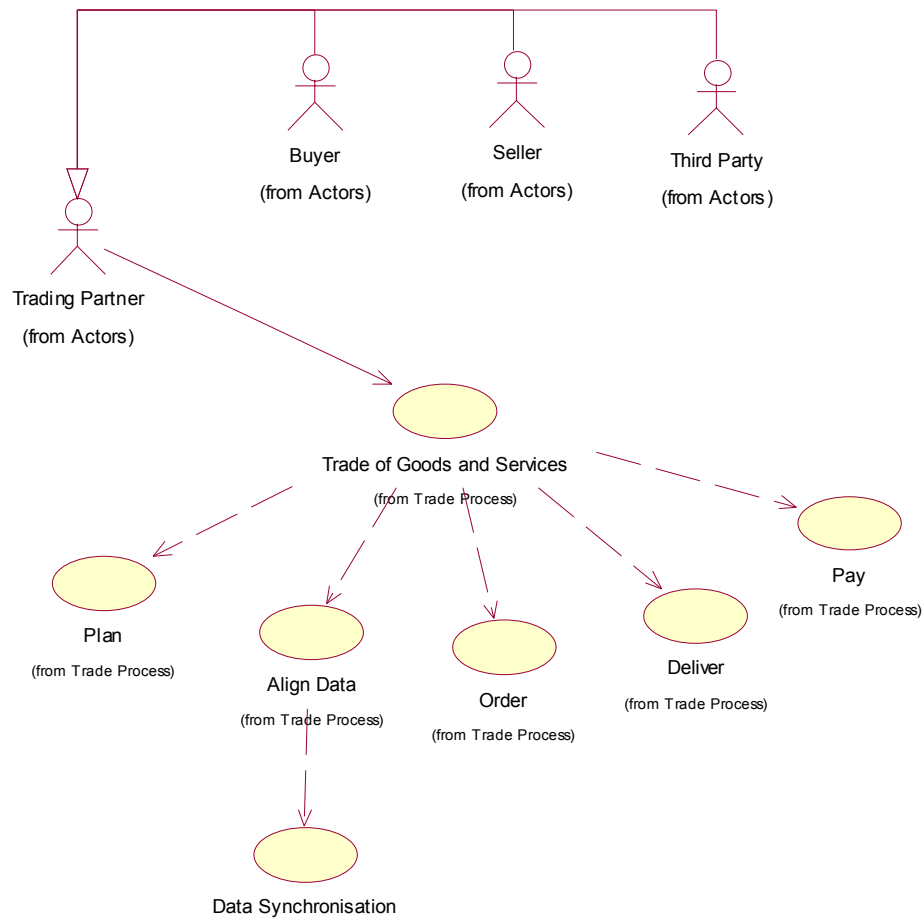


Figure 1 - Relationship to the General Business Model

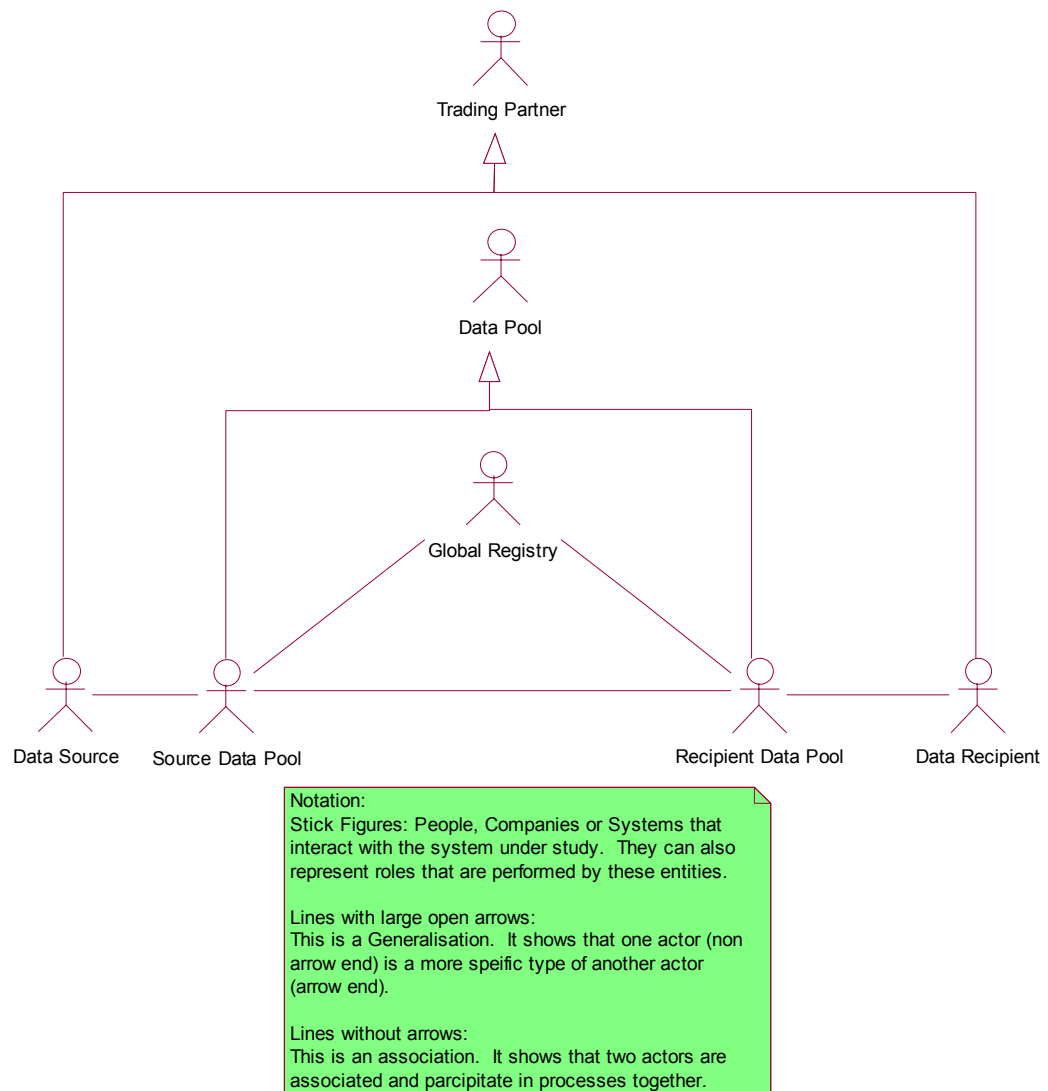


Figure 2 - Actor Relationships



Yellow: Detailed in this BRD
Red: Requirements pending new Change Requests
Grey: Informational (not required for this model)

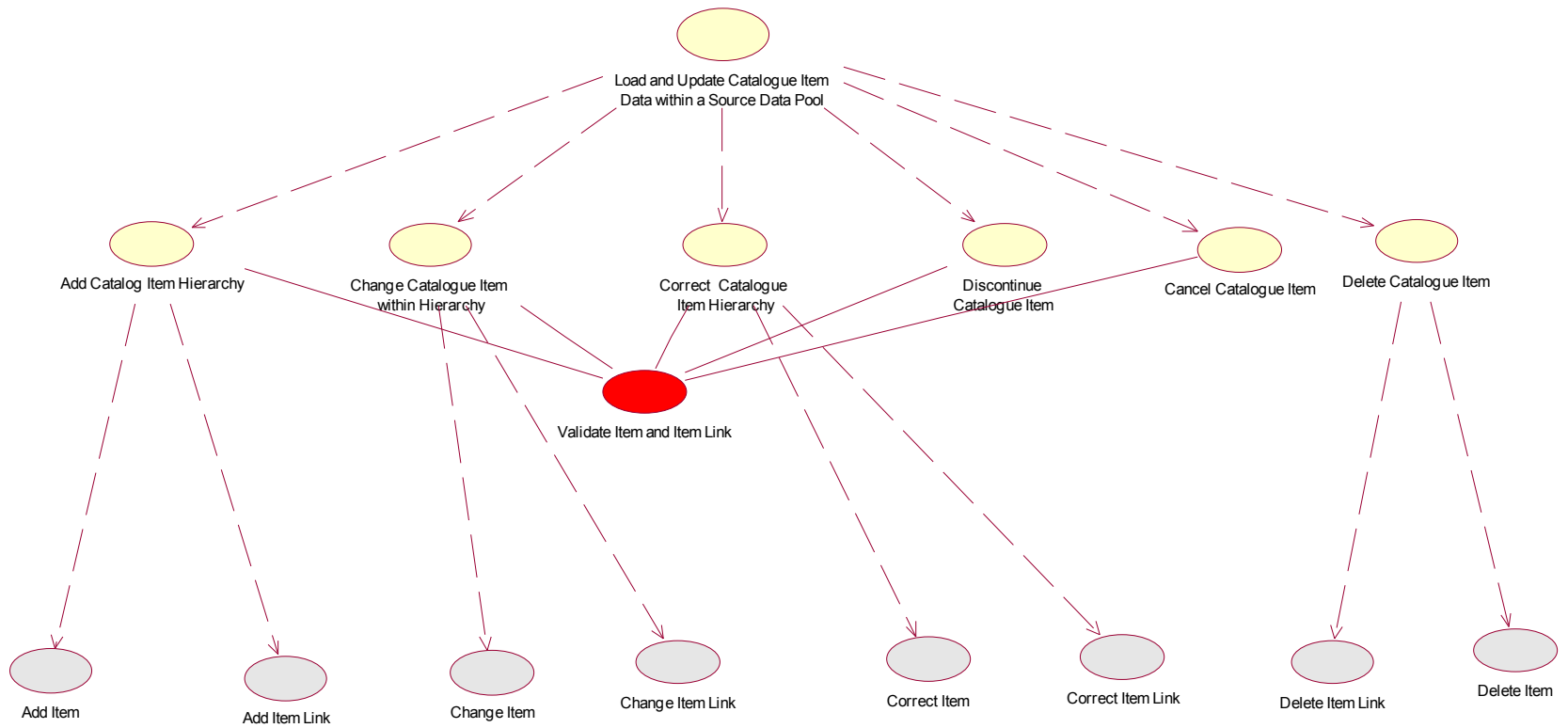


Figure 4 - Load and Update Catalogue Item Data within a Source Data Pool Use Case Diagram

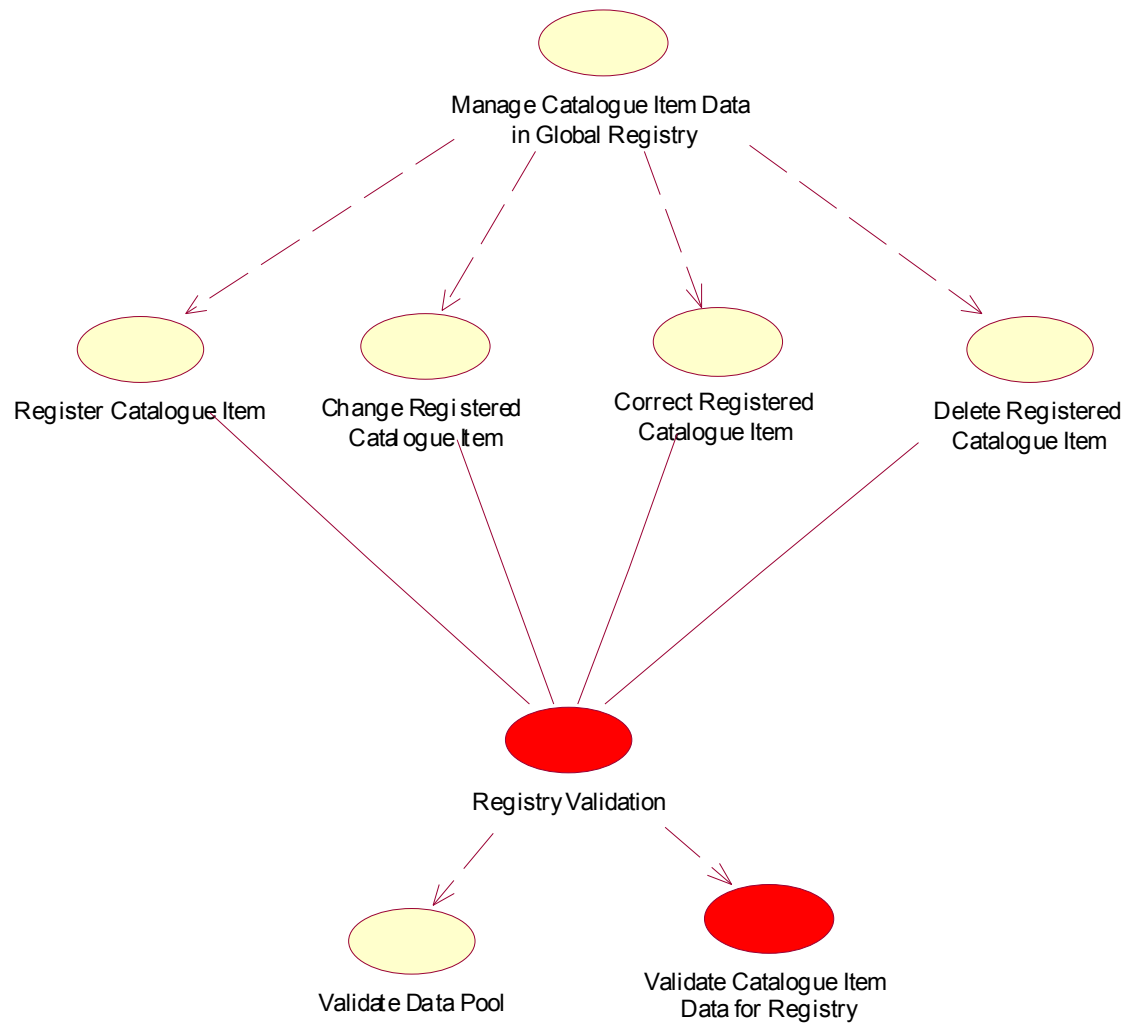


Figure 5 - Manage Catalogue Item Data in Global Registry Use Case Diagram

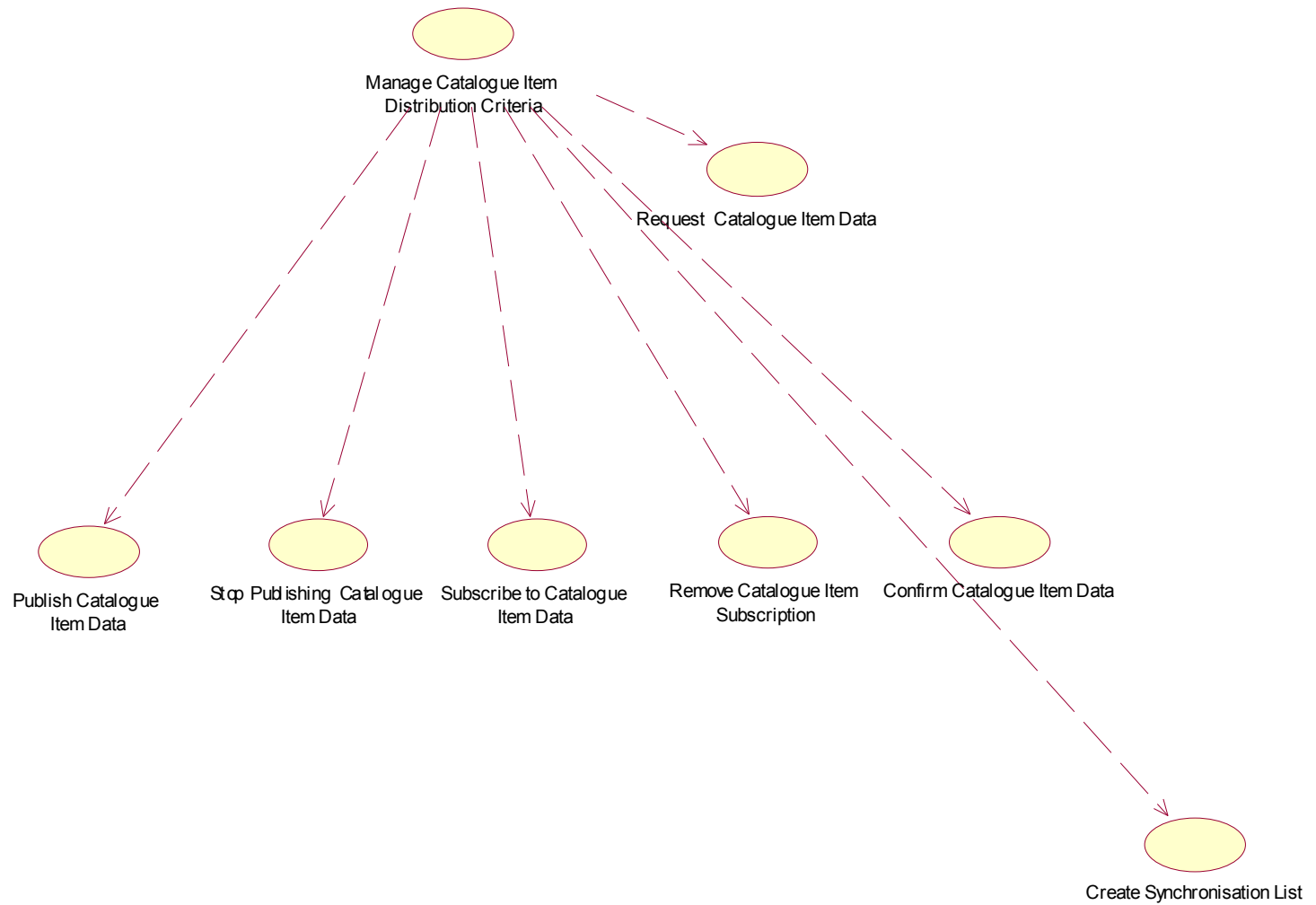


Figure 6 – Manage Catalogue Item Distribution Criteria Use Case Diagram

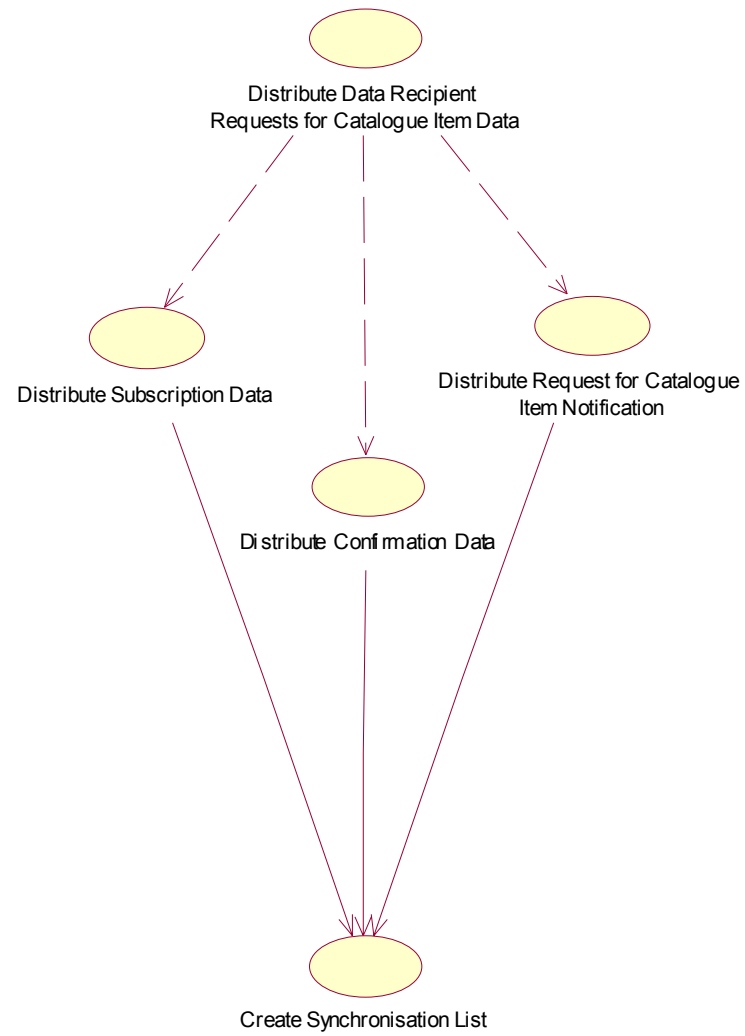


Figure 7 - Distribute Data Recipient Requests Use Case Diagram

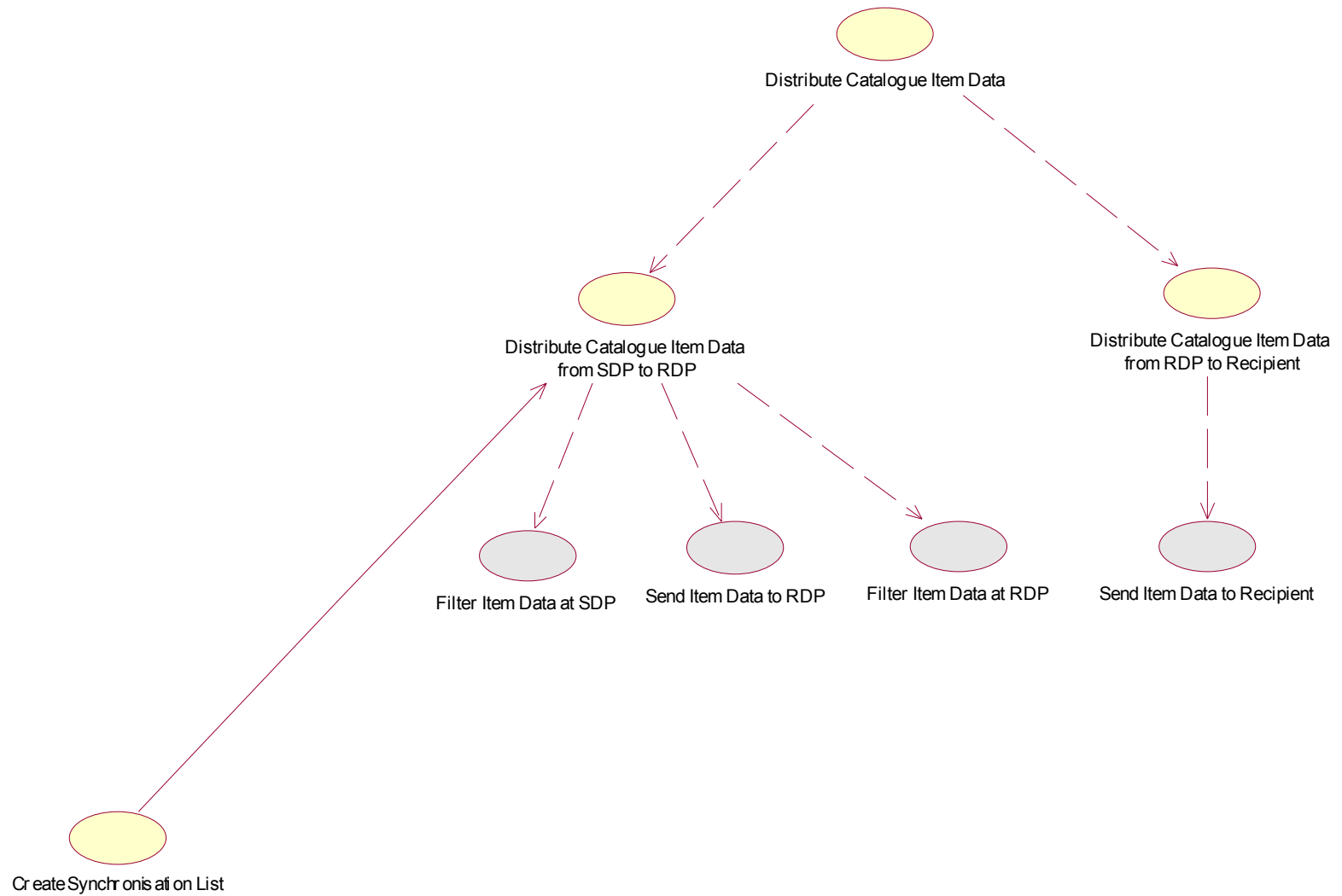


Figure 8 - Distribute Catalogue Item Data Use Case Diagram

Summary Use Cases

Global Search (see Figure 3 for view of Use case diagram)

Use Case Name	Global Search
Traceability Identifier	UC-31
Use Case Description	<p>The Global Search feature of Data Synchronisation will be defined as directed by GSMP Change Request 02-000152.</p> <p>Preliminarily, the Guiding Principles are:</p> <ol style="list-style-type: none"> will have: <ol style="list-style-type: none"> parametric search wild card search drop down list for searching Target Market specificity (language & currency) Must be enabled for images Must have ability to drill down enough to EAN.UCC classification structures Ability to search by specific language will have the ability to search to the attribute level. will have a request for publication functionality search engine will be housed at the home data pool Global Search functionality will be facilitated by the Global Registry <p>As a summary Use Case, specific processes will be further defined in the Detail Use Case section of this document.</p>
Use Cases Above	UC-1: Synchronise Catalogue Item Data
Use Cases Below	None
Actors	Source Data Pool (SDP) Global Registry Recipient Data Pool (RDP) Data Recipient
Performance Goals	<p>SDP: To ensure that Data Source provided Catalogue Item Data is searchable by Recipient Data Pools.</p> <p>RDP: To find Catalogue Item Data that matches the Data Recipient's search criteria.</p> <p>Data Recipient: To find Catalogue Item Data available in the Target Markets served by the Data Recipient.</p> <p>Global Registry: To ensure that Catalogue Item Data can be found by Recipient Data Pools.</p>
Preconditions	N/A

Postconditions	N/A
Scenario	N/A
Alternative Scenario	
Special Requirements	<ul style="list-style-type: none">•
Extension Points	N/A
Requirements Covered	N/A

Synchronise Catalogue Item Data

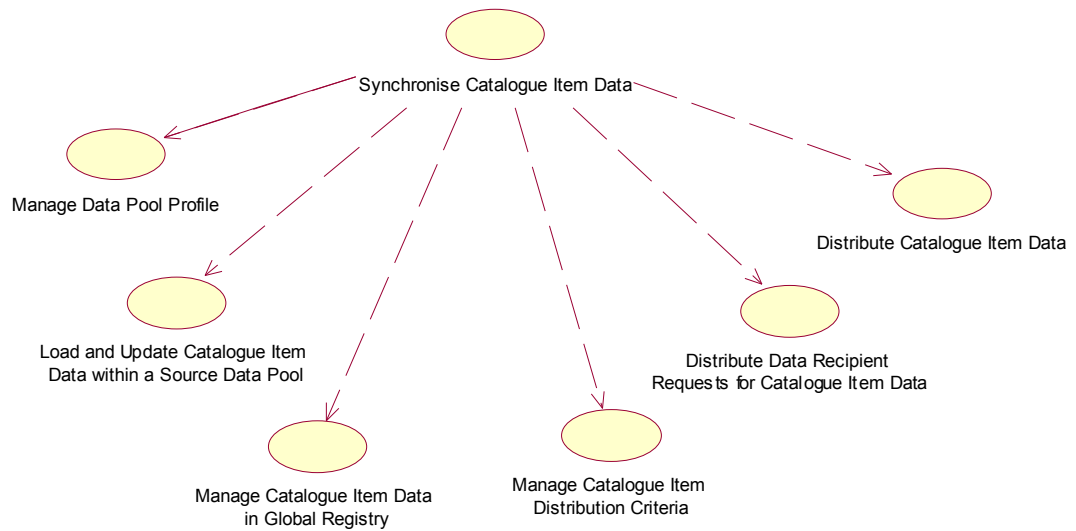


Figure 9 - Synchronise Catalogue Item Data Use Case Diagram

Use Case Name	Synchronise Catalogue Item Data
Traceability Identifier	UC-1
Use Case Description	<p>The process of continuous harmonisation of information between all trading partners within the supply chain through the use of Align Data standards.</p> <p>The salient points for synchronisation are: synchronisation is a process, it is auditable, must utilise industry standards (i.e. EAN.UCC), the data exchanged must be compliant with these standards, the recipient (i.e. the buyer) must acknowledge the integration of the data, and continuous updates must be applied.</p> <p>As a summary Use Case, specific processes will be further defined in the Detail Use Case section of this document.</p>
Use Cases Above	None
Use Cases Below	UC-30: Manage Data Pool Profile UC-2: Load and Update Catalogue Item Data within a Source Data Pool UC-46: Manage Catalogue Item Data in Global Registry UC-23: Manage Catalogue Item Distribution Criteria UC-47: Distribute Data Recipient Requests for Catalogue Item Data UC-29: Distribute Catalogue Item Data
Actors	Data Source Source Data Pool (SDP) Global Registry

	Recipient Data Pool (RDP) Data Recipient
Performance Goals	<p>Data Source: To have Catalogue Item Data available to Data Recipients.</p> <p>SDP: To have Data Source provided Catalogue Item Data is searchable by Recipient Data Pools.</p> <p>RDP: To find Catalogue Item Data that matches the Data Recipient's search criteria.</p> <p>Data Recipient: To find Catalogue Item Data available in the Target Markets served by the Data Recipient.</p> <p>Global Registry: To ensure that Catalogue Item Data can be found by Recipient Data Pools.</p>
Preconditions	
Postconditions	
Scenario	
Alternative Scenario	
Special Requirements	•
Extension Points	N/A
Requirements Covered	•

Manage Data Pool Profile

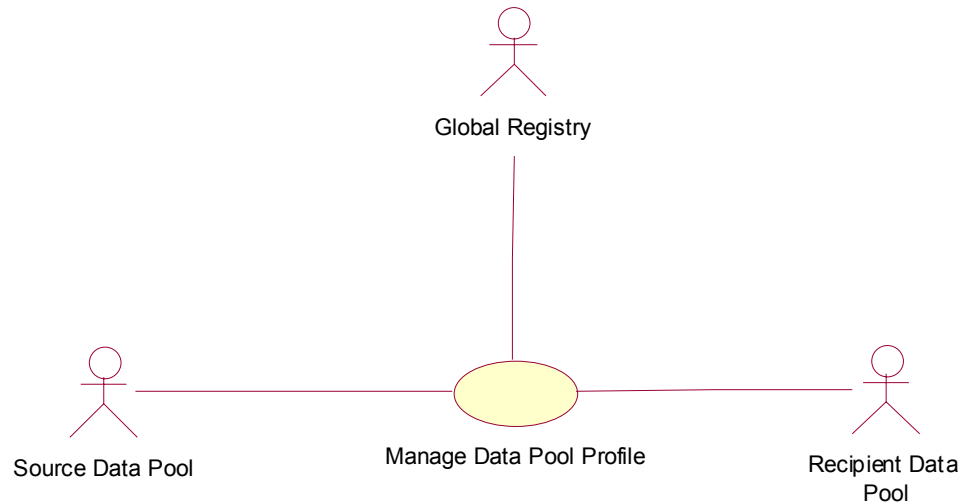


Figure 10 - Manage Data Pool Profile Use Case Diagram

Use Case Name	Manage Data Pool Profile	
Traceability Identifier	UC-30	
Use Case Description	<p>The maintenance and storage of certified data pool information in the Global Registry, defining all the actors in the interoperable network and allowing any actor to retrieve information about the others. Additional requirements are needed for the Data Pool Profile Use Case.</p> <p>As a summary Use Case, specific processes will be further defined in the Detail Use Case section of this document.</p>	
Use Cases Above	UC-1: Synchronise Catalogue Item Data	
Use Cases Below	N/A	
Actors	Source Data Pool (SDP) Global Registry Recipient Data Pool (RDP)	
Performance Goals	SDP:	To be able to obtain the address or URL of the RDP.
	RDP:	To make available their address (URL) to SDPs.
	Global Registry:	To be able to identify the Data Pools in the Synchronisation process.

Preconditions	
Postconditions	
Scenario	
Alternative Scenario	
Special Requirements	
Extension Points	N/A
Requirements Covered	

Load and Update Catalogue Item Data within a Source Data Pool

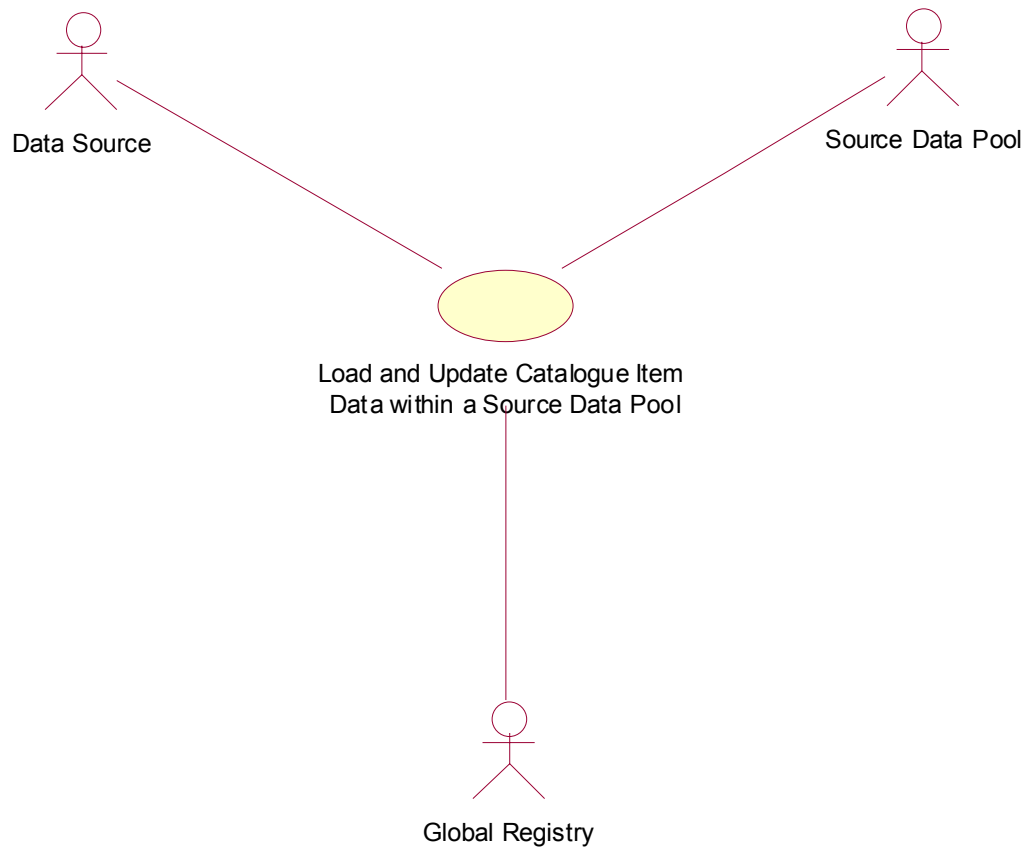


Figure 11 - Load and Update Catalogue Item Data within a Source Data Pool Use Case Diagram

Use Case Name	Load and Update Catalogue Item Level Data within Source Data Pool
Traceability Identifier	UC-2
Use Case Description	<p>This Use Case describes the processes that need to take place for Catalogue Item data to be transferred from the Data Source to the Source Data Pool, be validated and registered in the Global Registry. After this process, Catalogue Item data may be distributed to Recipients according to the distribution rules described in the Manage Catalogue Item Data Distribution Criteria Use Cases.</p> <p>As a summary Use Case, specific processes will be further defined in the Detail Use Case section of this document.</p>
Use Cases Above	UC-1: Synchronise Catalogue Item Data
Use Cases Below	UC-3: Add Catalogue Item Hierarchy UC-4: Change Catalogue Item Hierarchy UC-5: Correct Catalogue Item Hierarchy UC-6: Discontinue Catalogue Item Hierarchy UC-7: Cancel Catalogue Item
Actors	Data Source Source Data Pool (SDP) Global Registry
Performance Goals	<p>Data Source: To have validated, registered Catalogue Item Hierarchy data in their Source Data Pool.</p> <p>SDP: To have validated, registered Catalogue Item Hierarchy data.</p> <p>Global Registry: To ensure valid, unique Catalogue Item data are registered.</p>
Preconditions	Data Source has defined Catalogue Item data and Catalogue Item hierarchies using Item Links.
Postconditions	Data Source knows that Catalogue Item data has been validated and registered and Item Links have been validated.
Scenario	<p>Begins when, the Data Source sends, to the SDP, Catalogue Item Hierarchy data.</p> <ol style="list-style-type: none"> 1. The SDP validates the Catalogue Item Hierarchy data 2. The SDP sends Catalogue Item Data to the Global Registry 3. The Global Registry validates and registers the Catalogue Item Data 4. The SDP stores the Catalogue Item Hierarchy data 5. The SDP notifies the Data Source of Registration <p>Ends when, the Data Source receives acknowledgement of the registration</p> <ol style="list-style-type: none"> 6. Some time later, the Data Source updates the Catalogue Item Hierarchy data and sends it to SDP 7. The SDP validates the Catalogue Item Hierarchy data 8. The SDP sends pertinent Catalogue Item Data updates to the Global Registry

	<p>9. The Global Registry validates and updates the Catalogue Item Data</p> <p>10. The Global Registry notifies SDP of successful registration</p> <p>11. The Global Registry notifies SDP of successful registration</p> <p>12. The SDP stores the new Catalogue Item Hierarchy data</p> <p>13. The SDP notifies the Data Source of Updates</p> <p>Ends when, the Data Source receives acknowledgement of the registration</p>
Alternative Scenario	<p>ad 1 & 7. Validation fails:</p> <p>1.1. / 7.1. SDP sends an validation error message to the Data Source</p> <p>Ends when, the Data Source receives the validation error message</p> <p><i>ad 3 & 9. Validation fails at the Global Registry</i></p> <p><i>3.1 / 9.1. Global Registry sends a registration error message to the SDP</i></p> <p><i>3.2 / 9.2. The SDP receives the registration error message and passes it to the Data Source</i></p> <p>Ends when, the Data Source receives the registration error message</p> <p><i>** SDP may not send Catalogue Item data to Registry for Uniqueness check w/o Registration.</i></p>
Special Requirements	<ul style="list-style-type: none"> • Data Source is using a (source) data pool. • Catalogue Item Hierarchy data consists of Catalogue Item data and Item Link data (if applicable).
Extension Points	N/A
Requirements Covered	

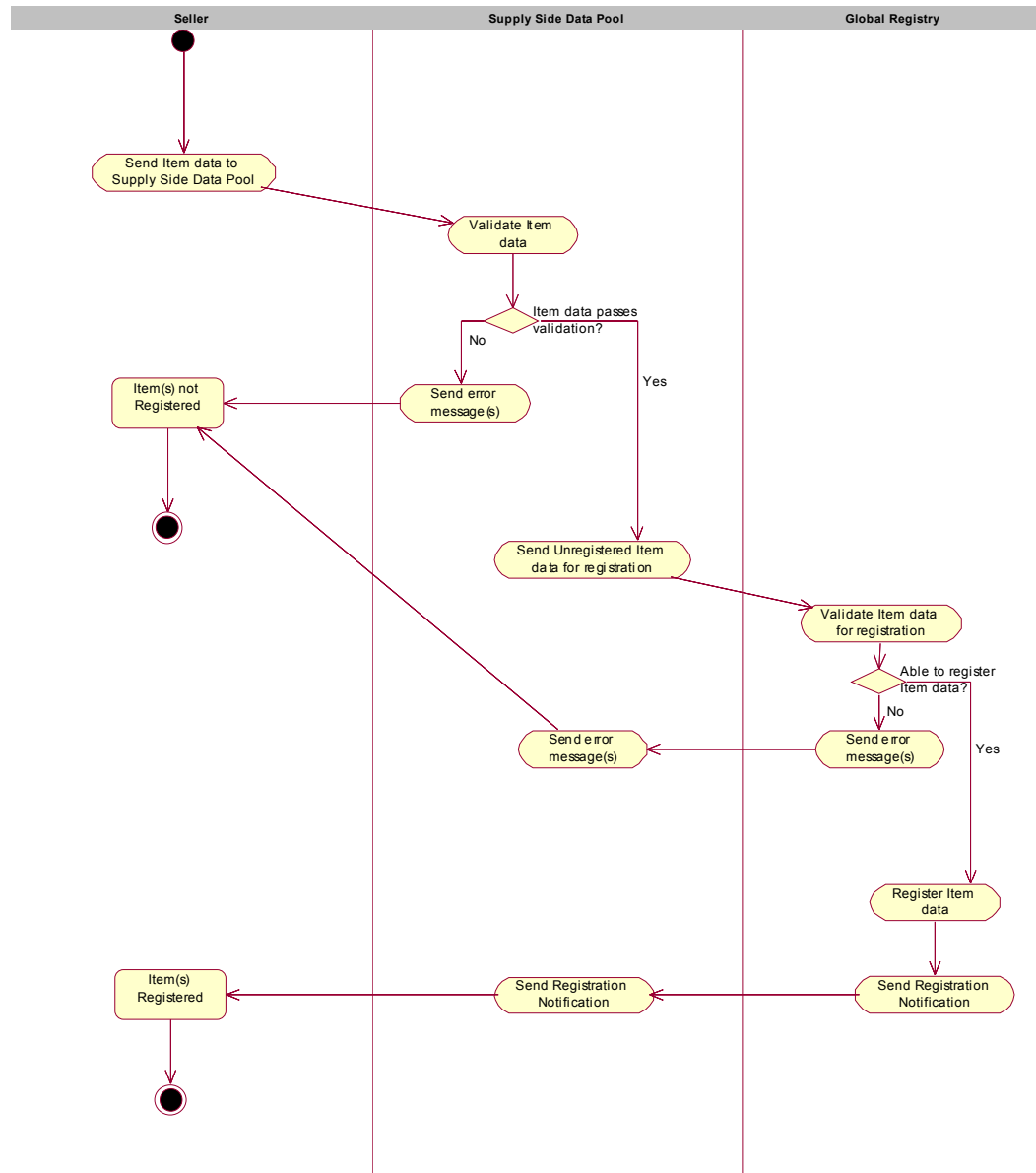


Figure 12 - Load and Update Catalogue Item Data within a Source Data Pool Activity Diagram

Manage Catalogue Item Data in Global Registry

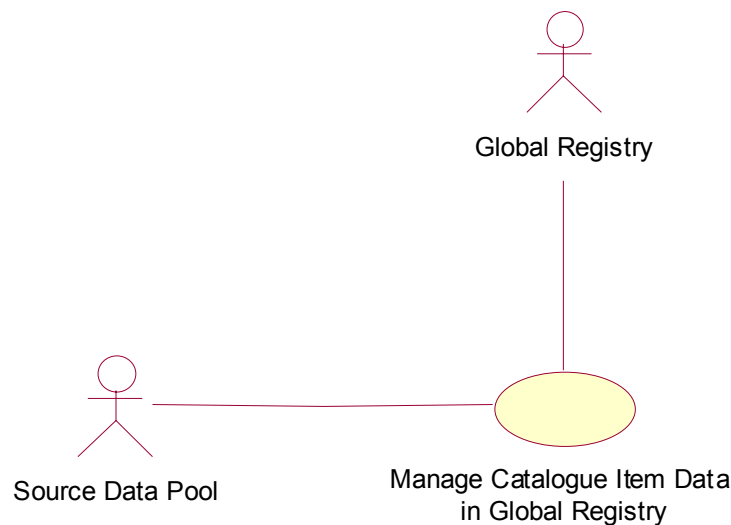


Figure 13 - Manage Catalogue Item Data in Global Registry Use Case Diagram

Use Case Name	Manage Catalogue Item Data in Global Registry
Traceability Identifier	UC-46
Use Case Description	<p>This use case describes the processes that need to take place for Catalogue Item Data to be registered in the Global Registry.</p> <p>As a summary Use Case, specific processes will be further defined in the Detail Use Case section of this document.</p>
Use Cases Above	UC-1: Synchronise Catalogue Item Data
Use Cases Below	UC-18: Register Catalogue Item UC-19: Change Registered Catalogue Item UC-21: Delete Registered Catalogue Item UC-17: Registry Validation UC-32: Validate Data Pool UC-33: Validate Catalogue Item Data for Registry
Actors	Source Data Pool (SDP) Global Registry
Performance Goals	SDP: To have validated, registered Catalogue Item Hierarchy data. Global Registry: To ensure valid, unique Catalogue Item data are registered.
Preconditions	Data Source has defined Catalogue Item data and Catalogue Item hierarchies using Item Links.
Postconditions	Data Source knows that Catalogue Item data has been validated and registered and Item Links have been validated.

Scenario	See detailed Use Cases 18, 19, 21, 17, 32, & 33 for Scenarios
Alternative Scenario	
Special Requirements	<ul style="list-style-type: none">• Data Source is using a (source) data pool.• Catalogue Item Hierarchy data consists of Catalogue Item data and Item Link data (if applicable).
Extension Points	N/A
Requirements Covered	

Manage Catalogue Item Distribution Criteria

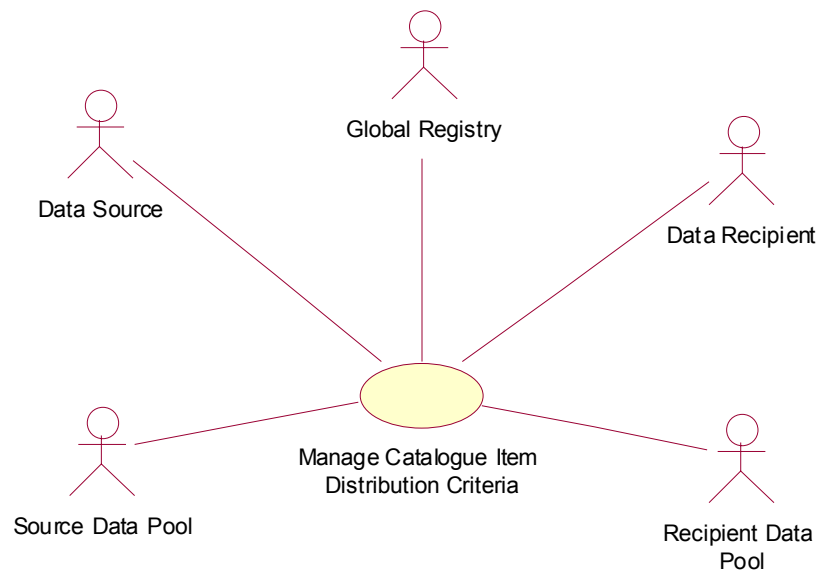


Figure 14 - Manage Catalogue Item Distribution Criteria Use Case Diagram

Use Case Name	Manage Catalogue Item Distribution Criteria
Traceability Identifier	UC-23
Use Case Description	<p>This Use Case describes the processes that need to take place for Publications, Subscriptions and Confirmations to be moved throughout the Synchronisation System.</p> <p>As a summary Use Case, specific processes will be further defined in the Detail Use Case section of this document.</p>
Use Cases Above	UC-1: Synchronise Catalogue Item Data
Use Cases Below	UC-24: Publish Catalogue Item Data UC-34: Stop Publishing Catalogue Item Data UC-27: Subscribe to Catalogue Item Data UC-28: Remove Catalogue Item Subscription UC-26: Confirm Catalogue Item Data
Actors	Data Source Source Data Pool (SDP) Global Registry Recipient Data Pool (RDP) Data Recipient
Performance Goals	Data Source: To have Catalogue Item publications available to the SDP for matching with Subscriptions. SDP: To have the proper criteria (Publications,

	<div>Subscriptions and Confirmations) to allow distribution of Catalogue Item data to Data Recipients (via their Recipient Data Pool).</div> <div>Global Registry: To be able to distribute Catalogue Item Subscriptions to the proper Source Data Pools.</div> <div>RDP: To ensure Catalogue Item Subscriptions match the data that is being sent by SDPs.</div> <div>Data Recipients: To control the type and volume of Catalogue Item Data received.</div>																								
Preconditions	N/A																								
Postconditions	N/A																								
Scenario	See detailed Use Cases 24, 34, 27, 28, 26 for Scenarios																								
Alternative Scenario																									
Special Requirements	<div>•</div>																								
Extension Points	N/A																								
Requirements Covered	<table><tr><th>ID</th><th>Requirement</th><th>Weight</th></tr><tr><td>REQ-</td><td>Every command needs a response and is</td><td>Primary</td></tr><tr><td>REQ-</td><td>The Data Source grants visibility of item,</td><td>Secondary</td></tr><tr><td>REQ-</td><td>Synchronisation Lists must include every</td><td>Secondary</td></tr><tr><td>REQ-</td><td>If an Catalogue Item is "Confirmed of</td><td>Secondary</td></tr><tr><td>REQ-</td><td>Relationship dependent data will only be</td><td>Secondary</td></tr><tr><td>REQ-</td><td>Events that can trigger notifications are: -</td><td>Primary</td></tr><tr><td>REQ-</td><td>Notifications must NOT be sent in the</td><td>Primary</td></tr></table>	ID	Requirement	Weight	REQ-	Every command needs a response and is	Primary	REQ-	The Data Source grants visibility of item,	Secondary	REQ-	Synchronisation Lists must include every	Secondary	REQ-	If an Catalogue Item is "Confirmed of	Secondary	REQ-	Relationship dependent data will only be	Secondary	REQ-	Events that can trigger notifications are: -	Primary	REQ-	Notifications must NOT be sent in the	Primary
ID	Requirement	Weight																							
REQ-	Every command needs a response and is	Primary																							
REQ-	The Data Source grants visibility of item,	Secondary																							
REQ-	Synchronisation Lists must include every	Secondary																							
REQ-	If an Catalogue Item is "Confirmed of	Secondary																							
REQ-	Relationship dependent data will only be	Secondary																							
REQ-	Events that can trigger notifications are: -	Primary																							
REQ-	Notifications must NOT be sent in the	Primary																							

	Item.	
REQ-25	The Data Distribution, which is the movement of data from one entity to another, must be handled through a specific notification type.	Primary
REQ-26	Notification to the data recipient will always include the entire hierarchy. (applies to add & update by adding a higher level)	Primary
REQ-27	In case of an ItemLink correction, the entire hierarchy will be indicated as corrected in the notification.	Primary
REQ-32	Acknowledgement Reason codes must be unique.	Secondary
REQ-92	"Single Data Source" Principle : - there can only be one official source of the data – the one that is registered - this source is identified by the data source - this is the only valid source for data synchronisation and related processes	Primary
REQ-99	The Global Registry functionality requirements can be summarised as follows: - Enable data synchronisation - Validation, registration and subscription functions - Enable global validation - Checking compliance with basic EAN.UCC rules related to the format of a GTIN/GLN and ensuring the uniqueness of the data that is being registered - Enable global search functionality that does not require full duplication of data in the Global Registry.	Primary
REQ-100	The Global Registry is involved in the following functions and/or business cases as defined in the Item Synchronisation detailed requirements: - Validation - Registration - Subscription - Global Search	Primary
REQ-101	Registry Validation includes : - EAN.UCC standards validation for GTIN and GLN formats (i.e. check digit) - Uniqueness validation for Item (GTIN/GLN/TM), Party (GLN) or data pool (GLN), ensuring there is only one occurrence and data source for each data record as identified by the appropriate fields.	Primary
REQ-102	Registry validation is a part of the registration process.	Primary
REQ-104	In summary, the registry requirements for validation are: - EAN.UCC standards validation for GTIN/GLN formats - Uniqueness validation for Item, Party and data pool key - Store and maintain EAN.UCC standards - Process validation command - Provide validation acknowledgement	Primary
REQ-105	Registration is the process, which references all Catalogue Items and Parties published in all certified data pools and on which there is a need to synchronise / retrieve information. This is supported by data storage in accordance with the Registry data scope and rules.	Primary
REQ-106	Registering a Catalogue Item involves a check by the Global Registry for Item uniqueness. The Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data found in the Global Registry must be unique. When an Item is registered, the	Primary

		registry verifies that the combination of this data is unique to that Item.	
	REQ-107	<p>The registration process is triggered by the following business cases: 1. Create Catalogue Item: After the physical load and validation of the data, the registry record needs to be created before data can be published. 2. Update Catalogue Item: When a registered Catalogue Item is updated in its source data pool, updates impacting the Registry data must be reflected in the Global Registry, before the updated data can be propagated to the recipients. Registration of Catalogue Item changes only needs to happen for changes that: Impacts fields stored in the Global Registry. Are authorised according to the GTIN allocation rules. 3. Correct Catalogue Item: When a registered item is corrected in its source data pool, corrections impacting the Registry data must be reflected in the Global Registry before the updated data can be propagated to the data recipients. 4. Delete Catalogue Item: Deletions need to be reflected in the Global Registry: the discontinuation dates starts the EAN.UCC standard retention period (48 months for CPG, 36 months for apparel) as soon as GTIN has been discontinued in ALL target markets where it was active (needs to be stored in the Global Registry). 5. Cancel Catalogue Item: Communicates a trade item was never manufactured – this allows an earlier “reuse” of the GTIN i.o. standard retention period. This is achieved through the maintenance (using change function) of the cancel date. 6. Removing an Catalogue Item from the supply chain: The permanent removal of a Catalogue Item from the supply chain is achieved through the maintenance of a discontinuation date. This date has to be reflected in the Global Registry to kick off the EAN.UCC retention period. Temporary removals are not reflected in the Global Registry and only handled through the maintenance of the availability period in the data pools.</p>	Primary
	REQ-108	<p>Registry requirements for registration are : - Registration can only happen after successful validation. - Registration can only produce errors, no warnings. - Successful Registration of a Catalogue Item is mandatory prior to publication of any hierarchy containing that Catalogue Item. - ItemStatus needs to be included in GTIN data model to reflect validation and registration status. - Process registration command (for create, update, correct, delete). - Provide registration acknowledgement.</p>	Primary
	REQ-109	<p>A Data Recipient requests that it receive a “notification” when a specific event occurs that meets the Recipients criteria (selective on sources, categories, etc). This is subject to the recipient’s access to information as controlled by the data source through its source data pool.</p>	Primary
	REQ-119	<p>Future effective changes stored in the data pool are only reflected in the Global Registry when they become effective</p>	Primary

	REQ-121	Party: - GLN - Start Availability Date of the Party - Deletion Date of the Party - Registration Date - Source Data Pool Pointer [GLN used to ...] - GLN of Data Source (*Data Source is actually the 'owner' of the GLN data - Date and Time of last change - Party Validation Information (including Version, Date & Certificate ID)	Primary
	REQ-128	Source Data Pools must send notifications based on matching publications and subscriptions.	Secondary

Distribute Data Recipient Requests for Catalogue Item Data

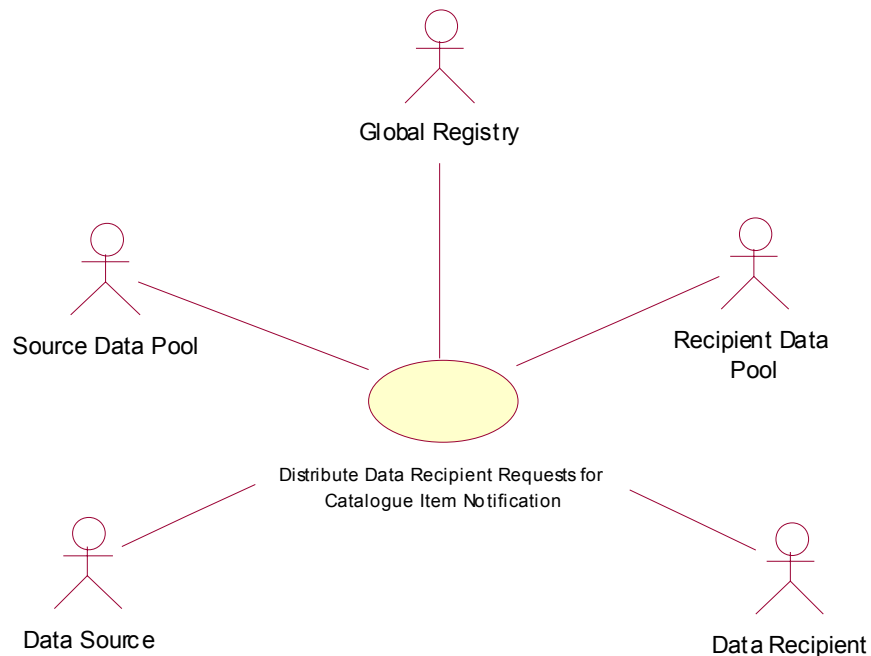


Figure 15 - Distribute Data Recipient Request for Catalogue Item Data Use Case Diagram

Use Case Name	Distribute Data Recipient Requests for Catalogue Item Data
Traceability Identifier	UC-47
Use Case Description	<p>This Use Case describes the processes that need to take place for Publications, Subscriptions and Confirmations to be moved throughout the Synchronisation System.</p> <p>As a summary Use Case, specific processes will be further defined in the Detail Use Case section of this document.</p>
Use Cases Above	UC-1: Synchronise Catalogue Item Data
Use Cases Below	UC-35: Distribute Subscription Data UC-43: Distribute Confirmation Data UC-22: Distribute Request for Notification
Actors	Data Source Source Data Pool (SDP) Global Registry Recipient Data Pool (RDP) Data Recipient
Performance Goals	<p>Data Source: To obtain a copy of all subscriptions within the GDSN.</p> <p>SDP: To have the proper criteria (Publications, Subscriptions and Confirmations) to allow distribution of Catalogue Item data to Data</p>

	<p>Recipients (via their Recipient Data Pool).</p> <p>Global Registry: To be able to distribute Catalogue Item Subscriptions to the proper Source Data Pools.</p> <p>RDP: To ensure Catalogue Item Subscriptions match the data that is being sent by SDPs.</p> <p>Data Recipients: To control the type and volume of Catalogue Item Data received.</p>
Preconditions	
Postconditions	
Scenario	See detailed Use Cases for Scenarios
Alternative Scenario	
Special Requirements	•
Extension Points	N/A
Requirements Covered	

Distribute Catalogue Item Data

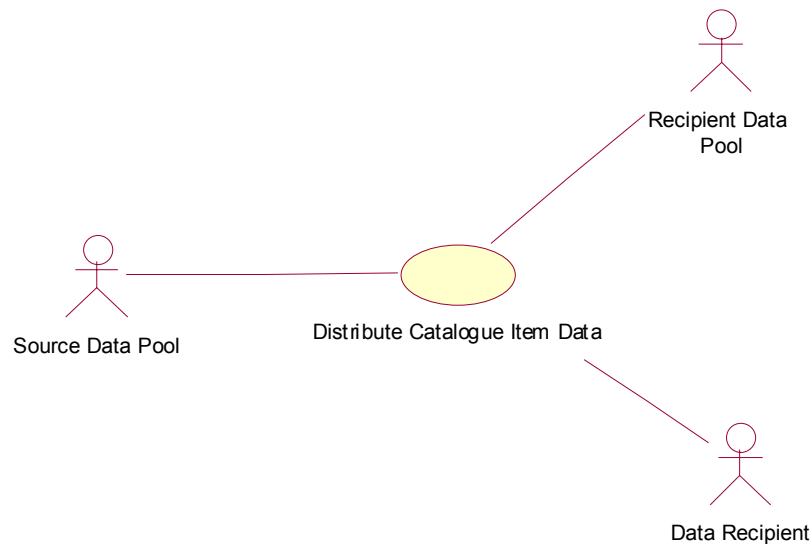


Figure 16 - Distribute Catalogue Item Data Use Case Diagram

Use Case Name	Distribute Catalogue Item Data	
Traceability Identifier	UC-29	
Use Case Description	<p>Using the Distribution Criteria, the Catalogue Item Data are distributed from SDP to RDP and finally, to the Data Recipient.</p> <p>As a summary Use Case, specific processes will be further defined in the Detail Use Case section of this document.</p>	
Use Cases Above	UC-1: Synchronise Catalogue Item Data	
Use Cases Below	UC-37: Distribute Catalogue Item Data from SDP to RDP UC-38: Distribute Catalogue Item Data from RDP to Data Recipient	
Actors	Source Data Pool (SDP) Recipient Data Pool (RDP) Data Recipient	
Performance Goals	SDP: RDP: Data Recipient:	Distribute Catalogue Item Data to the RDP based on the Distribution Criteria. Distribute Catalogue Item Data to the Recipient based on the Distribution Criteria. To receive Catalogue Item Data that comply with their Subscriptions and Confirmations.
Preconditions	Publications, Subscriptions and Confirmations have been defined.	

	The SDP knows which RDP needs to receive Catalogue Item Data for each Recipient.
Postconditions	Data Recipient has received Catalogue Item Data that comply with their Subscriptions and Confirmations.
Scenario	<ul style="list-style-type: none"> • SDP uses the Synchronisation List to filter the Catalogue Item Data. • SDP sends filtered Catalogue Item Data to the RDP. • RDP use Subscription and Confirmations to filter Catalogue Item Data. • RDP sends filtered Catalogue Item Data to the Data Recipient. • RDP sends appropriate Confirmations to the SDP.
Alternative Scenario	None at this summary level
Special Requirements	<ul style="list-style-type: none"> •
Extension Points	N/A
Requirements Covered	SEE DETAIL USE CASES 37 & 38

Detail Use Cases

Add Catalogue Item Hierarchy

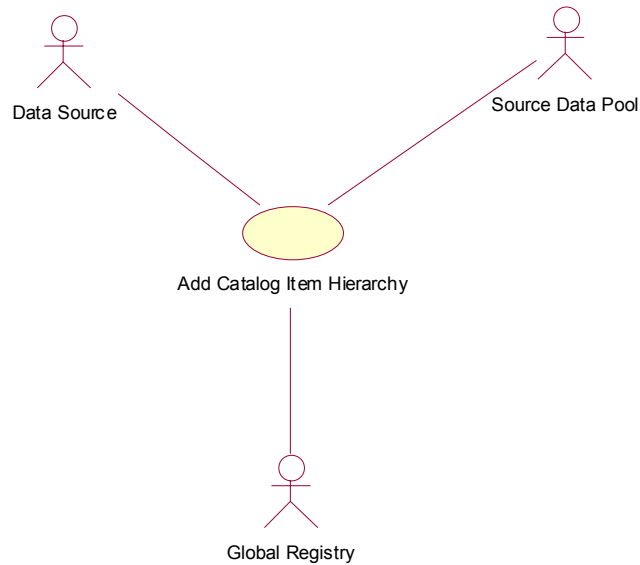


Figure 17 – Add Catalogue Item Hierarchy Use Case

Use Case Name	Add Catalogue Item Hierarchy	
Traceability Identifier	UC-3	
Use Case Description	<p>The Add Catalogue Item Hierarchy use case describes what activities need to happen to validate and register Catalogue Item Hierarchy data.</p> <p>After the Catalogue Item Hierarchy data are validated and registered, they can then reside in the Source Data Pool for distribution.</p>	
Actors	<p>Data Source</p> <p>Source Data Pool (SDP)</p> <p>Global Registry</p>	
Use Cases Above	UC-2: Load and Update Catalogue Item Data within a Source Data Pool	
Use Cases Below	N/A	
Performance Goals	Data Source:	To have validated, registered Catalogue Item Hierarchy data in their Source Data Pool.
	SDP:	To have validated, registered Catalogue Item Hierarchy data.

	Global Registry: To ensure valid, unique Catalogue Item data are registered.
Preconditions	Data Source has defined Catalogue Item data and Catalogue Item hierarchies using Item Links.
Postconditions	Data Source knows that Catalogue Item data has been validated and registered and Item Links have been validated.
Scenario	<p>Begins when, the Data Source sends, to the SDP, Catalogue Item Hierarchy data.</p> <ol style="list-style-type: none"> 1. The SDP receives the Catalogue Item Hierarchy data 2. The SDP validates the Catalogue Item Hierarchy data 3. The SDP sends a validation acknowledgement to the Data Source 4. The Data Source receives the validation acknowledgement: <i>Catalogue Item Hierarchy data loaded</i> 5. The SDP loads the Catalogue Item Hierarchy data 6. The SDP sends the Registry Catalogue Item data of Catalogue Items that are not registered yet to the Global Registry 7. The Global Registry receives the Registry Item data 8. The Global Registry validates the Registry Item data for uniqueness 9. The Global Registry registers the Registry Item data 10. The Global Registry sends a registration acknowledgement to the SDP 11. The SDP receives the registration acknowledgement 12. The SDP stores the registration acknowledgement 12. The SDP sends a registration acknowledgement to the Data Source <p>Ends when, the Data Source receives the registration acknowledgement: <i>Catalogue Item data registered</i></p>
Alternative Scenario	<p>ad 2. Validation fails: <i>Catalogue Item Hierarchy data not loaded</i></p> <p>2.1. SDP sends an validation error message to the Data Source Ends when, the Data Source receives the validation error message</p> <p>ad 7. Validation fails at the Global Registry: Catalogue Item data not registered</p> <p>7.1. Global Registry sends a registration error message to the SDP</p> <p>7.2. The SDP receives the registration error message</p> <p>7.3. The SDP sends a registration error message to the Data Source</p> <p>Ends when, the Data Source receives the registration error message</p> <p>ad 3. & 11. the validation and registration acknowledgment messages can be combined</p> <p>** SDP may not send Catalogue Item data to Registry for Uniqueness check w/o Registration.</p>

Special Requirements	<ul style="list-style-type: none">• Data Source is using a (source) data pool.• Catalogue Item Hierarchy data consists of Catalogue Item data and Item Link data (if applicable).																																																								
Extension Points	N/A																																																								
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Each combination of this key data found in the Global Registry must be unique.</td><td>Primary</td></tr><tr><td>REQ-12</td><td>Every command needs a response and is handled according to the agreement between the parties involved. 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This action is called "Full Refresh".</td><td>Primary</td></tr><tr><td>REQ-30</td><td>Only Catalogue Items are registered in the Global Registry. Not Catalogue Item Hierarchies.</td><td>Primary</td></tr><tr><td>REQ-31</td><td>Validation acknowledgements are mandatory.</td><td>Primary</td></tr><tr><td>REQ-32</td><td>Acknowledgement Reason codes must be unique.</td><td>Primary</td></tr><tr><td>REQ-33</td><td>ItemLinks are identified by the parent GTIN key + child GTIN key + quantity contained.</td><td>Secondary</td></tr><tr><td>REQ-34</td><td>ItemLinks are not registered or held within the Global Registry.</td><td>Primary</td></tr><tr><td>REQ-45</td><td>Data source is sending full Hierarchies to the Source Data Pool.</td><td>Secondary</td></tr></table>			ID	Requirement	Weight	REQ-1	Party data must exist prior to a Catalogue Item is being registered.	Primary	REQ-2	Catalogue Item data must be validated prior to registration.	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	REQ-46	New hierarchy replaces old hierarchy completely.	Primary
	REQ-92	"Single Data Source" Principle : - there can only be one official source of the data – the one that is registered - this source is identified by the data source - this is the only valid source for data synchronisation and related processes	Primary
	REQ-99	The Global Registry functionality requirements can be summarised as follows: - Enable data synchronisation - Validation, registration and subscription functions - Enable global validation - Checking compliance with basic EAN.UCC rules related to the format of a GTIN/GLN and ensuring the uniqueness of the data that is being registered - Enable global search functionality that does not require full duplication of data in the Global Registry.	Primary
	REQ-100	The Global Registry is involved in the following functions and/or business cases as defined in the Item Synchronisation detailed requirements: - Validation - Registration - Subscription - Global Search	Primary
	REQ-101	Registry Validation includes : - EAN.UCC standards validation for GTIN and GLN formats (i.e. check digit) - Uniqueness validation for Item (GTIN/GLN/TM), Party (GLN) or data pool (GLN), ensuring there is only one occurrence and data source for each data record as identified by the appropriate fields.	Primary
	REQ-102	Registry validation is a part of the registration process.	Primary
	REQ-104	In summary, the registry requirements for validation are: - EAN.UCC standards validation for GTIN/GLN formats - Uniqueness validation for Item, Party and data pool key - Store and maintain EAN.UCC standards - Process validation command - Provide validation acknowledgement	Primary
	REQ-105	Registration is the process, which references all Catalogue Items and Parties published in all certified data pools and on which there is a need to synchronise / retrieve information. This is supported by data storage in accordance with the Registry data scope and rules.	Primary
	REQ-106	Registering a Catalogue Item involves a check by the Global Registry for Item uniqueness. The Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data found in the Global Registry must be unique. When an Item is registered, the registry verifies that the combination of this data is unique to that Item.	Primary
	REQ-107	The registration process is triggered by the following business cases: 1. Create Catalogue Item: After the physical load and validation of the data, the registry record needs to be created before data can be published. 2. Update Catalogue Item: When a registered Catalogue Item is updated in its source data pool, updates impacting the Registry data must be reflected in the Global Registry, before the updated data can be propagated to	Primary

		<p>the recipients. Registration of Catalogue Item changes only needs to happen for changes that: Impacts fields stored in the Global Registry. Are authorised according to the GTIN allocation rules. 3. Correct Catalogue Item: When a registered item is corrected in its source data pool, corrections impacting the Registry data must be reflected in the Global Registry before the updated data can be propagated to the data recipients. 4. Delete Catalogue Item: Deletions need to be reflected in the Global Registry: the discontinuation dates starts the EAN.UCC standard retention period (48 months for CPG, 36 months for apparel) as soon as GTIN has been discontinued in ALL target markets where it was active (needs to be stored in the Global Registry). 5. Cancel Catalogue Item: Communicates a trade item was never manufactured – this allows an earlier “reuse” of the GTIN i.o. standard retention period. This is achieved through the maintenance (using change function) of the cancel date. 6. Removing an Catalogue Item from the supply chain: The permanent removal of a Catalogue Item from the supply chain is achieved through the maintenance of a discontinuation date. This date has to be reflected in the Global Registry to kick off the EAN.UCC retention period. Temporary removals are not reflected in the Global Registry and only handled through the maintenance of the availability period in the data pools.</p>	
	REQ-108	<p>Registry requirements for registration are : - Registration can only happen after successful validation. - Registration can only produce errors, no warnings. - Successful Registration of a Catalogue Item is mandatory prior to publication of any hierarchy containing that Catalogue Item. - ItemStatus needs to be included in GTIN data model to reflect validation and registration status. - Process registration command (for create, update, correct, delete). - Provide registration acknowledgement.</p>	Primary

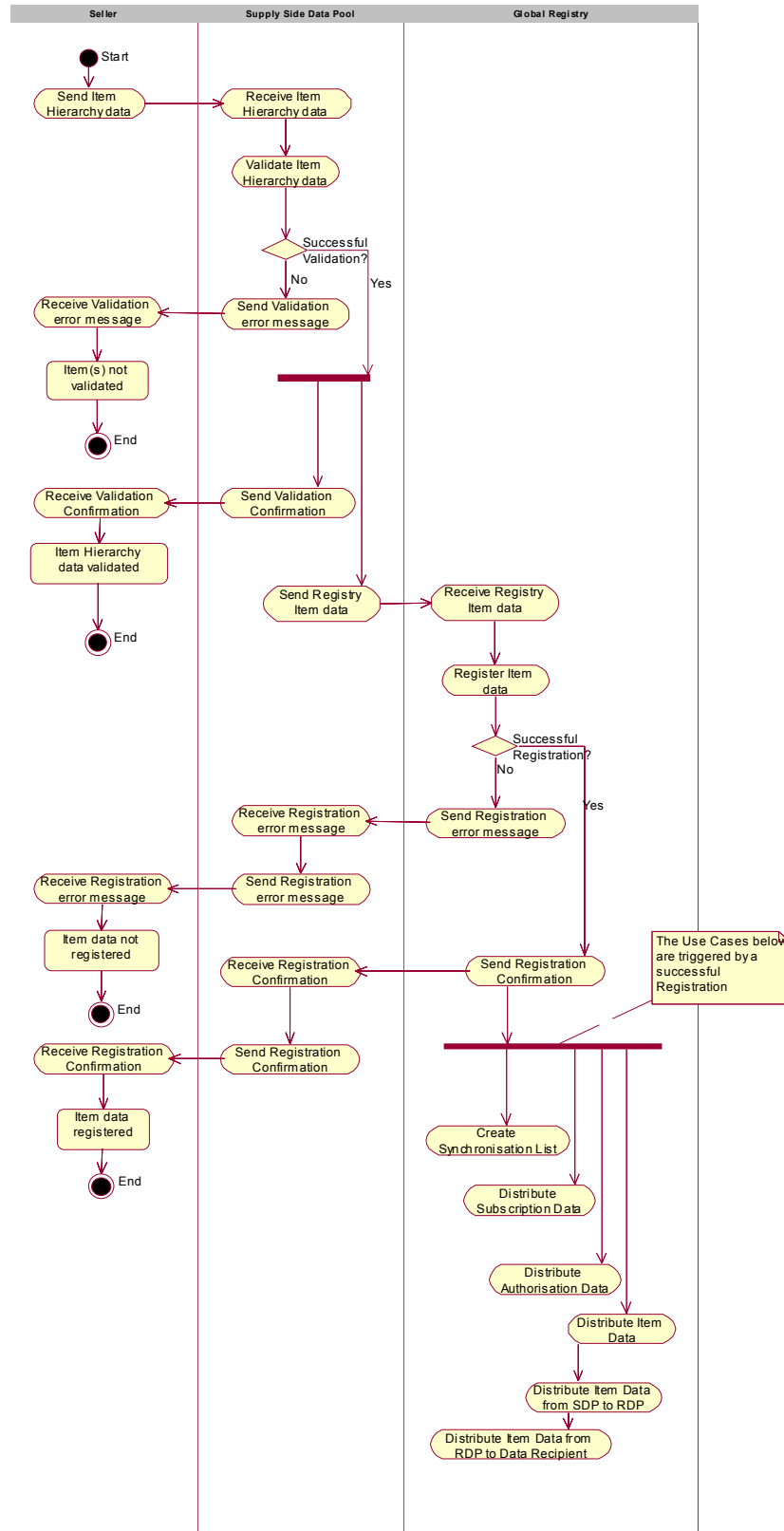


Figure 18 – Add Catalogue Item Hierarchy Activity Diagram

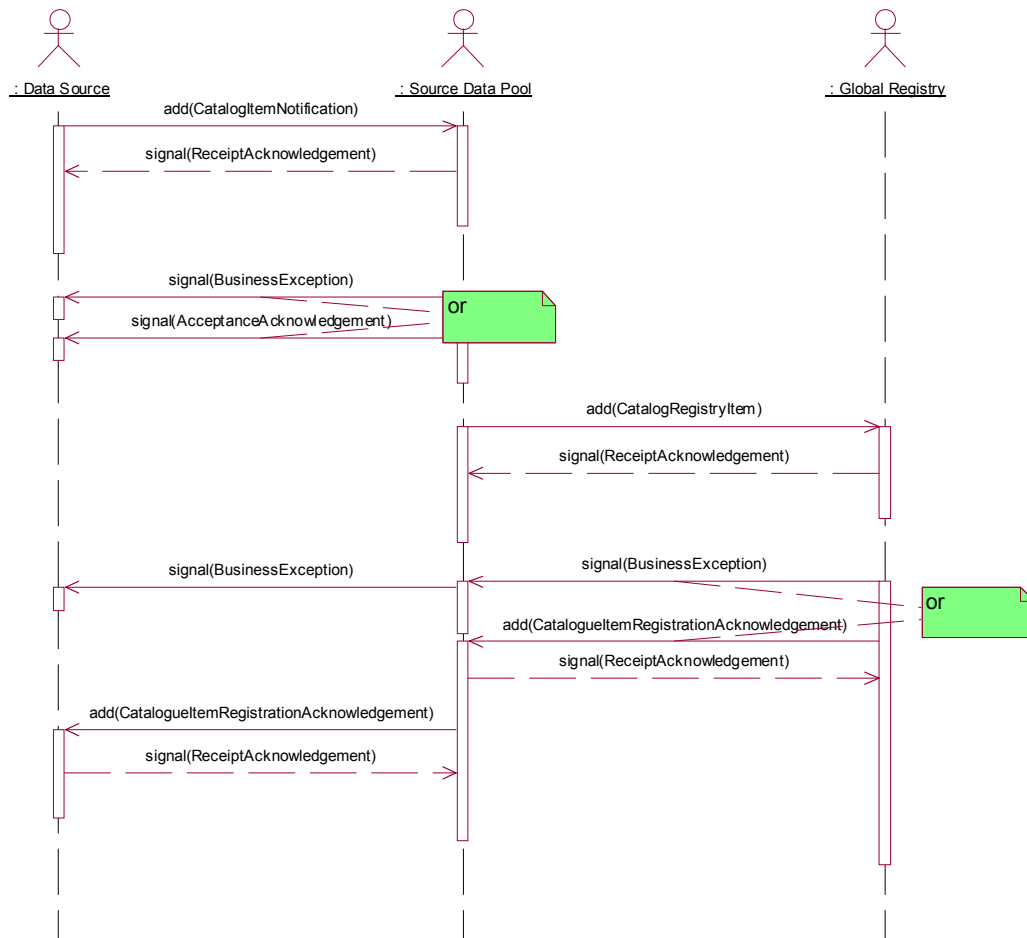


Figure 19 - Add Catalogue Item Hierarchy Sequence Diagram

Change Catalogue Item Hierarchy

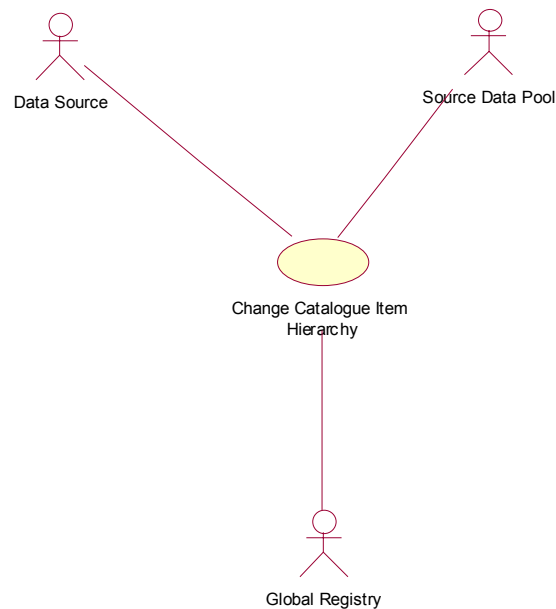


Figure 8 – Change Catalogue Item Hierarchy Use Case

Use Case Name	Change Catalogue Item Hierarchy
Traceability Identifier	UC-4
Use Case Description	The Change Catalogue Item Hierarchy use case describes what activities need to happen to change Catalogue Item Hierarchy data of a Catalogue Item already existing in a Source Data Pool, whether the Catalogue Item has been registered or not.
Use Cases Above	UC-2: Load and Update Catalogue Item Data within a Source Data Pool
Use Cases Below	UC-10: Change Catalogue Item UC-11: Change Item Link
Actors	Data Source Source Data Pool (SDP) Global Registry
Performance Goals	<p>Data Source: To change Catalogue Item Hierarchy data in their Source Data Pool.</p> <p>SDP: To have validated, registered updated Catalogue Item Hierarchy data.</p> <p>Global Registry: To ensure valid, unique Catalogue Item data are</p>

	registered, whether the Catalogue Item has been changed or not.
Preconditions	Data Source has defined the changes to Catalogue Item data and Catalogue Item hierarchies (using Item Links) of a Catalogue Item already existing in a Source Data Pool.
Postconditions	Data Source knows that updated Catalogue Item data has been validated and registered and updated Item Links have been validated.
Scenario	<p>Begins when, the Data Source sends, to the SDP, Catalogue Item Hierarchy data to be changed.</p> <ol style="list-style-type: none"> 1. The SDP receives Catalogue Item Hierarchy data to be changed 2. The SDP validates Catalogue Item Hierarchy data to be changed 3. The SDP sends a validation acknowledgement to the Data Source 4. The Data Source receives the validation acknowledgement: <i>Catalogue Item Hierarchy data changed</i> <ol style="list-style-type: none"> 5. The SDP loads the changed Catalogue Item Hierarchy data 6. The SDP sends the Registry Item data (to be changed) to the Global Registry 7. The Global Registry receives the Registry Item data to be changed 8. The Global Registry validates the Registry Item data 9. The Global Registry registers the changed Registry Item data 10. The Global Registry sends a registration acknowledgement to the SDP 12. The SDP receives the registration acknowledgement 13. The SDP stores the registration acknowledgement 14. The SDP sends a registration acknowledgement to the Data Source <p>Ends when, the Data Source receives the registration acknowledgement: <i>Catalogue Item data registered</i></p>
Alternative Scenario	<p>ad 2. Validation fails: <i>Catalogue Item Hierarchy data not loaded</i></p> <p>2.1. SDP sends an validation error message to the Data Source</p> <p>Ends when, the Data Source receives the validation error message</p> <p>ad 7. Validation fails at the Global Registry: Catalogue Item data not registered</p> <ol style="list-style-type: none"> 7.1. Global Registry sends a registration error message to the SDP 7.2. The SDP receives the registration error message 7.3. The SDP sends a registration error message to the Data Source <p>Ends when, the Data Source receives the registration error message</p> <p>ad 3. & 11. the validation and registration acknowledgment messages can be combined</p> <p>** SDP may not send Catalogue Item data to Registry for Uniqueness check w/o Registration.</p>

Special Requirements	<ul style="list-style-type: none">• Data Source is using a (source) data pool.• Catalogue Item Hierarchy data consists of Catalogue Item data and Item Link data (if applicable).• Validation is done against existing data, applying GDD standard and GTIN allocation rules.																																																
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Requirements Covered	<table><tr><th>ID</th><th>Requirement</th><th>Weight</th></tr><tr><td>REQ-4</td><td>Data Source must be able to change Catalogue Item data in the Source Data Pool.</td><td>Primary</td></tr><tr><td>REQ-8</td><td>EAN.UCC standards validation for GTIN and GLN format.</td><td>Primary</td></tr><tr><td>REQ-9</td><td>Uniqueness validation for Item (GTIN/GLN/TM), Party (GLN) or data pool (GLN) – only applies to the occurrence of the key, not to the uniqueness of the information related to it.</td><td>Primary</td></tr><tr><td>REQ-10</td><td>The Catalogue Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data found in the Global Registry must be unique.</td><td>Primary</td></tr><tr><td>REQ-12</td><td>Every command needs a response and is handled according to the agreement between the parties involved. In the inter-operable network, acknowledgement messages are standardised and may contain the following information: - Confirmation of message receipt-Success / Failure of processing (syntax and content)- Reason for failure, with a code number and text message unique assigned to each failure</td><td>Primary</td></tr><tr><td>REQ-20</td><td>Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.</td><td>Primary</td></tr><tr><td>REQ-24</td><td>Notifications must NOT be sent in the following cases since data is not yet public and validated information: - Data load (add, change, etc...) - Data validation - Registration of new Catalogue Item</td><td>Primary</td></tr><tr><td>REQ-30</td><td>Only Catalogue Items are registered in the Global Registry. Not Catalogue Item Hierarchies.</td><td>Primary</td></tr><tr><td>REQ-31</td><td>Validation acknowledgements are mandatory.</td><td>Primary</td></tr><tr><td>REQ-32</td><td>Acknowledgement Reason codes must be unique.</td><td>Primary</td></tr><tr><td>REQ-33</td><td>ItemLinks are identified by the parent GTIN key + child GTIN key + quantity contained.</td><td>Primary</td></tr><tr><td>REQ-34</td><td>ItemLinks are not registered or held within the Global Registry.</td><td>Primary</td></tr><tr><td>REQ-35</td><td>Changes have to comply with validation rules.</td><td>Secondary</td></tr><tr><td>REQ-36</td><td>If the Catalogue Item was registered, updates impacting the Registry data must be reflected in the Global Registry.</td><td>Primary</td></tr><tr><td>REQ-37</td><td>Registration of Catalogue Item changes only needs to happen for changes that: - Impact fields stored in the Global Registry. - Are authorised according to the GTIN allocation rules.</td><td>Primary</td></tr></table>	ID	Requirement	Weight	REQ-4	Data Source must be able to change Catalogue Item data in the Source Data Pool.	Primary	REQ-8	EAN.UCC standards validation for GTIN and GLN format.	Primary	REQ-9	Uniqueness validation for Item (GTIN/GLN/TM), Party (GLN) or data pool (GLN) – only applies to the occurrence of the key, not to the uniqueness of the information related to it.	Primary	REQ-10	The Catalogue Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data found in the Global Registry must be unique.	Primary	REQ-12	Every command needs a response and is handled according to the agreement between the parties involved. In the inter-operable network, acknowledgement messages are standardised and may contain the following information: - Confirmation of message receipt-Success / Failure of processing (syntax and content)- Reason for failure, with a code number and text message unique assigned to each failure	Primary	REQ-20	Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.	Primary	REQ-24	Notifications must NOT be sent in the following cases since data is not yet public and validated information: - Data load (add, change, etc...) - Data validation - Registration of new Catalogue Item	Primary	REQ-30	Only Catalogue Items are registered in the Global Registry. Not Catalogue Item Hierarchies.	Primary	REQ-31	Validation acknowledgements are mandatory.	Primary	REQ-32	Acknowledgement Reason codes must be unique.	Primary	REQ-33	ItemLinks are identified by the parent GTIN key + child GTIN key + quantity contained.	Primary	REQ-34	ItemLinks are not registered or held within the Global Registry.	Primary	REQ-35	Changes have to comply with validation rules.	Secondary	REQ-36	If the Catalogue Item was registered, updates impacting the Registry data must be reflected in the Global Registry.	Primary	REQ-37	Registration of Catalogue Item changes only needs to happen for changes that: - Impact fields stored in the Global Registry. - Are authorised according to the GTIN allocation rules.	Primary
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	REQ-38	The change function implies a full refresh of all attributes of the previously created Catalogue Item – this will be reflected in the subsequent notification, including a full refresh of the changed record of the full hierarchy.	Secondary
	REQ-45	Data source is sending full Hierarchies to the Source Data Pool.	Primary
	REQ-46	New hierarchy replaces old hierarchy completely.	Secondary
	REQ-92	“Single Data Source” Principle : - there can only be one official source of the data – the one that is registered - this source is identified by the data source - this is the only valid source for data synchronisation and related processes	Primary
	REQ-99	The Global Registry functionality requirements can be summarised as follows: - Enable data synchronisation - Validation, registration and subscription functions - Enable global validation - Checking compliance with basic EAN.UCC rules related to the format of a GTIN/GLN and ensuring the uniqueness of the data that is being registered - Enable global search functionality that does not require full duplication of data in the Global Registry.	Primary
	REQ-100	The Global Registry is involved in the following functions and/or business cases as defined in the Item Synchronisation detailed requirements: - Validation - Registration - Subscription - Global Search	Primary
	REQ-101	Registry Validation includes : - EAN.UCC standards validation for GTIN and GLN formats (i.e. check digit) - Uniqueness validation for Item (GTIN/GLN/TM), Party (GLN) or data pool (GLN), ensuring there is only one occurrence and data source for each data record as identified by the appropriate fields.	Primary
	REQ-102	Registry validation is a part of the registration process.	Primary
	REQ-104	In summary, the registry requirements for validation are: - EAN.UCC standards validation for GTIN/GLN formats - Uniqueness validation for Item, Party and data pool key - Store and maintain EAN.UCC standards - Process validation command - Provide validation acknowledgement	Primary
	REQ-105	Registration is the process, which references all Catalogue Items and Parties published in all certified data pools and on which there is a need to synchronise / retrieve information. This is supported by data storage in accordance with the Registry data scope and rules.	Primary
	REQ-106	Registering a Catalogue Item involves a check by the Global Registry for Item uniqueness. The Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data found in the Global Registry must be unique. When an Item is registered, the registry verifies that the combination of this data is unique to that Item.	Primary
	REQ-107	The registration process is triggered by the following business cases: 1. Create	Primary

		<p>Catalogue Item: After the physical load and validation of the data, the registry record needs to be created before data can be published. 2. Update Catalogue Item: When a registered Catalogue Item is updated in its source data pool, updates impacting the Registry data must be reflected in the Global Registry, before the updated data can be propagated to the recipients. Registration of Catalogue Item changes only needs to happen for changes that: Impacts fields stored in the Global Registry. Are authorised according to the GTIN allocation rules. 3. Correct Catalogue Item: When a registered item is corrected in its source data pool, corrections impacting the Registry data must be reflected in the Global Registry before the updated data can be propagated to the data recipients. 4. Delete Catalogue Item: Deletions need to be reflected in the Global Registry: the discontinuation dates starts the EAN.UCC standard retention period (48 months for CPG, 36 months for apparel) as soon as GTIN has been discontinued in ALL target markets where it was active (needs to be stored in the Global Registry). 5. Cancel Catalogue Item: Communicates a trade item was never manufactured – this allows an earlier “reuse” of the GTIN i.o. standard retention period. This is achieved through the maintenance (using change function) of the cancel date. 6. Removing an Catalogue Item from the supply chain: The permanent removal of a Catalogue Item from the supply chain is achieved through the maintenance of a discontinuation date. This date has to be reflected in the Global Registry to kick off the EAN.UCC retention period. Temporary removals are not reflected in the Global Registry and only handled through the maintenance of the availability period in the data pools.</p>	
	REQ-108	<p>Registry requirements for registration are : - Registration can only happen after successful validation. - Registration can only produce errors, no warnings. - Successful Registration of a Catalogue Item is mandatory prior to publication of any hierarchy containing that Catalogue Item. - ItemStatus needs to be included in GTIN data model to reflect validation and registration status. - Process registration command (for create, update, correct, delete). - Provide registration acknowledgement.</p>	Primary
	REQ-118	Changes/corrections applied to the Global Registry are effective immediately.	Primary
	REQ-119	Future effective changes stored in the data pool are only reflected in the Global Registry when they become effective.	Primary

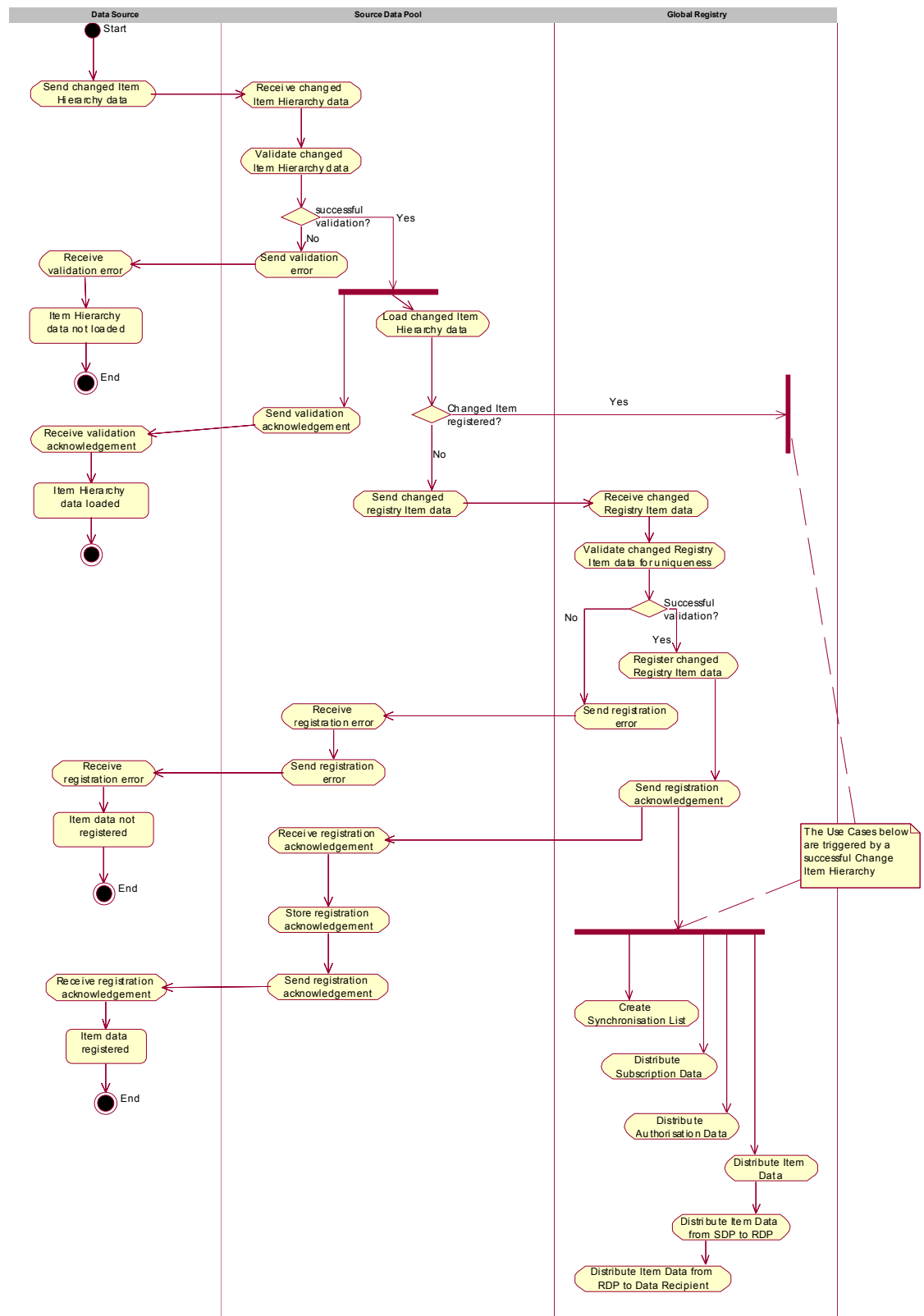


Figure 9 – Change Catalogue Item Hierarchy Activity Diagram

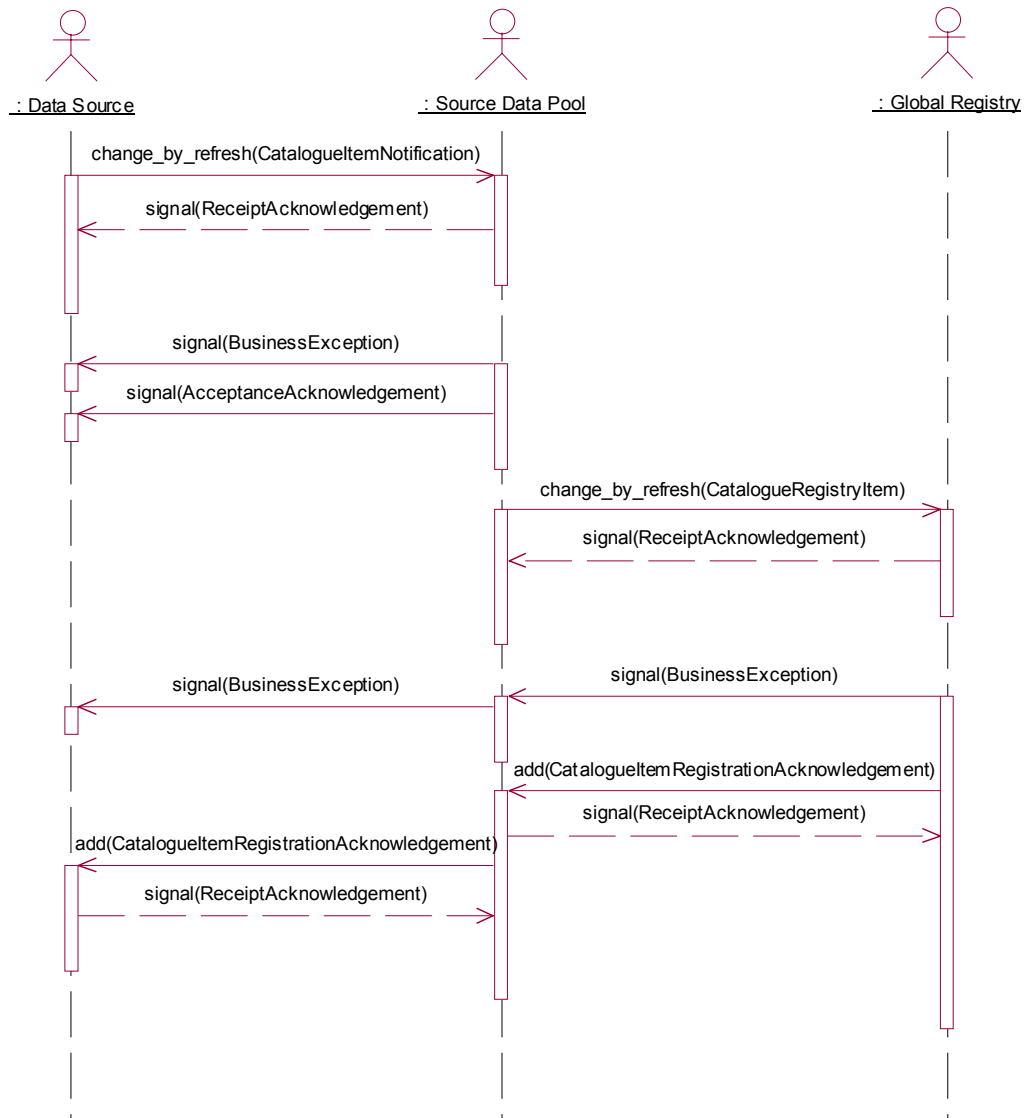


Figure 10 - Change Catalogue Item Hierarchy Sequence Diagram

Correct Catalogue Item Hierarchy

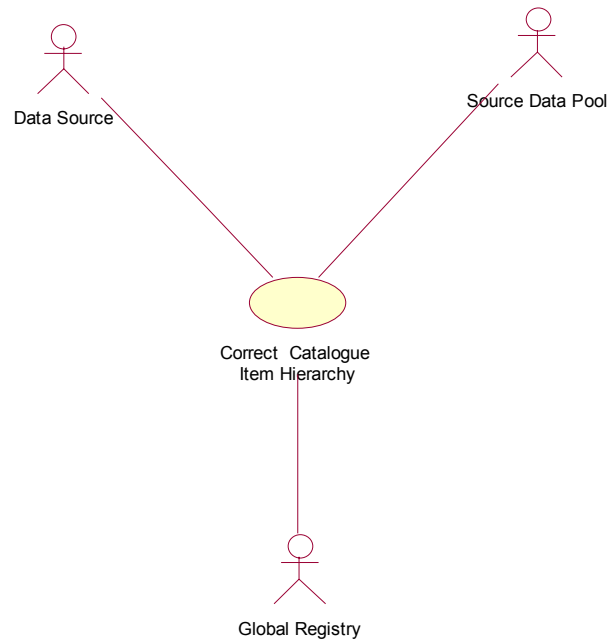


Figure 20 - Correct Catalogue Item Hierarchy Use Case

Use Case Name	Correct Catalogue Item Hierarchy
Traceability Identifier	UC-5
Use Case Description	The Correct Catalogue Item Hierarchy use case describes what activities need to happen to correct Catalogue Item Hierarchy data of a Catalogue Item already existing in a Source Data Pool, whether the Catalogue Item has been registered or not. A correction allows a Data Source to make changes to Catalogue Item data and hierarchy that would not be allowed by validation rules and as such is outside of normal processing. It is intended to provide a means for errors to be corrected and not as an alternative to the Change Catalogue Item Hierarchy process. A Data Source should expect that a Correct Catalogue Item Hierarchy message may be scrutinized more closely by the Data Recipient and possibly incur a delay in processing.
Use Cases Above	UC-2: Load and Update Catalogue Item Data within a Source Data Pool
Use Cases Below	UC-12: Correct Catalogue Item UC-13: Correct Item Link
Actors	Data Source Source Data Pool (SDP) Global Registry

Performance Goals	<p>Data Source: To make corrections to errors in Catalogue Item Hierarchy data and have those corrections reflected in their Source Data Pool.</p> <p>SDP: To have validated, registered updated Catalogue Item Hierarchy data.</p> <p>Global Registry: To ensure valid, unique Catalogue Item data are registered, whether the Catalogue Item has been corrected or not.</p>
Preconditions	Data Source has defined the corrections to Catalogue Item data and Catalogue Item hierarchies (using Item Links) of a Catalogue Item already existing in a Source Data Pool.
Postconditions	Data Source knows that corrected Catalogue Item data has been validated and registered and corrected Item Links have been validated.
Scenario	<p>Begins when, the Data Source sends, to the SDP, Catalogue Item Hierarchy data to be corrected.</p> <ol style="list-style-type: none"> 1. The SDP receives Catalogue Item Hierarchy data to be corrected 2. The SDP validates Catalogue Item Hierarchy data to be corrected 3. The SDP sends a validation acknowledgement to the Data Source 4. The Data Source receives the validation acknowledgement: <i>Catalogue Item Hierarchy data corrected</i> 5. The SDP loads the corrected Catalogue Item Hierarchy data 6. The SDP sends the Registry Item data (to be corrected) to the Global Registry 7. The Global Registry receives the Registry Item data to be corrected 8. The Global Registry checks that the Catalogue Item exists in the Registry. 9. The Global Registry registers the corrected Registry Item data 10. The Global Registry sends a registration acknowledgement to the SDP 11. The SDP receives the registration acknowledgement 12. The SDP stores the registration acknowledgement 13. The SDP sends a registration acknowledgement to the Data Source <p>Ends when, the Data Source receives the registration acknowledgement: <i>Catalogue Item data registered</i></p>
Alternative Scenario	<p>ad 2. Validation fails: <i>Catalogue Item Hierarchy data not loaded</i></p> <p>2.1. SDP sends an validation error message to the Data Source</p> <p>Ends when, the Data Source receives the validation error message</p> <p>ad 8. <i>The Catalogue Item is not found in the Registry:</i> Catalogue Item data not registered</p> <ol style="list-style-type: none"> 8.1. Global Registry sends a registration error message to the SDP 8.2. The SDP receives the registration error message 8.3. The SDP sends a registration error message to the Data Source

	<p>Ends when, the Data Source receives the registration error message</p> <p><i>ad 3. & 13. The validation and registration acknowledgment messages can be combined</i></p> <p><i>** SDP may not send Catalogue Item data to Registry for Uniqueness check w/o Registration.</i></p>																											
Special Requirements	<ul style="list-style-type: none">• Data Source is using a (source) data pool.• Catalogue Item Hierarchy data consists of Catalogue Item data and Item Link data (if applicable).• Validation is done against existing data, applying GDD standard and GTIN allocation rules.• Catalogue Item Hierarchy data bypasses the GTIN Allocation Rules																											
Extension Points	N/A																											
Requirements Covered	<table><tr><th>ID</th><th>Requirement</th><th>Weight</th></tr><tr><td>REQ-5</td><td>Data Source must be able to correct Catalogue Item data in the Source Data Pool.</td><td>Primary</td></tr><tr><td>REQ-8</td><td>EAN.UCC standards validation for GTIN and GLN format.</td><td>Primary</td></tr><tr><td>REQ-9</td><td>Uniqueness validation for Item (GTIN/GLN/TM), Party (GLN) or data pool (GLN) – only applies to the occurrence of the key, not to the uniqueness of the information related to it.</td><td>Primary</td></tr><tr><td>REQ-10</td><td>The Catalogue Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data found in the Global Registry must be unique.</td><td>Primary</td></tr><tr><td>REQ-11</td><td>Corrections bypass the standard GTIN/GLN allocation rules.</td><td>Primary</td></tr><tr><td>REQ-12</td><td>Every command needs a response and is handled according to the agreement between the parties involved. In the inter-operable network, acknowledgement messages are standardised and may contain the following information: -</td><td>Primary</td></tr><tr><td>REQ-20</td><td>Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.</td><td>Primary</td></tr><tr><td>REQ-21</td><td>If an Catalogue Item is "Confirmed of Synchronisation" then all Catalogue items below in the Catalogue Item Hierarchy shall be included in the Synchronisation list</td><td>Primary</td></tr></table>	ID	Requirement	Weight	REQ-5	Data Source must be able to correct Catalogue Item data in the Source Data Pool.	Primary	REQ-8	EAN.UCC standards validation for GTIN and GLN format.	Primary	REQ-9	Uniqueness validation for Item (GTIN/GLN/TM), Party (GLN) or data pool (GLN) – only applies to the occurrence of the key, not to the uniqueness of the information related to it.	Primary	REQ-10	The Catalogue Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data found in the Global Registry must be unique.	Primary	REQ-11	Corrections bypass the standard GTIN/GLN allocation rules.	Primary	REQ-12	Every command needs a response and is handled according to the agreement between the parties involved. In the inter-operable network, acknowledgement messages are standardised and may contain the following information: -	Primary	REQ-20	Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.	Primary	REQ-21	If an Catalogue Item is "Confirmed of Synchronisation" then all Catalogue items below in the Catalogue Item Hierarchy shall be included in the Synchronisation list	Primary
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		publication - Change of published Catalogue Item / Party / Partner Profile - Change of owner, rights - Subscription - Synchronisation List - Confirmation/ Rejection - Request for Notification - Any successful matching process	
	REQ-24	Notifications must NOT be sent in the following cases since data is not yet public and validated information: - Data load (add, change, etc...) - Data validation - Registration of new Catalogue Item	Primary
	REQ-26	Notification to the data recipient will always include the entire hierarchy. (applies to add & update by adding a higher level)	Primary
	REQ-27	In case of an ItemLink correction, the entire hierarchy will be indicated as corrected in the notification.	Secondary
	REQ-28	The updated hierarchy always fully replaces the current hierarchy. This action is called "Full Refresh".	Secondary
	REQ-30	Only Catalogue Items are registered in the Global Registry. Not Catalogue Item Hierarchies.	Primary
	REQ-31	Validation acknowledgements are mandatory.	Primary
	REQ-32	Acknowledgement Reason codes must be unique.	Primary
	REQ-33	ItemLinks are identified by the parent GTIN key + child GTIN key + quantity contained.	Primary
	REQ-34	ItemLinks are not registered or held within the Global Registry.	Primary
	REQ-36	If the Catalogue Item was registered, updates impacting the Registry data must be reflected in the Global Registry.	Primary
	REQ-37	Registration of Catalogue Item changes only needs to happen for changes that: - Impact fields stored in the Global Registry. - Are authorised according to the GTIN allocation rules.	Primary
	REQ-40	Incorrect core data (i.e. attributes that cannot be updated according to allocation rules) can only be updated through a specific correction functionality.	Secondary
	REQ-41	Correct Item Hierarchy must: - trigger syntactical and content validation - skip GTIN allocation rules validation - set a flag on the GTIN data record to inform the data recipient of the correction (see data distribution / notification) - the correction will also be reflected in the Global Registry if it impacts Registry data	Secondary
	REQ-42	If the correction impacts the hierarchy, then it must be handled by deleting the incorrect ItemLink and adding a new Item Link - Add/Delete Scenario's.	Secondary
	REQ-43	if the correction does not impact the hierarchy, then ItemLink attributes will be updated through the correction command.	Primary
	REQ-44	Notification of the hierarchy must indicate it is a correction.	Secondary
	REQ-45	Data source is sending full Hierarchies to the Source Data Pool.	Primary
	REQ-46	New hierarchy replaces old hierarchy completely.	Primary
	REQ-	A deletion cannot be corrected – only the	Primary

	57	discontinuation can be reversed.	
	REQ-59	ItemLinks can only be deleted: - as the correction of an error - as the result of a delete.Item	Primary
	REQ-92	“Single Data Source” Principle : - there can only be one official source of the data – the one that is registered - this source is identified by the data source - this is the only valid source for data synchronisation and related processes	Primary
	REQ-99	The Global Registry functionality requirements can be summarised as follows: - Enable data synchronisation - Validation, registration and subscription functions - Enable global validation - Checking compliance with basic EAN.UCC rules related to the format of a GTIN/GLN and ensuring the uniqueness of the data that is being registered - Enable global search functionality that does not require full duplication of data in the Global Registry.	Primary
	REQ-100	The Global Registry is involved in the following functions and/or business cases as defined in the Item Synchronisation detailed requirements: - Validation - Registration - Subscription - Global Search	Primary
	REQ-101	Registry Validation includes : - EAN.UCC standards validation for GTIN and GLN formats (i.e. check digit) - Uniqueness validation for Item (GTIN/GLN/TM), Party (GLN) or data pool (GLN), ensuring there is only one occurrence and data source for each data record as identified by the appropriate fields.	Primary
	REQ-102	Registry validation is a part of the registration process.	Primary
	REQ-104	In summary, the registry requirements for validation are: - EAN.UCC standards validation for GTIN/GLN formats - Uniqueness validation for Item, Party and data pool key - Store and maintain EAN.UCC standards - Process validation command - Provide validation acknowledgement	Primary
	REQ-105	Registration is the process, which references all Catalogue Items and Parties published in all certified data pools and on which there is a need to synchronise / retrieve information. This is supported by data storage in accordance with the Registry data scope and rules.	Primary
	REQ-106	Registering a Catalogue Item involves a check by the Global Registry for Item uniqueness. The Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data found in the Global Registry must be unique. When an Item is registered, the registry verifies that the combination of this data is unique to that Item.	Primary
	REQ-107	The registration process is triggered by the following business cases: 1. Create Catalogue Item: After the physical load and validation of the data, the registry record needs to be created before data can be published. 2. Update Catalogue Item: When a registered Catalogue Item is updated in its source data pool, updates	Primary

		<p>impacting the Registry data must be reflected in the Global Registry, before the updated data can be propagated to the recipients. Registration of Catalogue Item changes only needs to happen for changes that: Impacts fields stored in the Global Registry. Are authorised according to the GTIN allocation rules. 3. Correct Catalogue Item: When a registered item is corrected in its source data pool, corrections impacting the Registry data must be reflected in the Global Registry before the updated data can be propagated to the data recipients. 4. Delete Catalogue Item: Deletions need to be reflected in the Global Registry: the discontinuation dates starts the EAN.UCC standard retention period (48 months for CPG, 36 months for apparel) as soon as GTIN has been discontinued in ALL target markets where it was active (needs to be stored in the Global Registry). 5. Cancel Catalogue Item: Communicates a trade item was never manufactured – this allows an earlier “reuse” of the GTIN i.o. standard retention period. This is achieved through the maintenance (using change function) of the cancel date. 6. Removing an Catalogue Item from the supply chain: The permanent removal of a Catalogue Item from the supply chain is achieved through the maintenance of a discontinuation date. This date has to be reflected in the Global Registry to kick off the EAN.UCC retention period. Temporary removals are not reflected in the Global Registry and only handled through the maintenance of the availability period in the data pools.</p>	
	REQ-108	<p>Registry requirements for registration are :</p> <ul style="list-style-type: none"> - Registration can only happen after successful validation. - Registration can only produce errors, no warnings. - Successful Registration of a Catalogue Item is mandatory prior to publication of any hierarchy containing that Catalogue Item. - ItemStatus needs to be included in GTIN data model to reflect validation and registration status. - Process registration command (for create, update, correct, delete). - Provide registration acknowledgement. 	Primary
	REQ-118	Changes/corrections applied to the Global Registry are effective immediately.	Primary
	REQ-119	Future effective changes stored in the data pool are only reflected in the Global Registry when they become effective.	Primary

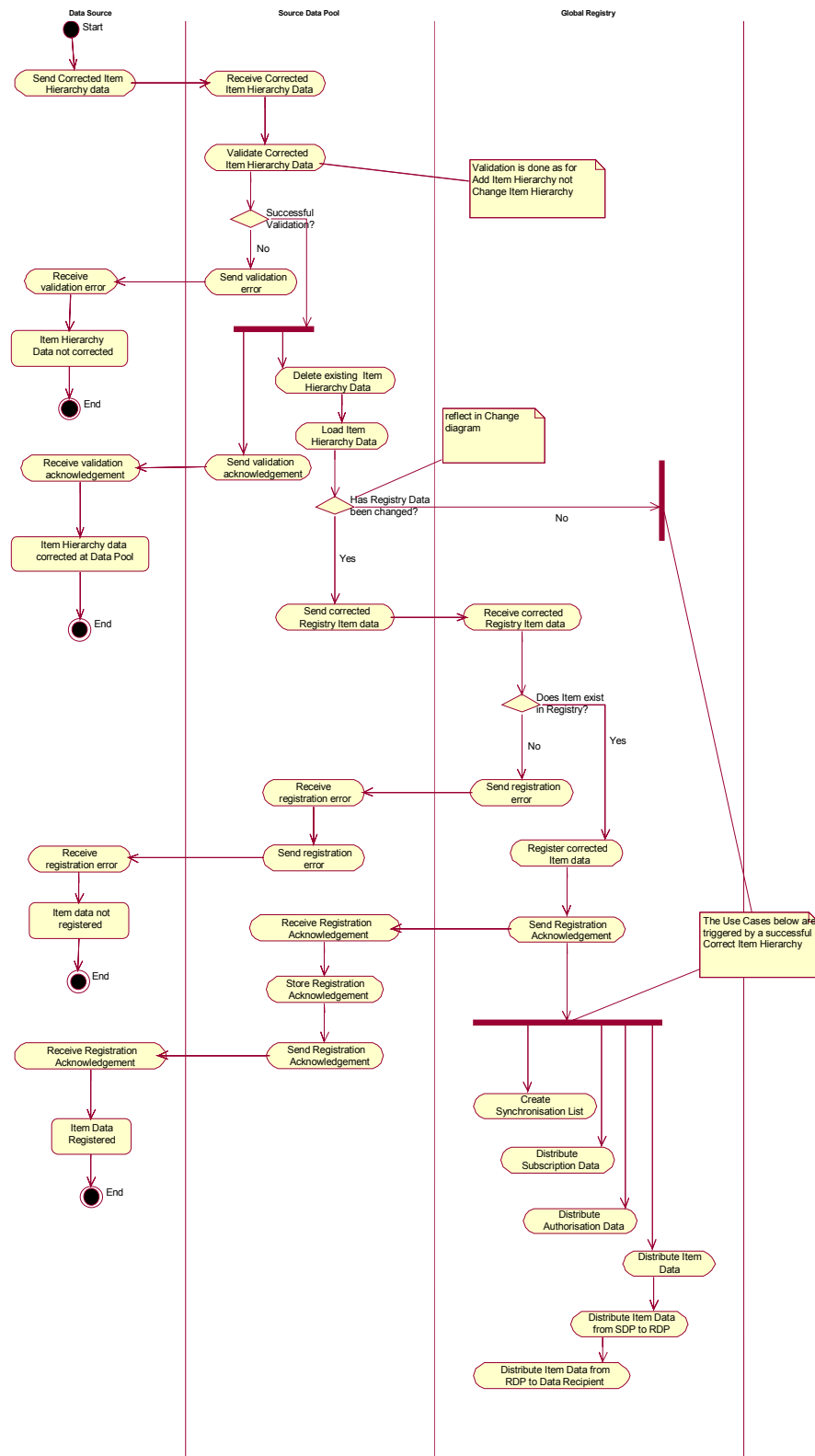


Figure 21 - Correct Catalogue Item Hierarchy Data Activity Diagram

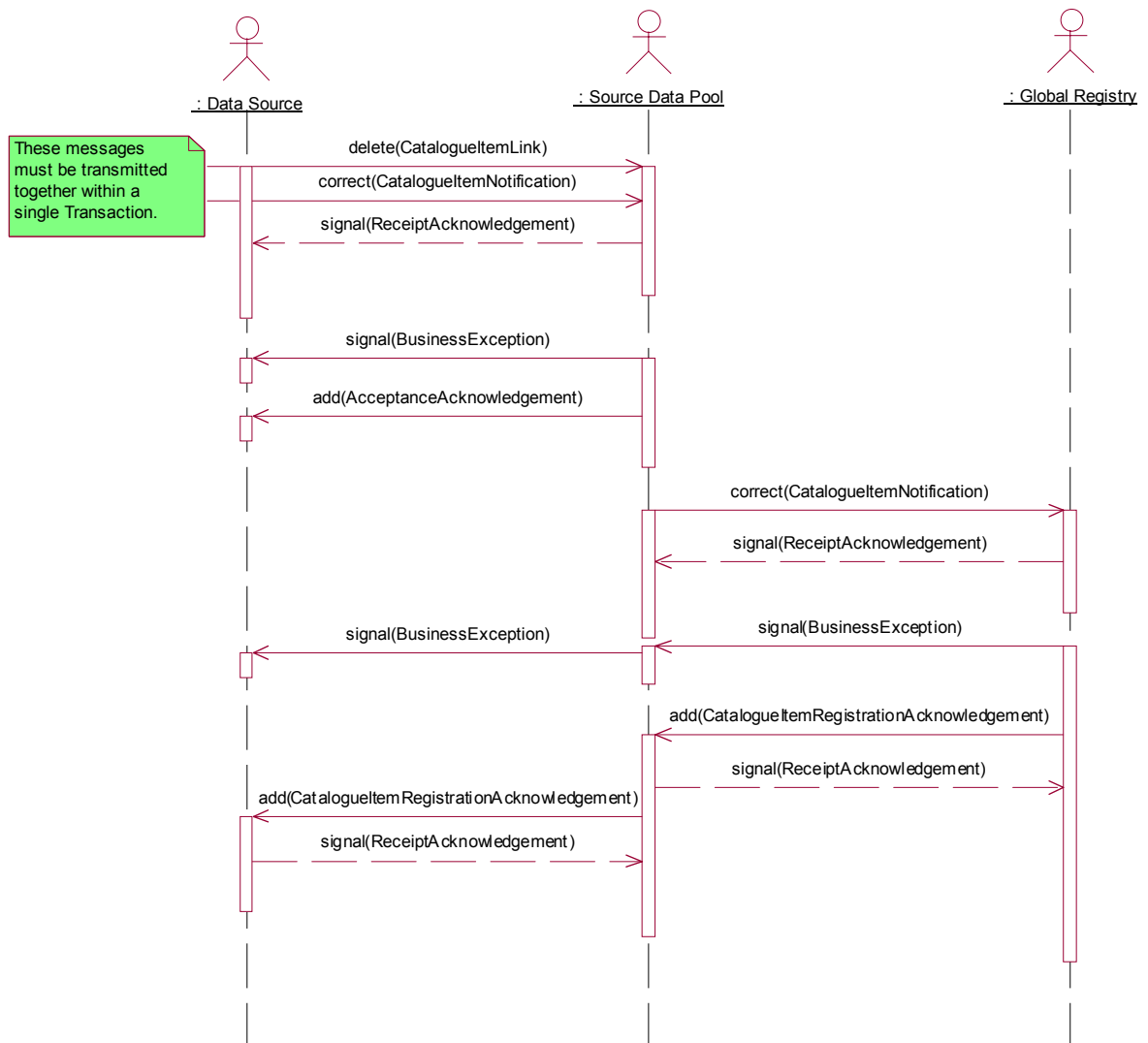


Figure 22 - Correct Catalogue Item Hierarchy Sequence Diagram

Discontinue Catalogue Item

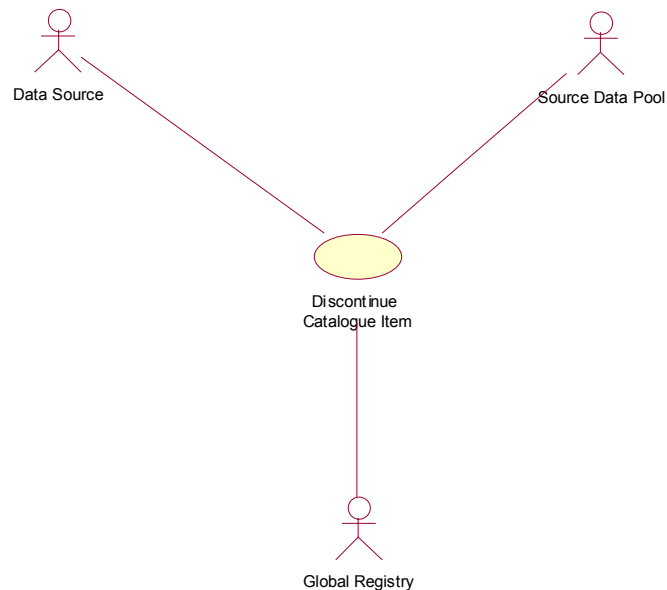


Figure 23 - Discontinue Catalogue Item Use Case

Use Case Name	Discontinue Catalogue Item
Traceability Identifier	UC-6
Use Case Description	<p>This use case describes the process to flag a Catalogue Item for deletion, authorising the deletion of the Catalogue Item Data. After the discontinuation period lapses (as defined by EAN.UCC GTIN allocation rules), all parties are free to delete the Item from their databases.</p> <p>This process is a special case of the Change Catalogue Item in that it uses the Change Catalogue Item process to set the discontinuation flag and date.</p>
Use Cases Above	UC-2: Load and Update Catalogue Item Data within a Source Data Pool
Use Cases Below	UC-21: Delete Registered Catalogue Item
Actors	Data Source Source Data Pool (SDP) Global Registry
Performance Goals	<p>Data Source: To be able to discontinue Catalogue Item Data in the SDP (and in the Global Registry).</p> <p>SDP: To discontinue Catalogue Item Data upon request of the Data Source.</p> <p>Global Registry: To discontinue Catalogue Item Data upon request of a SDP.</p>

Preconditions	The SDP has identified the Catalogue Item Data to be discontinued.
Postconditions	The Data Source has received the discontinue acknowledgement: <i>Catalogue Item data discontinued</i>
Scenario	<p>Begins when, the Data Source sends the Catalogue Item Data to be discontinued to the SDP.</p> <ol style="list-style-type: none"> 1. The SDP receives the Catalogue Item Data to be discontinued 2. The SDP validates the Catalogue Item Data against: <ul style="list-style-type: none"> • Publication status • Availability status (end availability + discontinued Y/N) • Hierarchy (parents have to be deleted before children) 3. The SDP discontinues the Catalogue Item Data 4. The SDP discontinues any Item Link involving the Catalogue Item Data 5. The SDP sends the Registry Item data to be discontinued to the Global Registry 6. The Global Registry receives the Registry Item data to be discontinued 7. The Global Registry validates the Registry Item data 8. The Global Registry discontinues the Registry Item data (deletion flag + effective change date = deletion date in the Global Registry) 9. The Global Registry sends a discontinue acknowledgement to the SDP 10. The SDP receives the discontinue acknowledgement 11. The SDP sends the discontinue acknowledgement to the Data Source <p>Ends when, the Data Source receives the discontinue acknowledgement: <i>Catalogue Item data discontinued</i></p>
Alternative Scenario	<p>ad 2. Validation fails: <i>Catalogue Item data not discontinued</i></p> <p>2.1. SDP sends a discontinue validation error message to the Data Source</p> <p>Ends when, the Data Source receives the discontinue validation error message</p> <p>ad 7. Validation fails: Catalogue Item data not discontinued</p> <p>7.1. Global Registry sends a discontinue validation error message to the SDP</p> <p>7.2. The SDP receives the discontinue validation error message</p> <p>7.3. The SDP sends a discontinue validation error message to the Data Source</p> <p>Ends when, the Data Source receives the discontinue validation error message</p>
Special Requirements	<ul style="list-style-type: none"> • The discontinuation date starts the standard retention period depending on the sector as soon as GTIN has been discontinued in ALL target markets where it was active (needs to be stored in the registry). • A deletion cannot be corrected – only the discontinuation can be reversed. • Deletes are not synchronised across data pools.
Extension	N/A

Points Requirements Covered			
	ID	Requirement	Weight
	REQ-12	Every command needs a response and is handled according to the agreement between the parties involved. In the inter-operable network, acknowledgement messages are standardised and may	Primary
	REQ-20	Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.	Primary
	REQ-21	If an Catalogue Item is "Confirmed of Synchronisation" then all Catalogue items below in the Catalogue Item Hierarchy shall be included in the Synchronisation list.	Primary
	REQ-22	Relationship dependent data will only be communicated for Synchronised, Review or Accept status in the Synchronisation List.	Primary
	REQ-23	Events that can trigger notifications are: - Publication of new data / change of publication - Change of published Catalogue Item / Party / Partner Profile - Change of owner, rights - Subscription -	Primary
	REQ-24	Notifications must NOT be sent in the following cases since data is not yet public and validated information: - Data load (add, change, etc...) - Data validation - Registration of new Catalogue	Primary
	REQ-26	Notification to the data recipient will always include the entire hierarchy. (applies to add & update by adding a higher level)	Primary
	REQ-30	Only Catalogue Items are registered in the Global Registry. Not Catalogue Item Hierarchies.	Primary
	REQ-31	Validation acknowledgements are mandatory.	Primary
	REQ-32	Acknowledgement Reason codes must be unique.	Primary
	REQ-34	ItemLinks are not registered or held within the Global Registry.	Primary
	REQ-36	If the Catalogue Item was registered, updates impacting the Registry data must be reflected in the Global Registry.	Primary
	REQ-37	Registration of Catalogue Item changes only needs to happen for changes that: - Impact fields stored in the Global Registry. - Are authorised according to the GTIN allocation rules.	Primary
	REQ-45	Data source is sending full Hierarchies to the Source Data Pool.	Primary

	56	standard retention period depending on the sector as soon as GTIN has been discontinued in ALL target markets where it was active (needs to be stored in the Global Registry).	
	REQ-57	A deletion cannot be corrected – only the discontinuation can be reversed.	Primary
	REQ-67	Communicate the product is no longer going to be manufactured: discontinued = Y + effective change date = discontinued date in the Global Registry.	Secondary
	REQ-68	Communicate the product is no longer going to be available: maintain end availability date.	Secondary
	REQ-92	“Single Data Source” Principle : - there can only be one official source of the data – the one that is registered - this source is identified by the data source - this is the only valid source for data synchronisation and related processes	Primary
	REQ-99	The Global Registry functionality requirements can be summarised as follows: - Enable data synchronisation - Validation, registration and subscription functions - Enable global validation - Checking compliance with basic EAN.UCC rules related to the format of a GTIN/GLN and ensuring the uniqueness of the data that is being registered - Enable global search functionality that does not require full duplication of data in the Global Registry.	Primary
	REQ-100	The Global Registry is involved in the following functions and/or business cases as defined in the Item Synchronisation detailed requirements: - Validation - Registration - Subscription - Global Search	Primary
	REQ-101	Registry Validation includes : - EAN.UCC standards validation for GTIN and GLN formats (i.e. check digit) - Uniqueness validation for Item (GTIN/GLN/TM), Party (GLN) or data pool (GLN), ensuring there is only one occurrence and data source for each data record as identified by the appropriate fields.	Primary
	REQ-102	Registry validation is a part of the registration process.	Primary
	REQ-104	In summary, the registry requirements for validation are: - EAN.UCC standards validation for GTIN/GLN formats - Uniqueness validation for Item, Party and data pool key - Store and maintain EAN.UCC standards - Process validation command - Provide validation acknowledgement	Primary
	REQ-105	Registration is the process, which references all Catalogue Items and Parties published in all certified data pools and on which there is a need to synchronise / retrieve information. This is supported by data storage in accordance with the Registry data scope and rules.	Primary
	REQ-106	Registering a Catalogue Item involves a check by the Global Registry for Item uniqueness. The Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data found in the Global Registry must be unique. When an Item is registered, the	Primary

		registry verifies that the combination of this data is unique to that Item.	
	REQ-107	<p>The registration process is triggered by the following business cases: 1. Create Catalogue Item: After the physical load and validation of the data, the registry record needs to be created before data can be published. 2. Update Catalogue Item: When a registered Catalogue Item is updated in its source data pool, updates impacting the Registry data must be reflected in the Global Registry, before the updated data can be propagated to the recipients. Registration of Catalogue Item changes only needs to happen for changes that: Impacts fields stored in the Global Registry. Are authorised according to the GTIN allocation rules. 3. Correct Catalogue Item: When a registered item is corrected in its source data pool, corrections impacting the Registry data must be reflected in the Global Registry before the updated data can be propagated to the data recipients. 4. Delete Catalogue Item: Deletions need to be reflected in the Global Registry: the discontinuation dates starts the EAN.UCC standard retention period (48 months for CPG, 36 months for apparel) as soon as GTIN has been discontinued in ALL target markets where it was active (needs to be stored in the Global Registry). 5. Cancel Catalogue Item: Communicates a trade item was never manufactured – this allows an earlier “reuse” of the GTIN i.o. standard retention period. This is achieved through the maintenance (using change function) of the cancel date. 6. Removing an Catalogue Item from the supply chain: The permanent removal of a Catalogue Item from the supply chain is achieved through the maintenance of a discontinuation date. This date has to be reflected in the Global Registry to kick off the EAN.UCC retention period. Temporary removals are not reflected in the Global Registry and only handled through the maintenance of the availability period in the data pools.</p>	Primary
	REQ-108	<p>Registry requirements for registration are : - Registration can only happen after successful validation. - Registration can only produce errors, no warnings. - Successful Registration of a Catalogue Item is mandatory prior to publication of any hierarchy containing that Catalogue Item. - ItemStatus needs to be included in GTIN data model to reflect validation and registration status. - Process registration command (for create, update, correct, delete). - Provide registration acknowledgement.</p>	Primary
	REQ-118	Changes/corrections applied to the Global Registry are effective immediately.	Primary
	REQ-119	Future effective changes stored in the data pool are only reflected in the Global Registry when they become effective.	Primary

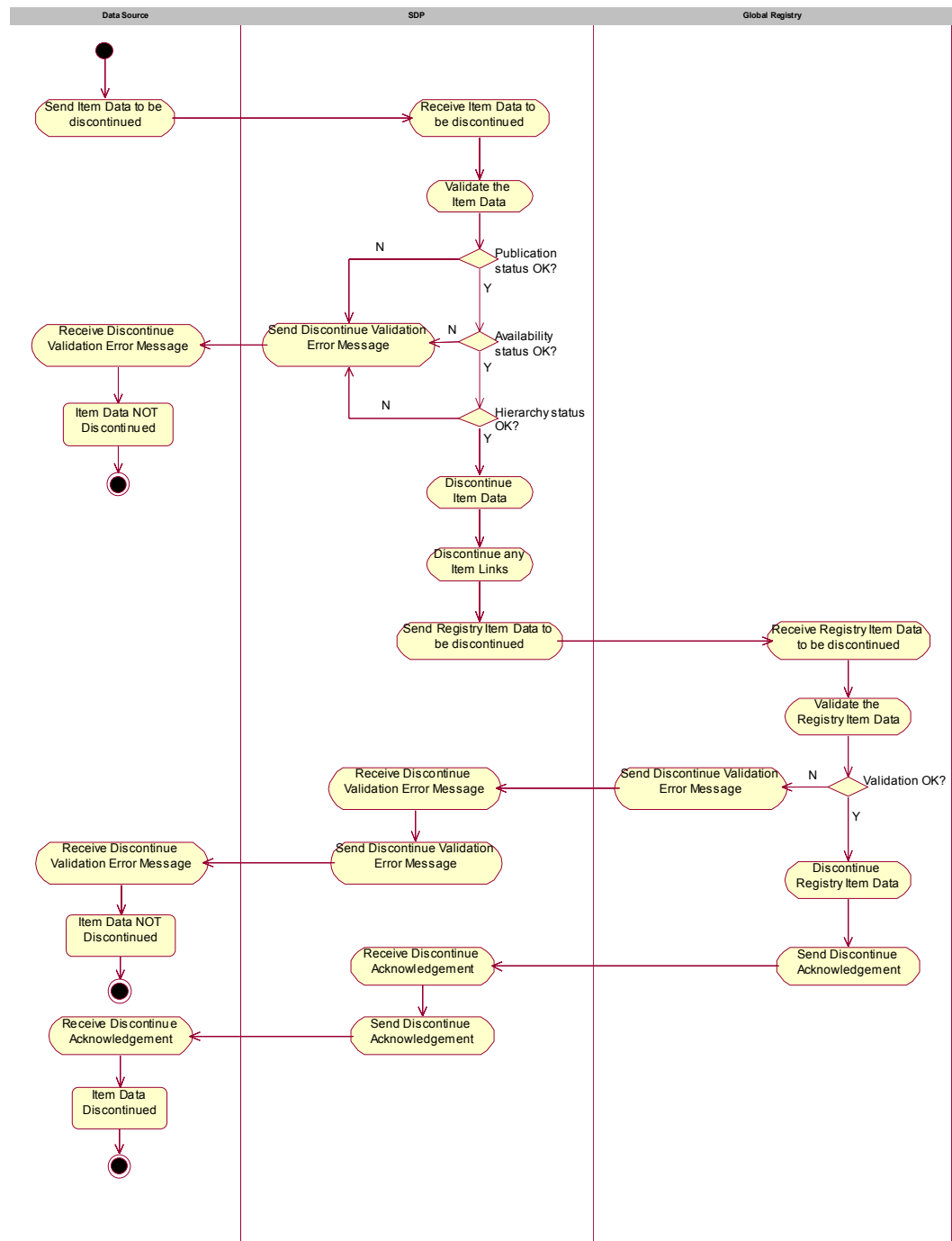


Figure 24 - Discontinue Catalogue Item Activity Diagram

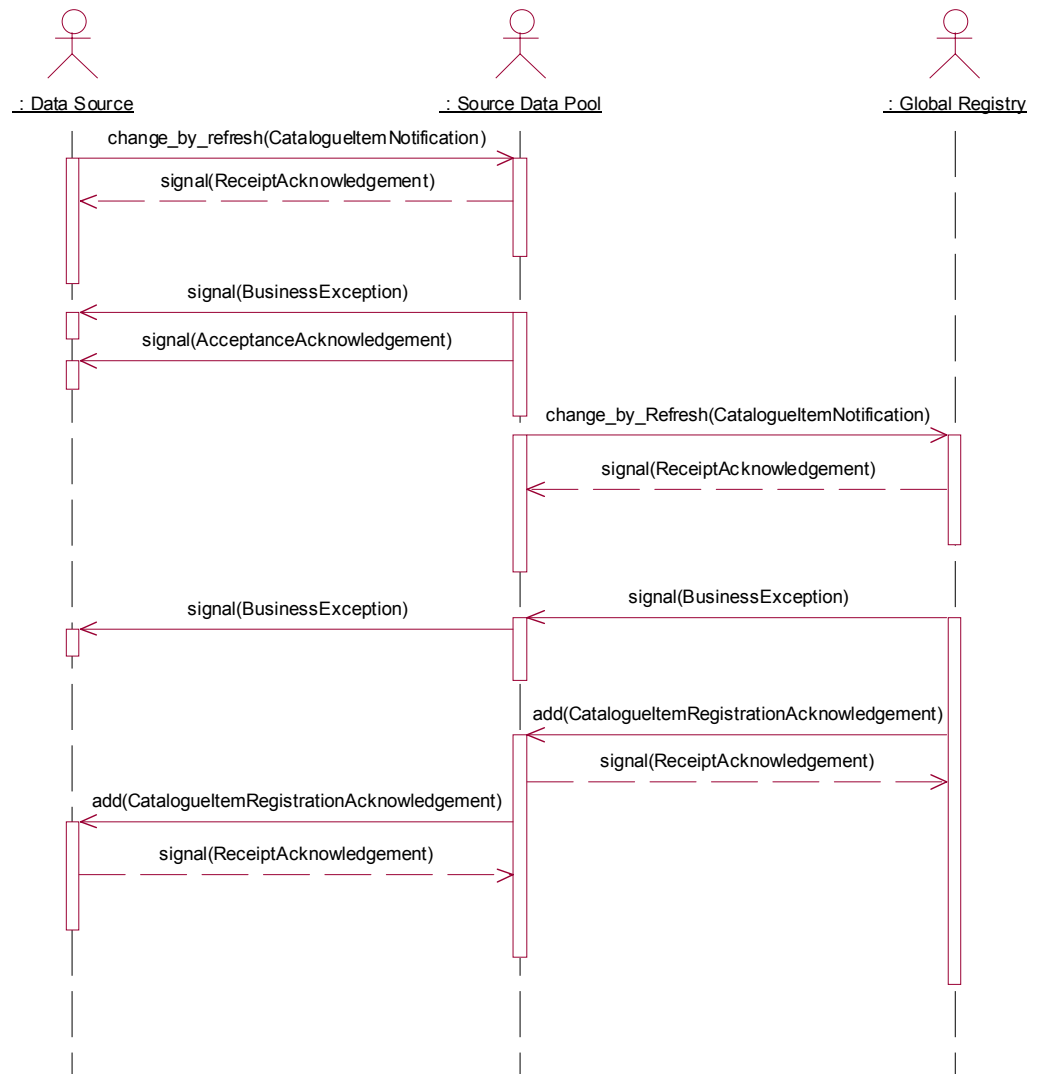


Figure 25 - Discontinue Catalogue Item Sequence Diagram

Delete Catalogue Item Hierarchy

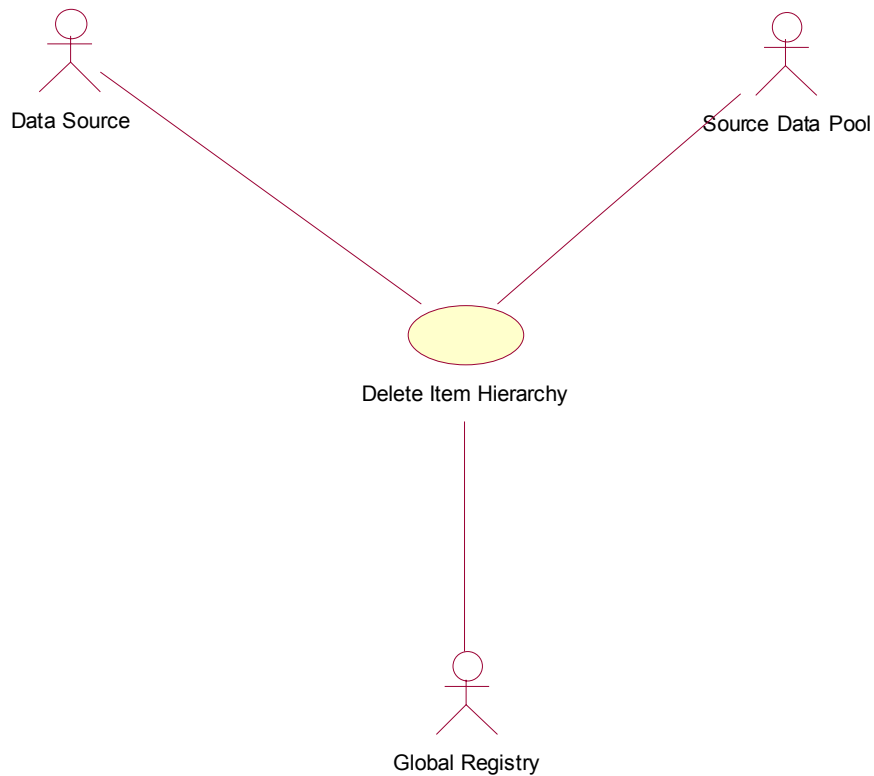


Figure 26 - Delete Catalogue Item Hierarchy Use Case

Use Case Name	Delete Catalogue Item Hierarchy	
Traceability Identifier	UC-25	
Use Case Description	This use case describes the process to remove a Catalogue Item from the Source Data Pool.	
Use Cases Above	UC-2: Load and Update Catalogue Item Data within a Source Data Pool	
Use Cases Below	None	
Actors	Data Source Source Data Pool (SDP) Global Registry	
Performance Goals	Data Source:	To be able to remove a discontinued or canceled Catalogue Item Data in the SDP (and in the Global Registry).
	SDP:	To be able to remove a discontinued or canceled Catalogue Item Data.

	Global Registry: To remove a discontinued or canceled Catalogue Item Data.																														
Preconditions	The SDP has either discontinued or canceled a Catalogue Item within the timeframe allowed by EAN.UCC standards.																														
Postconditions	The Catalogue Item has been removed from the SDP and Registry.																														
Scenario	No scenario. The SDP and Registry may remove (physically delete) a Catalogue Item that has been Canceled or Discontinued for a period described in the EAN.UCC General Specification.																														
Alternative Scenario	None																														
Special Requirements																															
Extension Points	N/A																														
Requirements Covered	<table><tr><th>ID</th><th>Requirement</th><th>Weight</th></tr><tr><td>REQ-</td><td>Data Source must be able to delete</td><td>Primary</td></tr><tr><td>REQ-</td><td>If a Catalogue Item is deleted:- the links</td><td>Primary</td></tr><tr><td>REQ-</td><td>Every command needs a response and is</td><td>Primary</td></tr><tr><td>REQ-</td><td>Synchronisation Lists must include every</td><td>Primary</td></tr><tr><td>REQ-</td><td>If an Catalogue Item is "Confirmed of</td><td>Primary</td></tr><tr><td>REQ-</td><td>Relationship dependent data will only be</td><td>Primary</td></tr><tr><td>REQ-</td><td>Events that can trigger notifications are: -</td><td>Primary</td></tr><tr><td>REQ-</td><td>Notifications must NOT be sent in the</td><td>Primary</td></tr><tr><td>REQ-</td><td>Notification to the data recipient will</td><td>Primary</td></tr></table>	ID	Requirement	Weight	REQ-	Data Source must be able to delete	Primary	REQ-	If a Catalogue Item is deleted:- the links	Primary	REQ-	Every command needs a response and is	Primary	REQ-	Synchronisation Lists must include every	Primary	REQ-	If an Catalogue Item is "Confirmed of	Primary	REQ-	Relationship dependent data will only be	Primary	REQ-	Events that can trigger notifications are: -	Primary	REQ-	Notifications must NOT be sent in the	Primary	REQ-	Notification to the data recipient will	Primary
ID	Requirement	Weight																													
REQ-	Data Source must be able to delete	Primary																													
REQ-	If a Catalogue Item is deleted:- the links	Primary																													
REQ-	Every command needs a response and is	Primary																													
REQ-	Synchronisation Lists must include every	Primary																													
REQ-	If an Catalogue Item is "Confirmed of	Primary																													
REQ-	Relationship dependent data will only be	Primary																													
REQ-	Events that can trigger notifications are: -	Primary																													
REQ-	Notifications must NOT be sent in the	Primary																													
REQ-	Notification to the data recipient will	Primary																													

		higher level)	
	REQ-30	Only Catalogue Items are registered in the Global Registry. Not Catalogue Item Hierarchies.	Primary
	REQ-31	Validation acknowledgements are mandatory.	Primary
	REQ-32	Acknowledgement Reason codes must be unique.	Primary
	REQ-33	ItemLinks are identified by the parent GTIN key + child GTIN key + quantity contained.	Primary
	REQ-34	ItemLinks are not registered or held within the Global Registry.	Primary
	REQ-36	If the Catalogue Item was registered, updates impacting the Registry data must be reflected in the Global Registry.	Primary
	REQ-37	Registration of Catalogue Item changes only needs to happen for changes that: - Impact fields stored in the Global Registry. - Are authorised according to the GTIN allocation rules.	Primary
	REQ-45	Data source is sending full Hierarchies to the Source Data Pool.	Primary
	REQ-46	New hierarchy replaces old hierarchy completely.	Primary
	REQ-47	The objective of the "Delete" Function is not to physically remove data from the data pool, but to "Flag for deletion", authorising the deletion of the data.	Primary
	REQ-48	The deletion needs to be validated against a number of criteria, e.g. Item is no longer published, item discontinued, retention limit (EAN/UCC specifications)...	Secondary
	REQ-49	Rules for archiving or physical deletes will be agreed with the data pools and in the scope of the certification process.	Primary
	REQ-50	Deletions need to be reflected in the registry (deletion flag + effective change date = deletion date in the Global Registry)	Primary
	REQ-51	To protect data integrity within the data pool, the deletion of a child can only occur after the deletion of the parents.	Primary
	REQ-52	Validation for deleted Items ensures the parents have been deleted before the deletion of the child is performed.	Primary
	REQ-53	Validation is automatically triggered by the "Delete" command and does not require a specific message flow.	Primary
	REQ-54	Deletion of a Catalogue Item must trigger the invalidation of any hierarchy links involving that Item, whether that Item is the parent or the child in the link. This is completed by the Refresh.ItemLink message. Ackn.ItemLink will be repeated for every link that was refreshed or invalidated.	Primary
	REQ-55	Deletion needs to be validated against : - Publication status - Availability Status (end availability + discontinued Y/N) - Hierarchy : parents have to be deleted before children	Primary
	REQ-57	A deletion cannot be corrected – only the discontinuation can be reversed.	Primary
	REQ-58	Deletes are not synchronised across data pools.	Primary
	REQ-	ItemLinks can only be deleted: - as the	Secondary

	59	correction of an error - as the result of a delete.Item	
	REQ-60	The validity period of a ItemLink is defined by the validity period of the Parent Item and/or the Child Item.	Secondary
	REQ-61	When either parent or child expire, the related ItemLink(s) have to expire as well. This is achieved through the Refresh.ItemLink function.	Secondary
	REQ-92	"Single Data Source" Principle : - there can only be one official source of the data – the one that is registered - this source is identified by the data source - this is the only valid source for data synchronisation and related processes	Primary
	REQ-99	The Global Registry functionality requirements can be summarised as follows: - Enable data synchronisation - Validation, registration and subscription functions - Enable global validation - Checking compliance with basic EAN.UCC rules related to the format of a GTIN/GLN and ensuring the uniqueness of the data that is being registered - Enable global search functionality that does not require full duplication of data in the Global Registry.	Primary
	REQ-100	The Global Registry is involved in the following functions and/or business cases as defined in the Item Synchronisation detailed requirements: - Validation - Registration - Subscription - Global Search	Primary
	REQ-101	Registry Validation includes : - EAN.UCC standards validation for GTIN and GLN formats (i.e. check digit) - Uniqueness validation for Item (GTIN/GLN/TM), Party (GLN) or data pool (GLN), ensuring there is only one occurrence and data source for each data record as identified by the appropriate fields.	Primary
	REQ-102	Registry validation is a part of the registration process.	Primary
	REQ-104	In summary, the registry requirements for validation are: - EAN.UCC standards validation for GTIN/GLN formats - Uniqueness validation for Item, Party and data pool key - Store and maintain EAN.UCC standards - Process validation command - Provide validation acknowledgement	Primary
	REQ-105	Registration is the process, which references all Catalogue Items and Parties published in all certified data pools and on which there is a need to synchronise / retrieve information. This is supported by data storage in accordance with the Registry data scope and rules.	Primary
	REQ-106	Registering a Catalogue Item involves a check by the Global Registry for Item uniqueness. The Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data found in the Global Registry must be unique. When an Item is registered, the registry verifies that the combination of this data is unique to that Item.	Primary
	REQ-107	The registration process is triggered by the following business cases: 1. Create Catalogue Item: After the physical load	Primary

		<p>and validation of the data, the registry record needs to be created before data can be published. 2. Update Catalogue Item: When a registered Catalogue Item is updated in its source data pool, updates impacting the Registry data must be reflected in the Global Registry, before the updated data can be propagated to the recipients. Registration of Catalogue Item changes only needs to happen for changes that: Impacts fields stored in the Global Registry. Are authorised according to the GTIN allocation rules. 3. Correct Catalogue Item: When a registered item is corrected in its source data pool, corrections impacting the Registry data must be reflected in the Global Registry before the updated data can be propagated to the data recipients. 4. Delete Catalogue Item: Deletions need to be reflected in the Global Registry: the discontinuation dates starts the EAN.UCC standard retention period (48 months for CPG, 36 months for apparel) as soon as GTIN has been discontinued in ALL target markets where it was active (needs to be stored in the Global Registry). 5. Cancel Catalogue Item: Communicates a trade item was never manufactured – this allows an earlier “reuse” of the GTIN i.o. standard retention period. This is achieved through the maintenance (using change function) of the cancel date. 6. Removing an Catalogue Item from the supply chain: The permanent removal of a Catalogue Item from the supply chain is achieved through the maintenance of a discontinuation date. This date has to be reflected in the Global Registry to kick off the EAN.UCC retention period. Temporary removals are not reflected in the Global Registry and only handled through the maintenance of the availability period in the data pools.</p>	
	REQ-108	<p>Registry requirements for registration are : - Registration can only happen after successful validation. - Registration can only produce errors, no warnings. - Successful Registration of a Catalogue Item is mandatory prior to publication of any hierarchy containing that Catalogue Item. - ItemStatus needs to be included in GTIN data model to reflect validation and registration status. - Process registration command (for create, update, correct, delete). - Provide registration acknowledgement.</p>	Primary
	REQ-118	Changes/corrections applied to the Global Registry are effective immediately.	Primary
	REQ-119	Future effective changes stored in the data pool are only reflected in the Global Registry when they become effective.	Primary

Cancel Catalogue Item

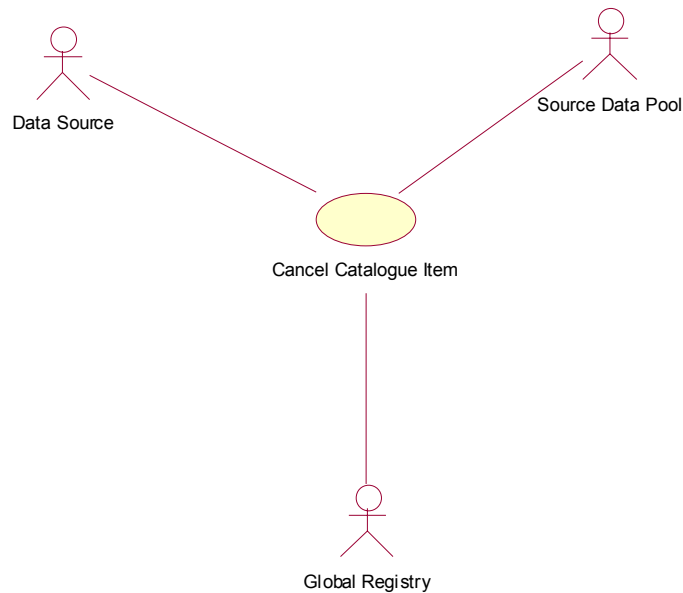


Figure 27 - Cancel Catalogue Item Use Case Diagram

Use Case Name	Cancel Catalogue Item
Traceability Identifier	UC-7
Use Case Description	<p>In certain cases, a manufacturer will register a Catalogue Item prior to deciding if it will ultimately be manufactured and sold.</p> <p>The Cancel Catalogue Item use case describes the process to communicate that a trade item was never manufactured. This allows the reuse of the GTIN 12 months after cancellation instead of 48 months.</p> <p>Note: This is a special usage of the Change Catalogue Item Hierarchy or Correct Catalogue Item Hierarchy use cases.</p>
Use Cases Above	UC-2: Load and Update Catalogue Item Data within a Source Data Pool
Use Cases Below	UC-7: Cancel Catalogue Item
Actors	Data Source Source Data Pool (SDP) Global Registry
Performance Goals	Data Source: To be able to reuse the GTIN of a Catalogue Item that has not been manufactured as soon as possible.

	<p>SDP: To have validated, registered updated Catalogue Item Hierarchy data.</p> <p>Global Registry: To ensure valid, unique Catalogue Item data are registered.</p>
Preconditions	Data Source has registered a Catalogue Item that it now does not intend to manufacture.
Postconditions	Catalogue Item retention period begins (after which, the GTIN can be reused).
Scenario	<p>Begins when, the Data Source sends, to the SDP, Catalogue Item Hierarchy data with a Catalogue Item that contains a cancel date.</p> <ol style="list-style-type: none"> 1. The SDP receives Catalogue Item Hierarchy data to be changed 2. The SDP validates Catalogue Item Hierarchy data to be changed 3. The SDP sends a validation acknowledgement to the Data Source 4. The Data Source receives the validation acknowledgement: <i>Catalogue Item Hierarchy data cancelled</i> 5. <i>The SDP loads the changed Catalogue Item Hierarchy data</i> 6. <i>The SDP sends the Registry Item data (to be changed) to the Global Registry</i> 7. The Global Registry receives the Registry Item data to be changed 8. The Global Registry checks that the Catalogue Item exists in the Registry.. 9. The Global Registry registers the changed Registry Item data 10. The Global Registry sends a registration acknowledgement to the SDP 11. The SDP receives the registration acknowledgement 12. The SDP stores the registration acknowledgement 13. The SDP sends a registration acknowledgement to the Data Source <p>Ends when, the Data Source receives the registration acknowledgement: <i>Catalogue Item data changed</i></p>
Alternative Scenario	<p>ad 2. Validation fails: <i>Catalogue Item Hierarchy data not loaded</i></p> <p>2.1. SDP sends an validation error message to the Data Source</p> <p>Ends when, the Data Source receives the validation error message</p> <p>ad 8. <i>The Catalogue Item is not found in the Registry:</i> Catalogue Item data not registered</p> <p>8.1. <i>Global Registry sends a registration error message to the SDP</i></p> <p>8.2. <i>The SDP receives the registration error message</i></p> <p>8.3. <i>The SDP sends a registration error message to the Data Source</i></p> <p>Ends when, the Data Source receives the registration error message</p> <p>ad 3. & 13. <i>The validation and registration acknowledgment messages can be combined</i></p>

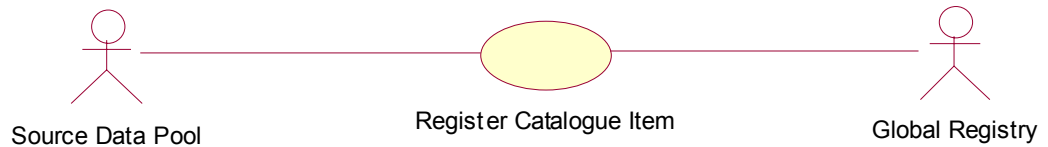
	** The Catalogue Item Data is now not available for distribution.																																									
Special Requirements	<ul style="list-style-type: none">• Data Source is using a (source) data pool.• Catalogue Item Hierarchy data consists of Catalogue Item data and Item Link data (if applicable).• Validation is done against existing data, applying GDD standard and GTIN allocation rules.• Catalogue Item Hierarchy data bypasses the GTIN Allocation Rules																																									
Extension Points	N/A																																									
Requirements Covered	<table><tr><th>ID</th><th>Requirement</th><th>Weight</th></tr><tr><td>REQ-12</td><td>Every command needs a response and is handled according to the agreement between the parties involved. In the inter-</td><td>Primary</td></tr><tr><td>REQ-20</td><td>Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.</td><td>Primary</td></tr><tr><td>REQ-21</td><td>If an Catalogue Item is "Confirmed of Synchronisation" then all Catalogue items below in the Catalogue Item Hierarchy</td><td>Primary</td></tr><tr><td>REQ-22</td><td>Relationship dependent data will only be communicated for Synchronised, Review or Accept status in the Synchronisation</td><td>Primary</td></tr><tr><td>REQ-23</td><td>Events that can trigger notifications are: - Publication of new data / change of publication - Change of published</td><td>Primary</td></tr><tr><td>REQ-24</td><td>Notifications must NOT be sent in the following cases since data is not yet public and validated information: - Data</td><td>Primary</td></tr><tr><td>REQ-26</td><td>Notification to the data recipient will always include the entire hierarchy. (applies to add & update by adding a</td><td>Primary</td></tr><tr><td>REQ-30</td><td>Only Catalogue Items are registered in the Global Registry. Not Catalogue Item Hierarchies.</td><td>Primary</td></tr><tr><td>REQ-31</td><td>Validation acknowledgements are mandatory.</td><td>Primary</td></tr><tr><td>REQ-32</td><td>Acknowledgement Reason codes must be unique.</td><td>Primary</td></tr><tr><td>REQ-34</td><td>ItemLinks are not registered or held within the Global Registry.</td><td>Primary</td></tr><tr><td>REQ-36</td><td>If the Catalogue Item was registered, updates impacting the Registry data must be reflected in the Global Registry.</td><td>Primary</td></tr></table>			ID	Requirement	Weight	REQ-12	Every command needs a response and is handled according to the agreement between the parties involved. In the inter-	Primary	REQ-20	Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.	Primary	REQ-21	If an Catalogue Item is "Confirmed of Synchronisation" then all Catalogue items below in the Catalogue Item Hierarchy	Primary	REQ-22	Relationship dependent data will only be communicated for Synchronised, Review or Accept status in the Synchronisation	Primary	REQ-23	Events that can trigger notifications are: - Publication of new data / change of publication - Change of published	Primary	REQ-24	Notifications must NOT be sent in the following cases since data is not yet public and validated information: - Data	Primary	REQ-26	Notification to the data recipient will always include the entire hierarchy. (applies to add & update by adding a	Primary	REQ-30	Only Catalogue Items are registered in the Global Registry. Not Catalogue Item Hierarchies.	Primary	REQ-31	Validation acknowledgements are mandatory.	Primary	REQ-32	Acknowledgement Reason codes must be unique.	Primary	REQ-34	ItemLinks are not registered or held within the Global Registry.	Primary	REQ-36	If the Catalogue Item was registered, updates impacting the Registry data must be reflected in the Global Registry.	Primary
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	REQ-37	Registration of Catalogue Item changes only needs to happen for changes that: - Impact fields stored in the Global Registry. - Are authorised according to the GTIN allocation rules.	Primary
	REQ-45	Data source is sending full Hierarchies to the Source Data Pool.	Primary
	REQ-62	Cancel Catalogue Item is achieved through the maintenance (using change function) of the cancel date.	Secondary
	REQ-63	Need cancel date in Catalogue Item data model.	Secondary
	REQ-64	Cancel date needs to be stored in the Global Registry.	Secondary
	REQ-65	Communicate that product is no longer available: maintain end availability date.	Secondary
	REQ-66	When product is available again: update start/end availability date.	Secondary
	REQ-92	"Single Data Source" Principle : - there can only be one official source of the data – the one that is registered - this source is identified by the data source - this is the only valid source for data synchronisation and related processes	Primary
	REQ-99	The Global Registry functionality requirements can be summarised as follows: - Enable data synchronisation - Validation, registration and subscription functions - Enable global validation - Checking compliance with basic EAN.UCC rules related to the format of a GTIN/GLN and ensuring the uniqueness of the data that is being registered - Enable global search functionality that does not require full duplication of data in the Global Registry.	Primary
	REQ-100	The Global Registry is involved in the following functions and/or business cases as defined in the Item Synchronisation detailed requirements: - Validation - Registration - Subscription - Global Search	Primary
	REQ-101	Registry Validation includes : - EAN.UCC standards validation for GTIN and GLN formats (i.e. check digit) - Uniqueness validation for Item (GTIN/GLN/TM), Party (GLN) or data pool (GLN), ensuring there is only one occurrence and data source for each data record as identified by the appropriate fields.	Primary
	REQ-102	Registry validation is a part of the registration process.	Primary
	REQ-104	In summary, the registry requirements for validation are: - EAN.UCC standards validation for GTIN/GLN formats - Uniqueness validation for Item, Party and data pool key - Store and maintain EAN.UCC standards - Process validation command - Provide validation acknowledgement	Primary
	REQ-105	Registration is the process, which references all Catalogue Items and Parties published in all certified data pools and on which there is a need to synchronise / retrieve information. This is supported by data storage in accordance	Primary

		with the Registry data scope and rules.	
	REQ-106	Registering a Catalogue Item involves a check by the Global Registry for Item uniqueness. The Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data found in the Global Registry must be unique. When an Item is registered, the registry verifies that the combination of this data is unique to that Item.	Primary
	REQ-107	The registration process is triggered by the following business cases: 1. Create Catalogue Item: After the physical load and validation of the data, the registry record needs to be created before data can be published. 2. Update Catalogue Item: When a registered Catalogue Item is updated in its source data pool, updates impacting the Registry data must be reflected in the Global Registry, before the updated data can be propagated to the recipients. Registration of Catalogue Item changes only needs to happen for changes that: Impacts fields stored in the Global Registry. Are authorised according to the GTIN allocation rules. 3. Correct Catalogue Item: When a registered item is corrected in its source data pool, corrections impacting the Registry data must be reflected in the Global Registry before the updated data can be propagated to the data recipients. 4. Delete Catalogue Item: Deletions need to be reflected in the Global Registry: the discontinuation dates starts the EAN.UCC standard retention period (48 months for CPG, 36 months for apparel) as soon as GTIN has been discontinued in ALL target markets where it was active (needs to be stored in the Global Registry). 5. Cancel Catalogue Item: Communicates a trade item was never manufactured – this allows an earlier “reuse” of the GTIN i.o. standard retention period. This is achieved through the maintenance (using change function) of the cancel date. 6. Removing an Catalogue Item from the supply chain: The permanent removal of a Catalogue Item from the supply chain is achieved through the maintenance of a discontinuation date. This date has to be reflected in the Global Registry to kick off the EAN.UCC retention period. Temporary removals are not reflected in the Global Registry and only handled through the maintenance of the availability period in the data pools.	Primary
	REQ-108	Registry requirements for registration are : - Registration can only happen after successful validation. - Registration can only produce errors, no warnings. - Successful Registration of a Catalogue Item is mandatory prior to publication of any hierarchy containing that Catalogue Item. - ItemStatus needs to be included in GTIN data model to reflect validation and registration status. - Process registration command (for create, update, correct, delete). - Provide registration acknowledgement.	Primary
	REQ-118	Changes/corrections applied to the Global Registry are effective immediately	Primary

	REQ-119	Future effective changes stored in the data pool are only reflected in the Global Registry when they become effective.	Primary
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Register Catalogue Item



Use Case Name	Register Catalogue Item
Traceability Identifier	UC-18
Use Case Description	<p>All Catalogue Items for trade must be registered in the Global Registry. Prior to registration, the Catalogue Item data must pass a validation at the Source Data Pool and a uniqueness check at the Registry. The Global Registry ensures that valid, unique Catalogue Item data are available worldwide.</p> <p>This Use Case describes the Registration process that is performed by the Global Registry.</p>
Use Cases Above	UC-2: Load and Update Catalogue Item Data within a Source Data Pool
Use Cases Below	None
Actors	Source Data Pool (SDP) Global Registry
Performance Goals	<p>SDP: To have validated, registered Catalogue Item data.</p> <p>Global Registry: To ensure valid, unique Catalogue Item data are registered.</p>
Preconditions	The Source Data Pool is a certified Data Pool. The Source Data Pool has a profile that resides in the registry. The Source Data Pool has validated Catalogue Item data received from a Data Source and has sent that Catalogue Item data and a Validation Certificate to the Global Registry.
Postconditions	The Catalogue Item data has been registered and retained by the Global Registry.
Scenario	<p>Begins when, the Global Registry receives validated Catalogue Item Data from a Source Data Pool.</p> <ol style="list-style-type: none"> 1. The Global Registry ensures that the Source Data Pool is certified. 2. The Global Registry validates the Validation Certificate (from validation engine) sent with the Catalogue Item data.

	<p>3. The Global Registry verifies the uniqueness of the GTIN, GLN, TM combination.</p> <p>4. The Global Registry stores the Catalogue Item data.</p> <p>Ends when, The Global Registry sends a registration acknowledgement to the SDP</p>																								
Alternative Scenario	<p>ad 1. Data Pool not certified:</p> <p>1.1. The Global Registry sends an error message to the Source Data Pool</p> <p>Ends when, the Source Data Pool receives the error message</p> <p>ad 2. <i>Validation certificate does not pass validation:</i></p> <p>2.1. The Global Registry sends a validation error message to the Source Data Pool</p> <p>Ends when, the Source Data Pool receives the validation error message</p> <p>ad 3. <i>The Catalogue Item already exists in the Registry:</i></p> <p>3.1. <i>Global Registry sends a registration error message to the SDP</i></p> <p>3.2. <i>The SDP receives the registration error message</i></p> <p>3.3. <i>The SDP sends a registration error message to the Data Source</i></p> <p>Ends when, the Data Source receives the registration error message</p>																								
Special Requirements	<ul style="list-style-type: none">Validation: applying GDD standard and GTIN allocation rules.																								
Extension Points	N/A																								
Requirements Covered	<table><tr><th>ID</th><th>Requirement</th><th>Weight</th></tr><tr><td>REQ-1</td><td>Party data must exist prior to a Catalogue Item is being registered.</td><td>Secondary</td></tr><tr><td>REQ-2</td><td>Catalogue Item data must be validated prior to registration.</td><td>Secondary</td></tr><tr><td>REQ-8</td><td>EAN.UCC standards validation for GTIN and GLN format.</td><td>Primary</td></tr><tr><td>REQ-9</td><td>Uniqueness validation for Item (GTIN/GLN/TM), Party (GLN) or data pool (GLN) – only applies to the occurrence of</td><td>Primary</td></tr><tr><td>REQ-10</td><td>The Catalogue Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data</td><td>Secondary</td></tr><tr><td>REQ-12</td><td>Every command needs a response and is handled according to the agreement between the parties involved. In the inter-</td><td>Primary</td></tr><tr><td>REQ-20</td><td>Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.</td><td>Primary</td></tr></table>	ID	Requirement	Weight	REQ-1	Party data must exist prior to a Catalogue Item is being registered.	Secondary	REQ-2	Catalogue Item data must be validated prior to registration.	Secondary	REQ-8	EAN.UCC standards validation for GTIN and GLN format.	Primary	REQ-9	Uniqueness validation for Item (GTIN/GLN/TM), Party (GLN) or data pool (GLN) – only applies to the occurrence of	Primary	REQ-10	The Catalogue Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data	Secondary	REQ-12	Every command needs a response and is handled according to the agreement between the parties involved. In the inter-	Primary	REQ-20	Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.	Primary
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	REQ-20	Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.	Primary
	REQ-23	Events that can trigger notifications are: - Publication of new data / change of publication - Change of published Catalogue Item / Party / Partner Profile - Change of owner, rights - Subscription - Synchronisation List - Confirmation/ Rejection - Request for Notification - Any successful matching process	Primary
	REQ-24	Notifications must NOT be sent in the following cases since data is not yet public and validated information: - Data load (add, change, etc...) - Data validation - Registration of new Catalogue Item	Secondary
	REQ-30	Only Catalogue Items are registered in the Global Registry. Not Catalogue Item Hierarchies.	Secondary
	REQ-31	Validation acknowledgements are mandatory.	Secondary
	REQ-32	Acknowledgement Reason codes must be unique.	Primary
	REQ-34	ItemLinks are not registered or held within the Global Registry.	Secondary
	REQ-36	If the Catalogue Item was registered, updates impacting the Registry data must be reflected in the Global Registry.	Primary
	REQ-37	Registration of Catalogue Item changes only needs to happen for changes that: - Impact fields stored in the Global Registry. - Are authorised according to the GTIN allocation rules.	Primary
	REQ-42	If the correction impacts the hierarchy, then it must be handled by deleting the incorrect ItemLink and adding a new Item Link - Add/Delete Scenario's.	Primary
	REQ-92	"Single Data Source" Principle : - there can only be one official source of the data - the one that is registered - this source is identified by the data source - this is the only valid source for data synchronisation and related processes	Primary
	REQ-99	The Global Registry functionality requirements can be summarised as follows: - Enable data synchronisation - Validation, registration and subscription functions - Enable global validation - Checking compliance with basic EAN.UCC rules related to the format of a GTIN/GLN and ensuring the uniqueness of the data that is being registered - Enable global search functionality that does not require full duplication of data in the Global Registry.	Primary
	REQ-100	The Global Registry is involved in the following functions and/or business cases as defined in the Item Synchronisation detailed requirements: - Validation - Registration - Subscription - Global Search	Primary
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		appropriate fields.	
	REQ-102	Registry validation is a part of the registration process.	Secondary
	REQ-104	In summary, the registry requirements for validation are: - EAN.UCC standards validation for GTIN/GLN formats - Uniqueness validation for Item, Party and data pool key - Store and maintain EAN.UCC standards - Process validation command - Provide validation acknowledgement	Secondary
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	REQ-106	Registering a Catalogue Item involves a check by the Global Registry for Item uniqueness. The Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data found in the Global Registry must be unique. When an Item is registered, the registry verifies that the combination of this data is unique to that Item.	Secondary
	REQ-107	The registration process is triggered by the following business cases: 1. Create Catalogue Item: After the physical load and validation of the data, the registry record needs to be created before data can be published. 2. Update Catalogue Item: When a registered Catalogue Item is updated in its source data pool, updates impacting the Registry data must be reflected in the Global Registry, before the updated data can be propagated to the recipients. Registration of Catalogue Item changes only needs to happen for changes that: Impacts fields stored in the Global Registry. Are authorised according to the GTIN allocation rules. 3. Correct Catalogue Item: When a registered item is corrected in its source data pool, corrections impacting the Registry data must be reflected in the Global Registry before the updated data can be propagated to the data recipients. 4. Delete Catalogue Item: Deletions need to be reflected in the Global Registry: the discontinuation dates starts the EAN.UCC standard retention period (48 months for CPG, 36 months for apparel) as soon as GTIN has been discontinued in ALL target markets where it was active (needs to be stored in the Global Registry). 5. Cancel Catalogue Item: Communicates a trade item was never manufactured – this allows an earlier “reuse” of the GTIN i.o. standard retention period. This is achieved through the maintenance (using change function) of the cancel date. 6. Removing an Catalogue Item from the supply chain: The permanent removal of a Catalogue Item from the supply chain is achieved through the maintenance of a discontinuation date. This date has to be reflected in the Global Registry to kick off the EAN.UCC retention period. Temporary removals are not reflected in the Global Registry and only handled through the	Secondary

		maintenance of the availability period in the data pools.	
	REQ-108	Registry requirements for registration are : - Registration can only happen after successful validation. - Registration can only produce errors, no warnings. - Successful Registration of a Catalogue Item is mandatory prior to publication of any hierarchy containing that Catalogue Item. - ItemStatus needs to be included in GTIN data model to reflect validation and registration status. - Process registration command (for create, update, correct, delete). - Provide registration acknowledgement.	Secondary
	REQ-117	Catalogue Item: - GTIN - GLN of Data Source - Unique Item Identification - Target Market - Country Code [3166-1] - Sub-division code [3166-2] - EAN.UCC Classification [brick level] - Address of the source data pool (GLN used to look up url in data pool profile) - Registration Date - Deletion Date (default : 31.12.9999) - Cancel Date (default : 31.12.9999) - Discontinued Date (default : 31.12.9999) - Date and Time of last change (system date for every action on the Catalogue Item) - Item Validation Information (including validation engine Version, validation date Date & Certificate ID) – certificate ID only has to be maintained at item creation time, periodic maintenance does not affect the Global Registry but is ensured in the data notification (notified certificate needs to be equal or higher than registry certificate)	Secondary
	REQ-121	Party: - GLN - Start Availability Date of the Party - Deletion Date of the Party - Registration Date - Source Data Pool Pointer [GLN used to] - GLN of Data Source (*Data Source is actually the 'owner' of the GLN data - Date and Time of last change - Party Validation Information (including Version, Date & Certificate ID)	Secondary

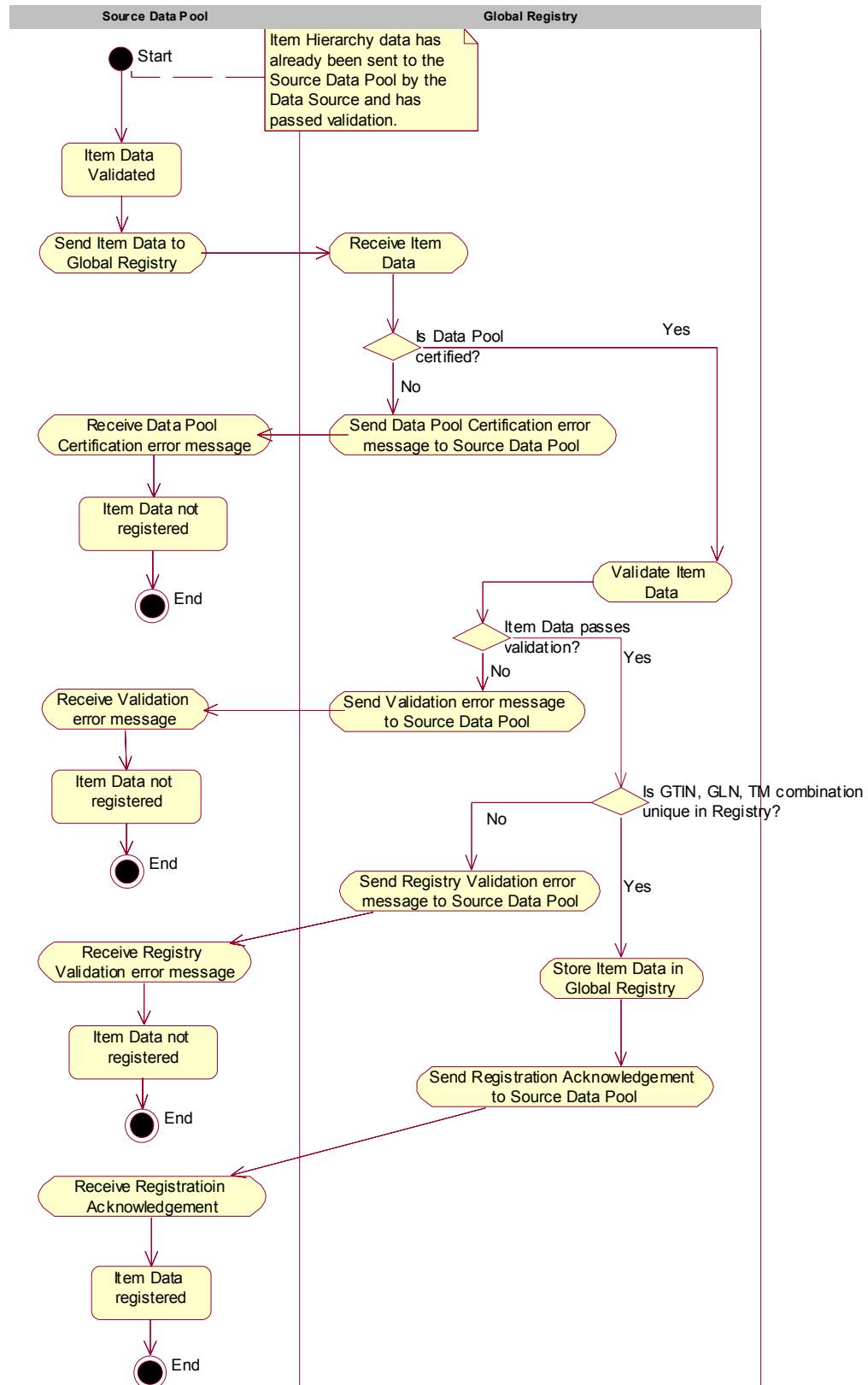


Figure 28 - Register Catalogue Item Activity Diagram

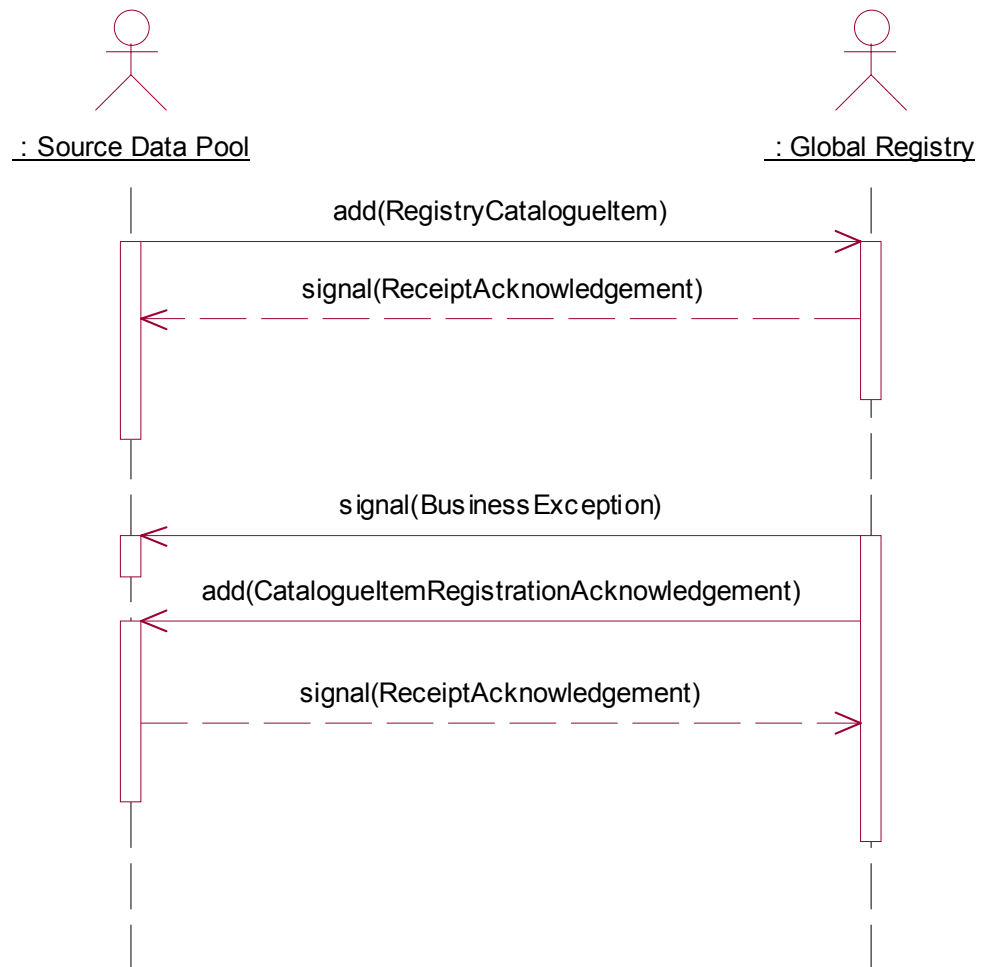


Figure 29 - Register Catalogue Item Sequence Diagram

Change Registered Catalogue Item

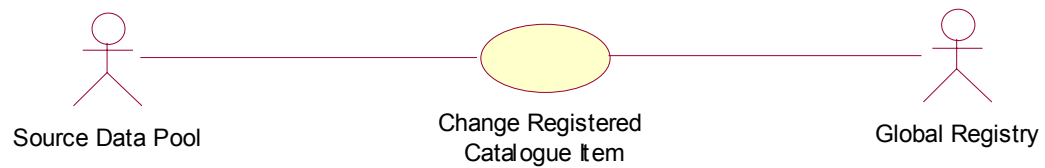


Figure 30 - Change Registered Catalogue Item Use Case Diagram

Use Case Name	Change Registered Catalogue Item
Traceability Identifier	UC-19
Use Case Description	<p>All Catalogue Items for trade must be registered in the Global Registry. Prior to registration, the Catalogue Item data must pass a validation at the Source Data Pool and a uniqueness check at the Registry. The Global Registry ensures that valid, unique Catalogue Item data are available worldwide.</p> <p>In the event that Catalogue Item data changes (see Change Catalogue Item Hierarchy Use Case) in a Source Data Pool, the changes must be reflected in the Global Registry.</p>
Use Cases Above	UC-10: Change Catalogue Item
Use Cases Below	None
Actors	Source Data Pool (SDP) Global Registry
Performance Goals	<p>SDP: To have validated, registered Catalogue Item data.</p> <p>Global Registry: To ensure valid, unique Catalogue Item data are registered.</p>
Preconditions	The Source Data Pool is a certified Data Pool. . The Source Data Pool has a profile that resides in the registry. The Source Data Pool has received a "Change Catalogue Item Hierarchy" message from the Data Source. The Source Data Pool has validated Catalogue Item data received from a Data Source and has sent that Catalogue Item data and a Validation Certificate to the Global Registry.
Postconditions	The Catalogue Item data changes have been applied and retained in the Global Registry.
Scenario	<p>Begins when, the Global Registry receives a validated Change Registered Catalogue Item message from a Source Data Pool.</p> <ol style="list-style-type: none"> 1. The Global Registry ensures that the Source Data Pool is certified. 2. The Global Registry validates the Validation Certificate (from

	<p>validation engine) sent with the Catalogue Item data.</p> <p>3. The Global Registry ensures that the Catalogue Item data already exists in the Registry.</p> <p>4. The Global Registry stores the Catalogue Item data.</p> <p>Ends when, The Global Registry sends a registration acknowledgement to the SDP</p>																					
Alternative Scenario	<p>ad 1. Data Pool not certified:</p> <p>1.1. The Global Registry sends an error message to the Source Data Pool</p> <p>Ends when, the Source Data Pool receives the error message</p> <p><i>ad 2. Validation certificate does not pass validation:</i></p> <p>2.1. The Global Registry sends a validation error message to the Source Data Pool</p> <p>Ends when, the Source Data Pool receives the validation error message</p> <p><i>ad 3. The Catalogue Item does not exist in the Registry:</i></p> <p>3.1. Global Registry sends a registration error message to the SDP</p> <p>3.2. The SDP receives the registration error message</p> <p>Ends when, the Source Data Pool receives the registration error message</p>																					
Special Requirements	<ul style="list-style-type: none">Validation: applying GDD standard and GTIN allocation rules.																					
Extension Points	N/A																					
Requirements Covered	<table><tr><th>ID</th><th>Requirement</th><th>Weight</th></tr><tr><td>REQ-4</td><td>Data Source must be able to change Catalogue Item data in the Source Data Pool.</td><td>Secondary</td></tr><tr><td>REQ-8</td><td>EAN.UCC standards validation for GTIN and GLN format.</td><td>Primary</td></tr><tr><td>REQ-9</td><td>Uniqueness validation for Item (GTIN/GLN/TM), Party (GLN) or data pool (GLN) – only applies to the occurrence of</td><td>Primary</td></tr><tr><td>REQ-10</td><td>The Catalogue Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data</td><td>Primary</td></tr><tr><td>REQ-12</td><td>Every command needs a response and is handled according to the agreement between the parties involved. In the inter-</td><td>Primary</td></tr><tr><td>REQ-20</td><td>Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.</td><td>Primary</td></tr></table>	ID	Requirement	Weight	REQ-4	Data Source must be able to change Catalogue Item data in the Source Data Pool.	Secondary	REQ-8	EAN.UCC standards validation for GTIN and GLN format.	Primary	REQ-9	Uniqueness validation for Item (GTIN/GLN/TM), Party (GLN) or data pool (GLN) – only applies to the occurrence of	Primary	REQ-10	The Catalogue Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data	Primary	REQ-12	Every command needs a response and is handled according to the agreement between the parties involved. In the inter-	Primary	REQ-20	Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.	Primary
ID	Requirement	Weight																				
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REQ-8	EAN.UCC standards validation for GTIN and GLN format.	Primary																				
REQ-9	Uniqueness validation for Item (GTIN/GLN/TM), Party (GLN) or data pool (GLN) – only applies to the occurrence of	Primary																				
REQ-10	The Catalogue Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data	Primary																				
REQ-12	Every command needs a response and is handled according to the agreement between the parties involved. In the inter-	Primary																				
REQ-20	Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.	Primary																				

	REQ-20	Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.	Primary
	REQ-23	Events that can trigger notifications are: - Publication of new data / change of publication - Change of published Catalogue Item / Party / Partner Profile - Change of owner, rights - Subscription - Synchronisation List - Confirmation/ Rejection - Request for Notification - Any successful matching process	Primary
	REQ-24	Notifications must NOT be sent in the following cases since data is not yet public and validated information: - Data load (add, change, etc...) - Data validation - Registration of new Catalogue Item	Primary
	REQ-30	Only Catalogue Items are registered in the Global Registry. Not Catalogue Item Hierarchies.	Primary
	REQ-31	Validation acknowledgements are mandatory.	Primary
	REQ-32	Acknowledgement Reason codes must be unique.	Primary
	REQ-34	ItemLinks are not registered or held within the Global Registry.	Primary
	REQ-35	Changes have to comply with validation rules.	Secondary
	REQ-36	If the Catalogue Item was registered, updates impacting the Registry data must be reflected in the Global Registry.	Secondary
	REQ-37	Registration of Catalogue Item changes only needs to happen for changes that: - Impact fields stored in the Global Registry. - Are authorised according to the GTIN allocation rules.	Secondary
	REQ-38	The change function implies a full refresh of all attributes of the previously created Catalogue Item – this will be reflected in the subsequent notification, including a full refresh of the changed record of the full hierarchy.	Primary
	REQ-62	Cancel Catalogue Item is achieved through the maintenance (using change function) of the cancel date.	Primary
	REQ-64	Cancel date needs to be stored in the Global Registry.	Primary
	REQ-92	“Single Data Source” Principle : - there can only be one official source of the data – the one that is registered - this source is identified by the data source - this is the only valid source for data synchronisation and related processes	Primary
	REQ-99	The Global Registry functionality requirements can be summarised as follows: - Enable data synchronisation - Validation, registration and subscription functions - Enable global validation - Checking compliance with basic EAN.UCC rules related to the format of a GTIN/GLN and ensuring the uniqueness of the data that is being registered - Enable global search functionality that does not require full duplication of data in the Global Registry.	Primary
	REQ-100	The Global Registry is involved in the following functions and/or business cases as defined in the Item Synchronisation detailed requirements: - Validation -	Primary

		Registration - Subscription - Global Search	
	REQ-101	Registry Validation includes : - EAN.UCC standards validation for GTIN and GLN formats (i.e. check digit) - Uniqueness validation for Item (GTIN/GLN/TM), Party (GLN) or data pool (GLN), ensuring there is only one occurrence and data source for each data record as identified by the appropriate fields.	Primary
	REQ-102	Registry validation is a part of the registration process.	Primary
	REQ-104	In summary, the registry requirements for validation are: - EAN.UCC standards validation for GTIN/GLN formats - Uniqueness validation for Item, Party and data pool key - Store and maintain EAN.UCC standards - Process validation command - Provide validation acknowledgement	Primary
	REQ-105	Registration is the process, which references all Catalogue Items and Parties published in all certified data pools and on which there is a need to synchronise / retrieve information. This is supported by data storage in accordance with the Registry data scope and rules.	Primary
	REQ-106	Registering a Catalogue Item involves a check by the Global Registry for Item uniqueness. The Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data found in the Global Registry must be unique. When an Item is registered, the registry verifies that the combination of this data is unique to that Item.	Primary
	REQ-107	The registration process is triggered by the following business cases: 1. Create Catalogue Item: After the physical load and validation of the data, the registry record needs to be created before data can be published. 2. Update Catalogue Item: When a registered Catalogue Item is updated in its source data pool, updates impacting the Registry data must be reflected in the Global Registry, before the updated data can be propagated to the recipients. Registration of Catalogue Item changes only needs to happen for changes that: Impacts fields stored in the Global Registry. Are authorised according to the GTIN allocation rules. 3. Correct Catalogue Item: When a registered item is corrected in its source data pool, corrections impacting the Registry data must be reflected in the Global Registry before the updated data can be propagated to the data recipients. 4. Delete Catalogue Item: Deletions need to be reflected in the Global Registry: the discontinuation dates starts the EAN.UCC standard retention period (48 months for CPG, 36 months for apparel) as soon as GTIN has been discontinued in ALL target markets where it was active (needs to be stored in the Global Registry). 5. Cancel Catalogue Item: Communicates a trade item was never manufactured – this allows an earlier “reuse” of the GTIN i.o. standard retention period. This is achieved through the maintenance (using change function) of the cancel date. 6.	Primary

		Removing an Catalogue Item from the supply chain: The permanent removal of a Catalogue Item from the supply chain is achieved through the maintenance of a discontinuation date. This date has to be reflected in the Global Registry to kick off the EAN.UCC retention period. Temporary removals are not reflected in the Global Registry and only handled through the maintenance of the availability period in the data pools.	
	REQ-108	Registry requirements for registration are : - Registration can only happen after successful validation. - Registration can only produce errors, no warnings. - Successful Registration of a Catalogue Item is mandatory prior to publication of any hierarchy containing that Catalogue Item. - ItemStatus needs to be included in GTIN data model to reflect validation and registration status. - Process registration command (for create, update, correct, delete). - Provide registration acknowledgement.	Primary
	REQ-118	Changes/corrections applied to the Global Registry are effective immediately.	Secondary
	REQ-119	Future effective changes stored in the data pool are only reflected in the Global Registry when they become effective.	Secondary

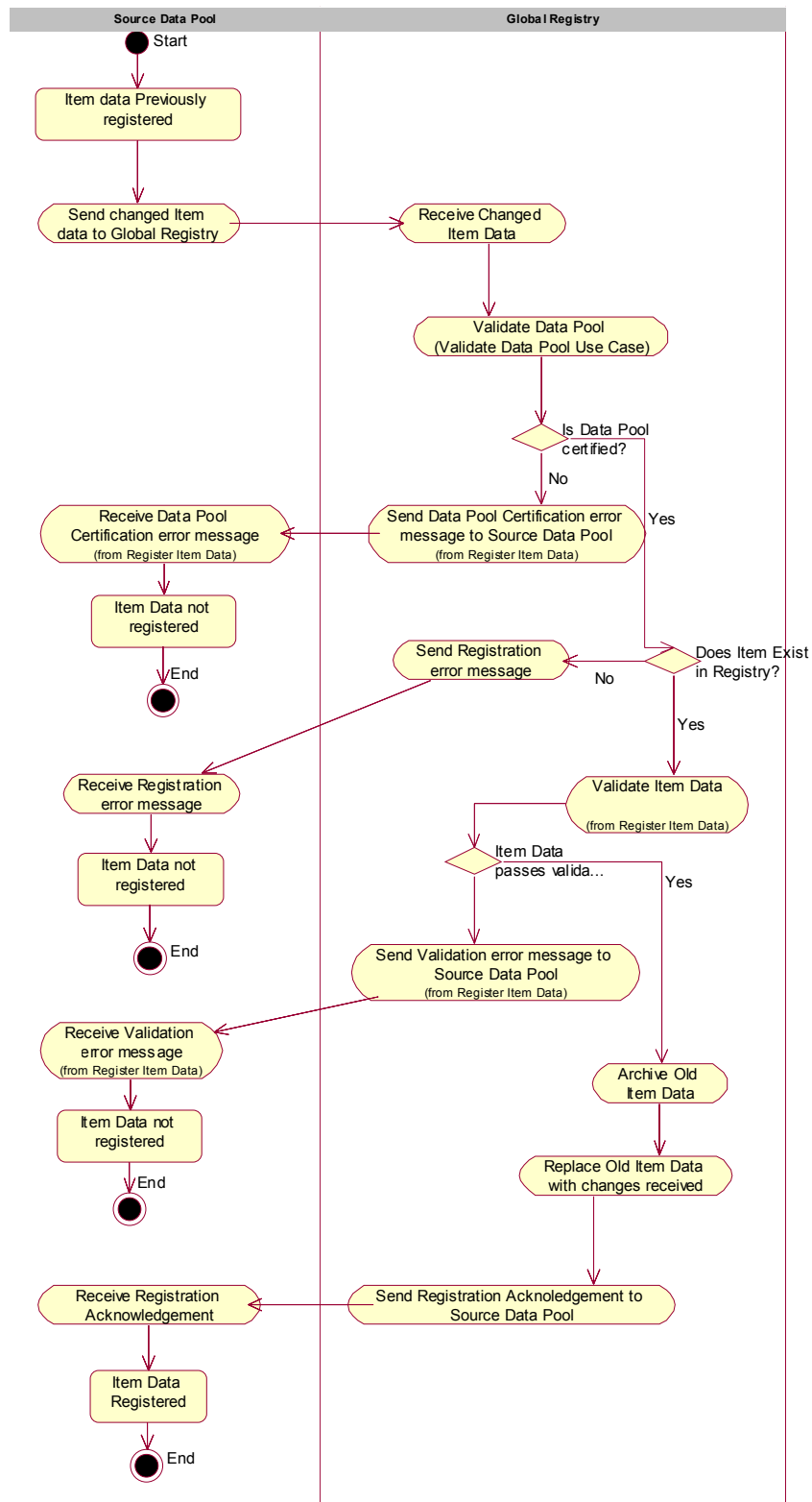


Figure 31 - Change Registered Catalogue Item Activity Diagram

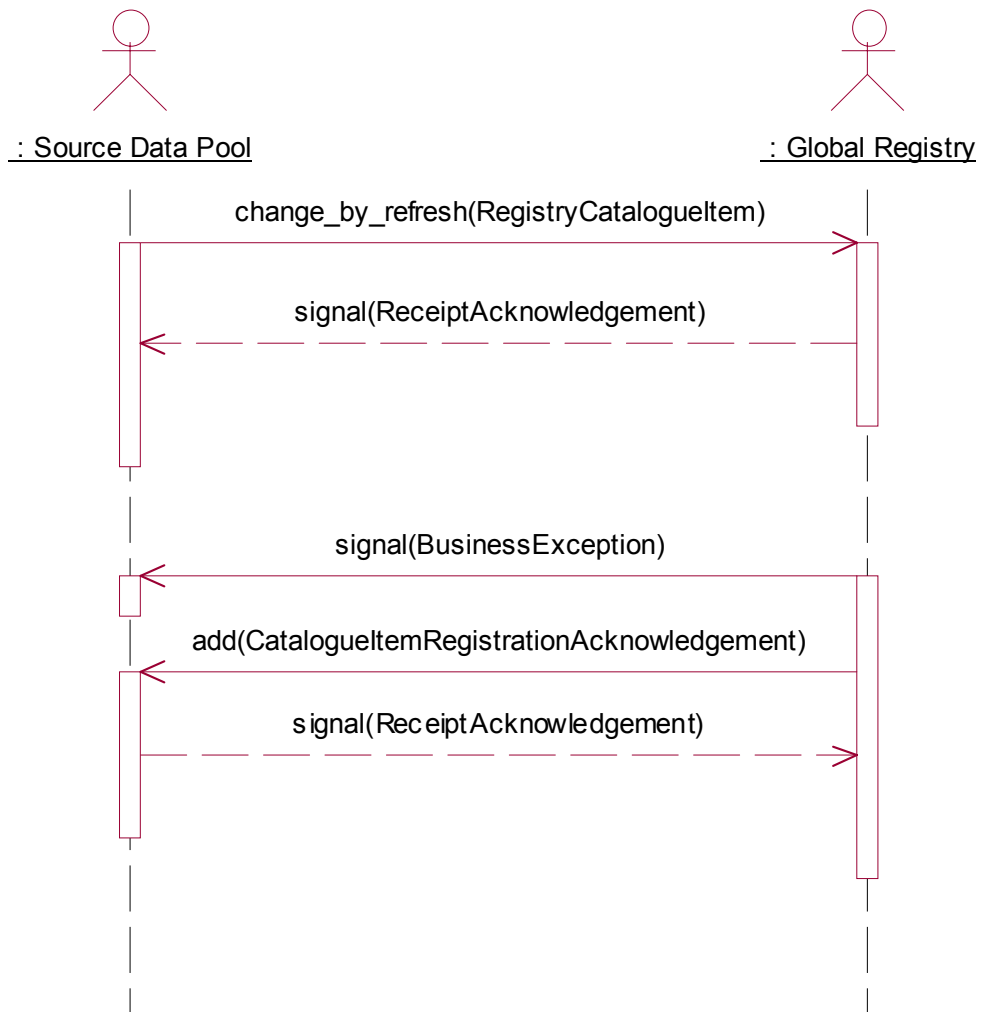


Figure 32 - Change Registered Catalogue Item Sequence Diagram

Correct Registered Catalogue Item

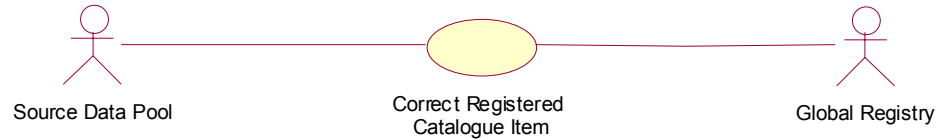


Figure 33 - Correct Registered Catalogue Item Use Case Diagram

Use Case Name	Correct Registered Catalogue Item	
Traceability Identifier	UC-20	
Use Case Description	<p>All Catalogue Items for trade must be registered in the Global Registry. Prior to registration, the Catalogue Item data must pass a validation at the Source Data Pool and a uniqueness check at the Registry. The Global Registry ensures that valid, unique Catalogue Item data are available worldwide.</p> <p>A correction allows a Data Source to make changes to Catalogue Item data that would not be allowed by validation rules and as such is outside of normal processing. It is intended to provide a means for errors to be corrected and not as an alternative to the Change Registered Catalogue Item process.</p> <p>This process is triggered by the "Correct Hierarchy Data" Use Case. In the event that Catalogue Item Hierarchy data is corrected (see Correct Catalogue Item Hierarchy Use Case) in a Source Data Pool, the changes must be reflected in the Global Registry.</p>	
Use Cases Above	UC-12: Correct Catalogue Item	
Use Cases Below	None	
Actors	Source Data Pool (SDP) Global Registry	
Performance Goals	<p>SDP: To correct errors in Catalogue Item data. To have validated, registered Catalogue Item Hierarchy data.</p> <p>Global Registry: To ensure valid, unique Catalogue Item data are registered.</p>	

Preconditions	The Source Data Pool is a certified Data Pool whose profile resides in the registry. The Source Data Pool has received a "Correct Catalogue Item Hierarchy" message from the Data Source. The Source Data Pool has validated Catalogue Item data received and has sent that Catalogue Item data to the Global Registry.		
Postconditions	The Catalogue Item data corrections have been applied and retained in the Global Registry.		
Scenario	<p>Begins when, the Global Registry receives a validated Correct Registered Catalogue Item message from a Source Data Pool.</p> <ol style="list-style-type: none"> 1. The Global Registry ensures that the Source Data Pool is certified. 2. The Global Registry ensures that the Catalogue Item data already exists in the Registry. 3. The Global Registry performs the Source Data Pool validation. 4. The Global Registry removes the old Catalogue Item Data from the Registry. 5. The Global Registry stores the Catalogue Item data. <p>Ends when, The Global Registry sends a registration acknowledgement to the SDP</p>		
Alternative Scenario	<p><i>ad 1. Data Pool not certified:</i></p> <ol style="list-style-type: none"> 1.1. The Global Registry sends an error message to the Source Data Pool <p>Ends when, the Source Data Pool receives the error message</p> <p><i>ad 2. The Catalogue Item does not exist in the Registry:</i></p> <ol style="list-style-type: none"> 3.1. Global Registry sends a registration error message to the SDP 3.2. The SDP receives the registration error message <p>Ends when, the Source Data Pool receives the registration error message</p> <p><i>ad 3. Catalogue Item data does not pass Data Pool validation:</i></p> <ol style="list-style-type: none"> 3.1. The Global Registry sends a validation error message to the Source Data Pool <p>Ends when, the Source Data Pool receives the validation error message</p>		
Special Requirements	<ul style="list-style-type: none"> • Validation: applying GDD standards. 		
Extension Points	N/A		
Requirements Covered	ID	Requirement	Weight
	REQ-5	Data Source must be able to correct Catalogue Item data in the Source Data Pool.	Secondary
	REQ-8	EAN.UCC standards validation for GTIN and GLN format.	Primary
	REQ-	Uniqueness validation for Item	Primary

	9	(GTIN/GLN/TM), Party (GLN) or data pool (GLN) – only applies to the occurrence of the key, not to the uniqueness of the information related to it.	
	REQ-10	The Catalogue Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data found in the Global Registry must be unique.	Primary
	REQ-11	Corrections bypass the standard GTIN/GLN allocation rules.	Secondary
	REQ-12	Every command needs a response and is handled according to the agreement between the parties involved. In the inter-operable network, acknowledgement messages are standardised and may contain the following information: - Confirmation of message receipt- Success / Failure of processing (syntax and content)- Reason for failure, with a code number and text message unique assigned to each failure	Primary
	REQ-20	Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.	Primary
	REQ-21	If an Catalogue Item is "Confirmed of Synchronisation" then all Catalogue items below in the Catalogue Item Hierarchy shall be included in the Synchronisation list.	Primary
	REQ-22	Relationship dependent data will only be communicated for Synchronised, Review or Accept status in the Synchronisation List.	Primary
	REQ-23	Events that can trigger notifications are: - Publication of new data / change of publication - Change of published Catalogue Item / Party / Partner Profile - Change of owner, rights - Subscription - Synchronisation List - Confirmation/ Rejection - Request for Notification - Any successful matching process	Primary
	REQ-24	Notifications must NOT be sent in the following cases since data is not yet public and validated information: - Data load (add, change, etc...) - Data validation - Registration of new Catalogue Item	Primary
	REQ-30	Only Catalogue Items are registered in the Global Registry. Not Catalogue Item Hierarchies.	Primary
	REQ-31	Validation acknowledgements are mandatory.	Primary
	REQ-32	Acknowledgement Reason codes must be unique.	Primary
	REQ-34	ItemLinks are not registered or held within the Global Registry.	Primary
	REQ-36	If the Catalogue Item was registered, updates impacting the Registry data must be reflected in the Global Registry.	Primary
	REQ-37	Registration of Catalogue Item changes only needs to happen for changes that: - Impact fields stored in the Global Registry. - Are authorised according to the GTIN allocation rules.	Primary
	REQ-40	Incorrect core data (i.e. attributes that cannot be updated according to allocation rules) can only be updated through a specific correction functionality.	Primary

	REQ-41	Correct Item Hierarchy must: - trigger syntactical and content validation - skip GTIN allocation rules validation - set a flag on the GTIN data record to inform the data recipient of the correction (see data distribution / notification) - the correction will also be reflected in the Global Registry if it impacts Registry data	Primary
	REQ-42	If the correction impacts the hierarchy, then it must be handled by deleting the incorrect ItemLink and adding a new Item Link - Add/Delete Scenario's.	Primary
	REQ-43	if the correction does not impact the hierarchy, then ItemLink attributes will be updated through the correction command.	Secondary
	REQ-44	Notification of the hierarchy must indicate it is a correction.	Primary
	REQ-57	A deletion cannot be corrected – only the discontinuation can be reversed.	Primary
	REQ-92	“Single Data Source” Principle : - there can only be one official source of the data – the one that is registered - this source is identified by the data source - this is the only valid source for data synchronisation and related processes	Primary
	REQ-99	The Global Registry functionality requirements can be summarised as follows: - Enable data synchronisation - Validation, registration and subscription functions - Enable global validation - Checking compliance with basic EAN.UCC rules related to the format of a GTIN/GLN and ensuring the uniqueness of the data that is being registered - Enable global search functionality that does not require full duplication of data in the Global Registry.	Primary
	REQ-100	The Global Registry is involved in the following functions and/or business cases as defined in the Item Synchronisation detailed requirements: - Validation - Registration - Subscription - Global Search	Primary
	REQ-101	Registry Validation includes : - EAN.UCC standards validation for GTIN and GLN formats (i.e. check digit) - Uniqueness validation for Item (GTIN/GLN/TM), Party (GLN) or data pool (GLN), ensuring there is only one occurrence and data source for each data record as identified by the appropriate fields.	Primary
	REQ-102	Registry validation is a part of the registration process.	Primary
	REQ-104	In summary, the registry requirements for validation are: - EAN.UCC standards validation for GTIN/GLN formats - Uniqueness validation for Item, Party and data pool key - Store and maintain EAN.UCC standards - Process validation command - Provide validation acknowledgement	Primary
	REQ-105	Registration is the process, which references all Catalogue Items and Parties published in all certified data pools and on which there is a need to synchronise / retrieve information. This is supported by data storage in accordance with the Registry data scope and rules.	Primary
	REQ-106	Registering a Catalogue Item involves a check by the Global Registry for Item	Primary

		uniqueness. The Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data found in the Global Registry must be unique. When an Item is registered, the registry verifies that the combination of this data is unique to that Item.	
	REQ-107	The registration process is triggered by the following business cases: 1. Create Catalogue Item: After the physical load and validation of the data, the registry record needs to be created before data can be published. 2. Update Catalogue Item: When a registered Catalogue Item is updated in its source data pool, updates impacting the Registry data must be reflected in the Global Registry, before the updated data can be propagated to the recipients. Registration of Catalogue Item changes only needs to happen for changes that: Impacts fields stored in the Global Registry. Are authorised according to the GTIN allocation rules. 3. Correct Catalogue Item: When a registered item is corrected in its source data pool, corrections impacting the Registry data must be reflected in the Global Registry before the updated data can be propagated to the data recipients. 4. Delete Catalogue Item: Deletions need to be reflected in the Global Registry: the discontinuation dates starts the EAN.UCC standard retention period (48 months for CPG, 36 months for apparel) as soon as GTIN has been discontinued in ALL target markets where it was active (needs to be stored in the Global Registry). 5. Cancel Catalogue Item: Communicates a trade item was never manufactured – this allows an earlier “reuse” of the GTIN i.o. standard retention period. This is achieved through the maintenance (using change function) of the cancel date. 6. Removing an Catalogue Item from the supply chain: The permanent removal of a Catalogue Item from the supply chain is achieved through the maintenance of a discontinuation date. This date has to be reflected in the Global Registry to kick off the EAN.UCC retention period. Temporary removals are not reflected in the Global Registry and only handled through the maintenance of the availability period in the data pools.	Primary
	REQ-108	Registry requirements for registration are : - Registration can only happen after successful validation. - Registration can only produce errors, no warnings. - Successful Registration of a Catalogue Item is mandatory prior to publication of any hierarchy containing that Catalogue Item. - ItemStatus needs to be included in GTIN data model to reflect validation and registration status. - Process registration command (for create, update, correct, delete). - Provide registration acknowledgement.	Primary
	REQ-118	Changes/corrections applied to the Global Registry are effective immediately.	Primary
	REQ-119	Future effective changes stored in the data pool are only reflected in the Global Registry when they become effective.	Primary

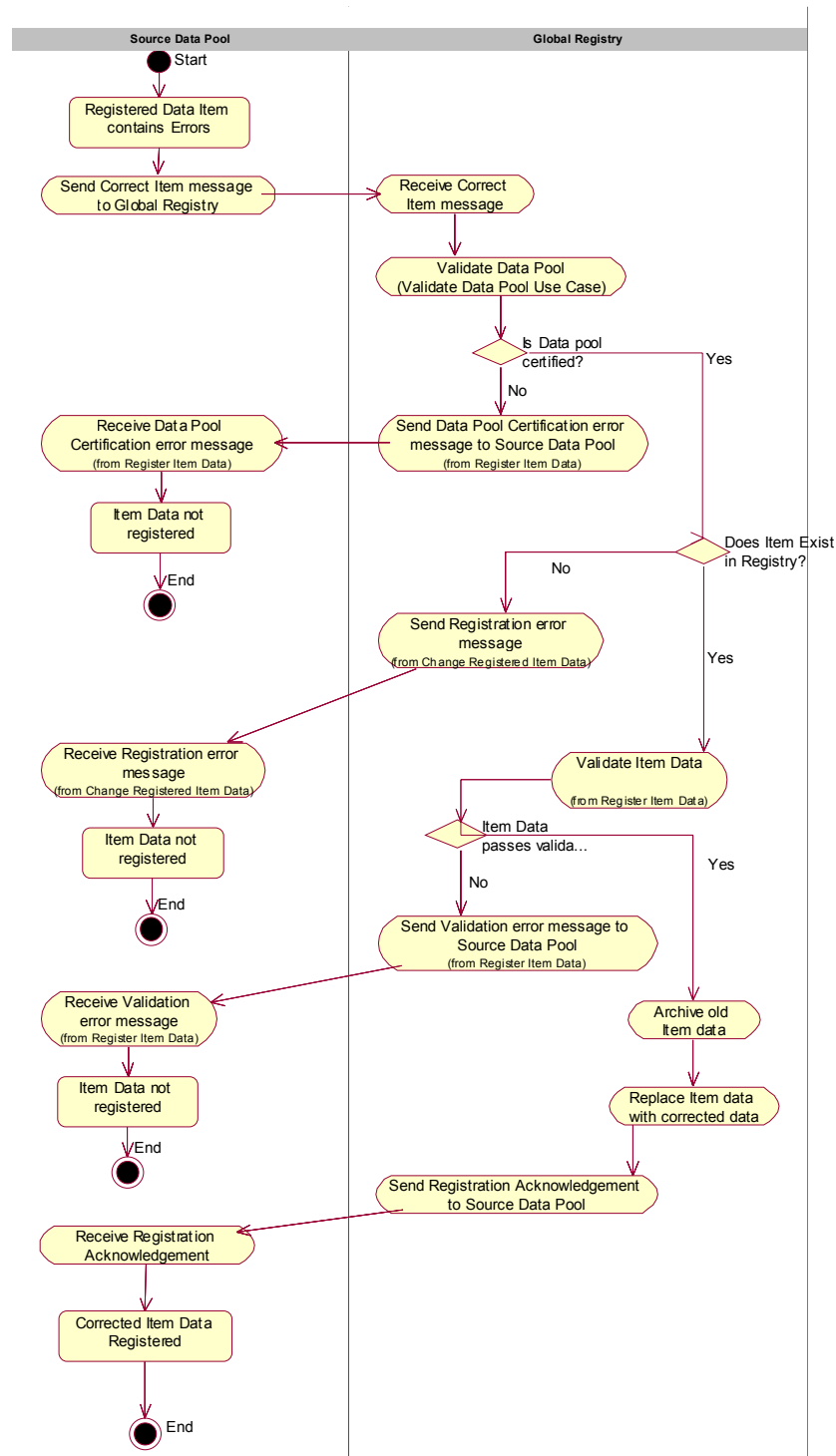


Figure 34 - Correct Registered Catalogue Item Activity Diagram

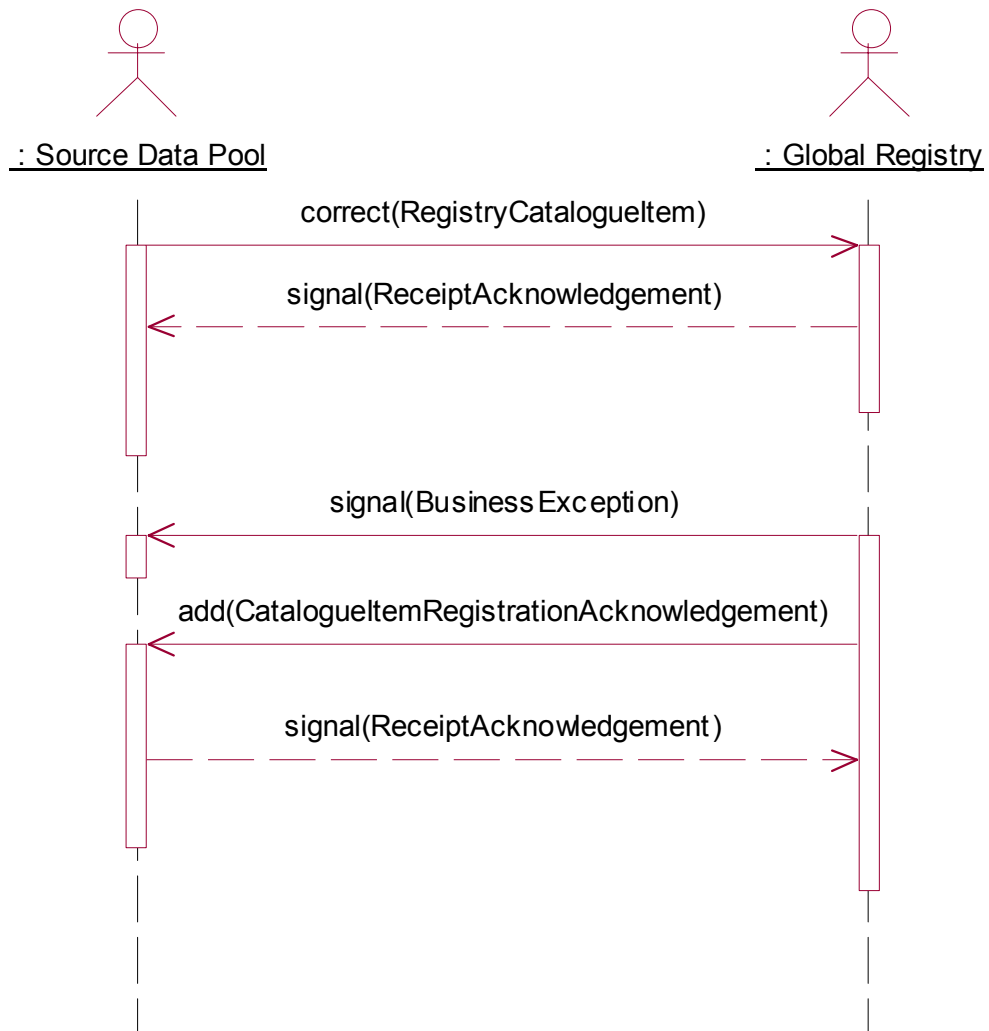


Figure 35 - Correct Registered Catalogue Item Sequence Diagram

Delete Registered Catalogue Item



Figure 36 - Delete Registered Catalogue Item

Use Case Name	Delete Registered Catalogue Item		
Traceability Identifier	UC-21		
Use Case Description	This use case describes the processes that need to take place for Catalogue Item registered in the Global Registry to be deleted. The process takes place in the Global Registry based upon either a previously set Cancel or Discontinue date.		
Use Cases Above	UC-46: Manage Catalogue Item Data in Global Registry		
Use Cases Below	None		
Actors	Global Registry		
Performance Goals	Global Registry: To ensure that GTIN allocation rules are followed.		
Preconditions	The deletion of registered Catalogue Items is a consequence of 2 actions: - Catalogue Item was discontinued or cancelled (through change) - Catalogue Item was flagged for deletion (through change). So these changes are reflected in the Global Registry data and will trigger a clean up (internal process) when the retention limit is over.		
Postconditions	The Global Registry updates by deleting the item record from the registry.		
Scenario	N/A		
Alternative Scenario			
Special Requirements	•		
Extension Points	N/A		
Requirements Covered	ID	Requirement	Weight
	REQ-	Data Source must be able to delete	Secondary
	REQ-	If a Catalogue Item is deleted:- the links	Secondary

		must be deleted	
	REQ-12	Every command needs a response and is handled according to the agreement between the parties involved. In the inter-operable network, acknowledgement messages are standardised and may contain the following information: - Confirmation of message receipt- Success / Failure of processing (syntax and content)- Reason for failure, with a code number and text message unique assigned to each failure	Primary
	REQ-20	Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.	Primary
	REQ-21	If an Catalogue Item is "Confirmed of Synchronisation" then all Catalogue items below in the Catalogue Item Hierarchy shall be included in the Synchronisation list.	Primary
	REQ-22	Relationship dependent data will only be communicated for Synchronised, Review or Accept status in the Synchronisation List.	Primary
	REQ-23	Events that can trigger notifications are: - Publication of new data / change of publication - Change of published Catalogue Item / Party / Partner Profile - Change of owner, rights - Subscription - Synchronisation List - Confirmation/ Rejection - Request for Notification - Any successful matching process	Primary
	REQ-24	Notifications must NOT be sent in the following cases since data is not yet public and validated information: - Data load (add, change, etc...) - Data validation - Registration of new Catalogue Item	Primary
	REQ-30	Only Catalogue Items are registered in the Global Registry. Not Catalogue Item Hierarchies.	Primary
	REQ-31	Validation acknowledgements are mandatory.	Primary
	REQ-32	Acknowledgement Reason codes must be unique.	Primary
	REQ-34	ItemLinks are not registered or held within the Global Registry.	Primary
	REQ-36	If the Catalogue Item was registered, updates impacting the Registry data must be reflected in the Global Registry.	Primary
	REQ-37	Registration of Catalogue Item changes only needs to happen for changes that: - Impact fields stored in the Global Registry. - Are authorised according to the GTIN allocation rules.	Primary
	REQ-42	If the correction impacts the hierarchy, then it must be handled by deleting the incorrect ItemLink and adding a new Item Link - Add/Delete Scenario's.	Primary
	REQ-47	The objective of the "Delete" Function is not to physically remove data from the data pool, but to "Flag for deletion", authorising the deletion of the data.	Secondary
	REQ-48	The deletion needs to be validated against a number of criteria, e.g. Item is no longer published, item discontinued, retention limit (EAN/UCC specifications)...	Primary
	REQ-	Rules for archiving or physical deletes will	Primary

	49	be agreed with the data pools and in the scope of the certification process.	
	REQ-50	Deletions need to be reflected in the registry (deletion flag + effective change date = deletion date in the Global Registry)	Secondary
	REQ-51	To protect data integrity within the data pool, the deletion of a child can only occur after the deletion of the parents.	Secondary
	REQ-52	Validation for deleted Items ensures the parents have been deleted before the deletion of the child is performed.	Secondary
	REQ-53	Validation is automatically triggered by the "Delete" command and does not require a specific message flow.	Primary
	REQ-54	Deletion of a Catalogue Item must trigger the invalidation of any hierarchy links involving that Item, whether that Item is the parent or the child in the link. This is completed by the Refresh.ItemLink message. Ackn.ItemLink will be repeated for every link that was refreshed or invalidated.	Secondary
	REQ-55	Deletion needs to be validated against : - Publication status - Availability Status (end availability + discontinued Y/N) - Hierarchy : parents have to be deleted before children	Primary
	REQ-57	A deletion cannot be corrected – only the discontinuation can be reversed.	Secondary
	REQ-58	Deletes are not synchronised across data pools.	Secondary
	REQ-59	ItemLinks can only be deleted: - as the correction of an error - as the result of a delete.Item	Primary
	REQ-60	The validity period of a ItemLink is defined by the validity period of the Parent Item and/or the Child Item.	Primary
	REQ-61	When either parent or child expire, the related ItemLink(s) have to expire as well. This is achieved through the Refresh.ItemLink function.	Primary
	REQ-92	"Single Data Source" Principle : - there can only be one official source of the data – the one that is registered - this source is identified by the data source - this is the only valid source for data synchronisation and related processes	Primary
	REQ-99	The Global Registry functionality requirements can be summarised as follows: - Enable data synchronisation - Validation, registration and subscription functions - Enable global validation - Checking compliance with basic EAN.UCC rules related to the format of a GTIN/GLN and ensuring the uniqueness of the data that is being registered - Enable global search functionality that does not require full duplication of data in the Global Registry.	Primary
	REQ-100	The Global Registry is involved in the following functions and/or business cases as defined in the Item Synchronisation detailed requirements: - Validation - Registration - Subscription - Global Search	Primary
	REQ-101	Registry Validation includes : - EAN.UCC standards validation for GTIN and GLN formats (i.e. check digit) - Uniqueness	Primary

		validation for Item (GTIN/GLN/TM), Party (GLN) or data pool (GLN), ensuring there is only one occurrence and data source for each data record as identified by the appropriate fields.	
	REQ-102	Registry validation is a part of the registration process.	Primary
	REQ-104	In summary, the registry requirements for validation are: - EAN.UCC standards validation for GTIN/GLN formats - Uniqueness validation for Item, Party and data pool key - Store and maintain EAN.UCC standards - Process validation command - Provide validation acknowledgement	Primary
	REQ-105	Registration is the process, which references all Catalogue Items and Parties published in all certified data pools and on which there is a need to synchronise / retrieve information. This is supported by data storage in accordance with the Registry data scope and rules.	Primary
	REQ-106	Registering a Catalogue Item involves a check by the Global Registry for Item uniqueness. The Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data found in the Global Registry must be unique. When an Item is registered, the registry verifies that the combination of this data is unique to that Item.	Primary
	REQ-107	The registration process is triggered by the following business cases: 1. Create Catalogue Item: After the physical load and validation of the data, the registry record needs to be created before data can be published. 2. Update Catalogue Item: When a registered Catalogue Item is updated in its source data pool, updates impacting the Registry data must be reflected in the Global Registry, before the updated data can be propagated to the recipients. Registration of Catalogue Item changes only needs to happen for changes that: Impacts fields stored in the Global Registry. Are authorised according to the GTIN allocation rules. 3. Correct Catalogue Item: When a registered item is corrected in its source data pool, corrections impacting the Registry data must be reflected in the Global Registry before the updated data can be propagated to the data recipients. 4. Delete Catalogue Item: Deletions need to be reflected in the Global Registry: the discontinuation dates starts the EAN.UCC standard retention period (48 months for CPG, 36 months for apparel) as soon as GTIN has been discontinued in ALL target markets where it was active (needs to be stored in the Global Registry). 5. Cancel Catalogue Item: Communicates a trade item was never manufactured – this allows an earlier “reuse” of the GTIN i.o. standard retention period. This is achieved through the maintenance (using change function) of the cancel date. 6. Removing an Catalogue Item from the supply chain: The permanent removal of a Catalogue Item from the supply chain is achieved through the maintenance of a discontinuation date. This date has to be	Primary

		reflected in the Global Registry to kick off the EAN.UCC retention period. Temporary removals are not reflected in the Global Registry and only handled through the maintenance of the availability period in the data pools.	
	REQ-108	Registry requirements for registration are : - Registration can only happen after successful validation. - Registration can only produce errors, no warnings. - Successful Registration of a Catalogue Item is mandatory prior to publication of any hierarchy containing that Catalogue Item. - ItemStatus needs to be included in GTIN data model to reflect validation and registration status. - Process registration command (for create, update, correct, delete). - Provide registration acknowledgement.	Primary
	REQ-118	Changes/corrections applied to the Global Registry are effective immediately.	Primary
	REQ-119	Future effective changes stored in the data pool are only reflected in the Global Registry when they become effective.	Primary

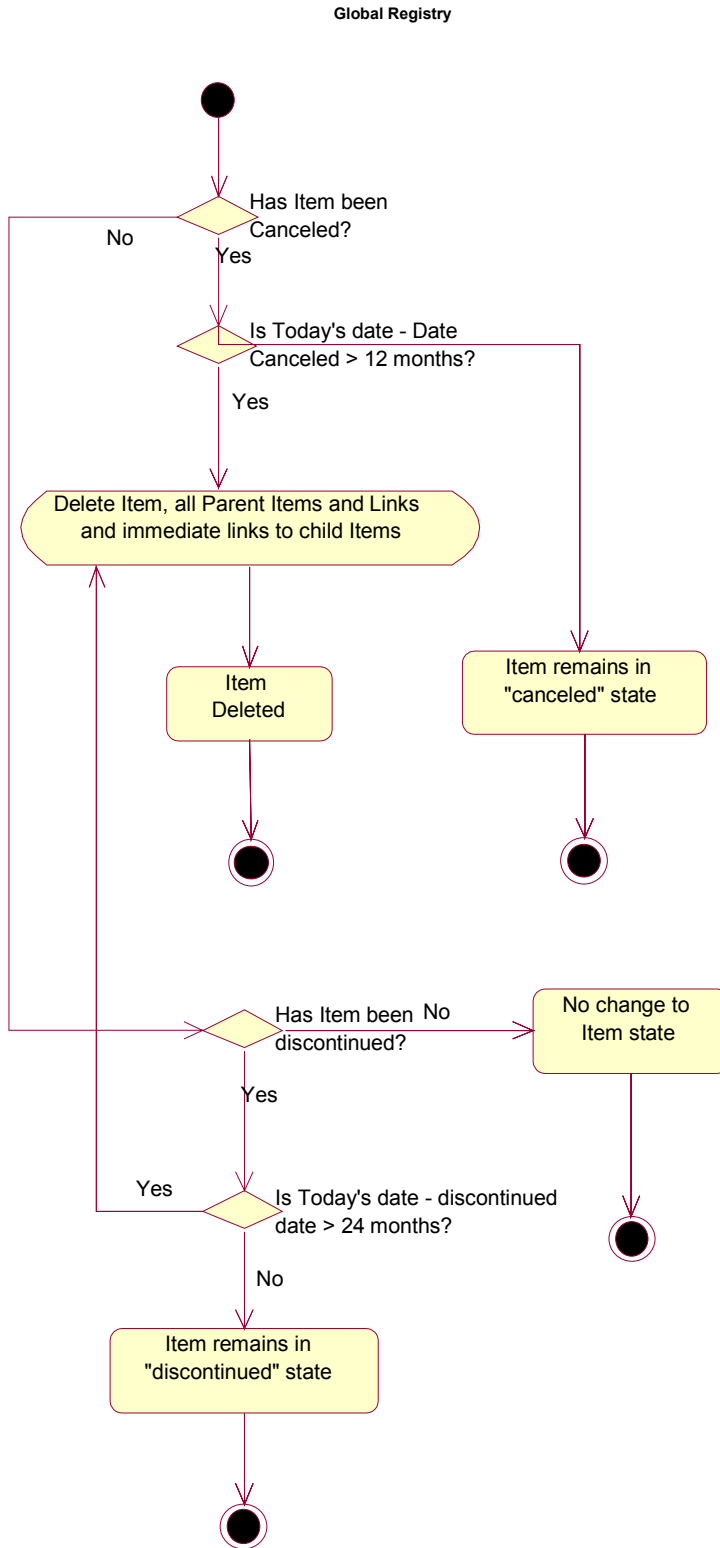
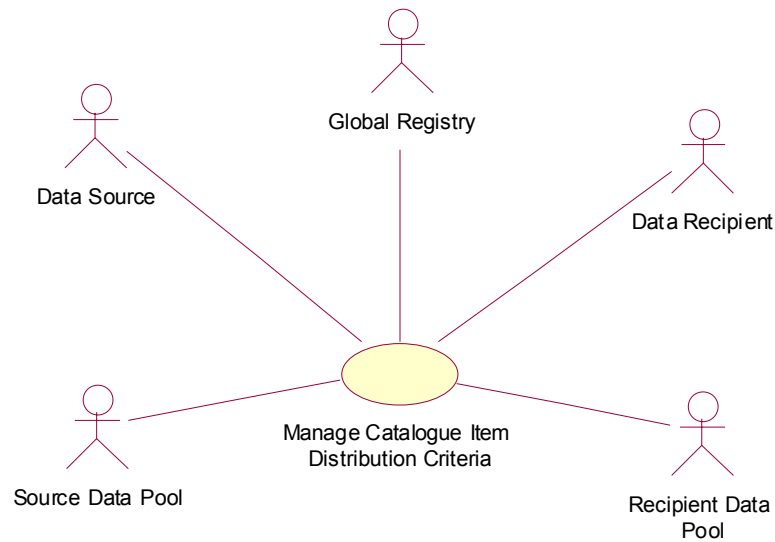


Figure 37 - Delete Registered Catalogue Item Activity diagram

Manage Catalogue Item Distribution Criteria



Use Case Name	Manage Catalogue Item Distribution Criteria
Traceability Identifier	UC-23
Use Case Description	The Manage Catalogue Item Distribution Criteria Use Case describes the process that takes place to allow Data Sources and Data Recipients to define the criteria or circumstances under which they will distribute or receive Catalogue Item data.
Use Cases Above	UC-1: Synchronise Catalogue Item Data
Use Cases Below	UC-24: Publish Catalogue Item Data UC-25: Subscribe to Catalogue Item Data UC-26: Confirm Catalogue Item Data UC-28: Remove Catalogue Item Subscription UC-34: Stop Publishing Catalogue Item Data UC-48: Request Catalogue Item Data
Actors	Data Source Source Data Pool (SDP) Data Recipient Recipient Data Pool (RDP) Global Registry
Performance Goals	Data Source: To inform the Source Data Pool of the criteria under which Catalogue Item Data may be distributed to Data Recipients (Publication). SDP: To obtain the necessary information that will allow the SDP to distribute Catalogue Item Data to the appropriate Recipient Data Pool (Publications, Subscriptions and Confirmations). Data Recipient: To inform the Recipient Data Pool of the criteria

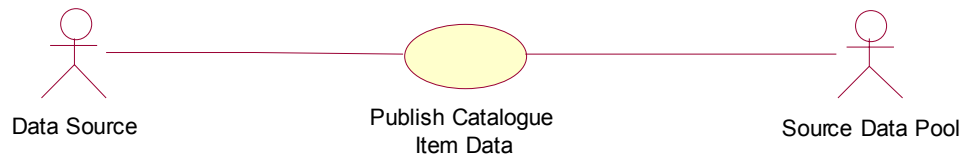
	<p>under which Catalogue Item Data may be forwarded to the Data Recipient (Subscriptions, Confirmations).</p> <p>RDP: To obtain the necessary information that will allow the RDP to forward Catalogue Item Data to the appropriate Data Recipient (Subscriptions, Confirmations).</p> <p>Global Registry: To provide SDP with Subscriptions and the address of the RDP for a particular Data Recipient.</p>		
Preconditions	The Data Source has determined that they would like to distribute Catalogue Item Data. The Data Recipient has determined that they would like to receive Catalogue Item Data.		
Postconditions	A full set of criteria (Publications, Subscriptions and Confirmations) is specified, enabling the ongoing process of distribution of Catalogue Item data. The confirmation is not a pre-requisite to the distribution of data.		
Scenario	<ul style="list-style-type: none"> • The Data Source Publishes Catalogue Item data. • The Data Recipient Subscribes to Catalogue Item Data. • The Data Recipient Confirms Catalogue Item Data. • The Source Data Pool applies the Publications, Subscriptions and Confirmations to create the Synchronisation List. 		
Alternative Scenario	None at this summary level		
Special Requirements	<ul style="list-style-type: none"> • 		
Extension Points	N/A		
Requirements Covered	ID	Requirement	Weight
	REQ-12	Every command needs a response and is handled according to the agreement between the parties involved. In the inter-operable network, acknowledgement messages are standardised and may contain the following information: - Confirmation of message receipt-	Primary
	REQ-13	The Data Source grants visibility of item, party and partner profiles including party capabilities data to a given list of parties (identified by their GLNs) or to all parties in a given Target Market.	Secondary
	REQ-20	Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.	Secondary
	REQ-21	If an Catalogue Item is "Confirmed of Synchronisation" then all Catalogue items below in the Catalogue Item Hierarchy shall be included in the Synchronisation list.	Secondary
	REQ-22	Relationship dependent data will only be communicated for Synchronised, Review or Accept status in the Synchronisation List.	Secondary

	23	Publication of new data / change of publication - Change of published Catalogue Item / Party / Partner Profile - Change of owner, rights - Subscription - Synchronisation List - Confirmation/ Rejection - Request for Notification - Any successful matching process	
	REQ-24	Notifications must NOT be sent in the following cases since data is not yet public and validated information: - Data load (add, change, etc...) - Data validation - Registration of new Catalogue Item	Primary
	REQ-25	The Data Distribution, which is the movement of data from one entity to another, must be handled through a specific notification type.	Primary
	REQ-26	Notification to the data recipient will always include the entire hierarchy. (applies to add & update by adding a higher level)	Primary
	REQ-27	In case of an ItemLink correction, the entire hierarchy will be indicated as corrected in the notification.	Primary
	REQ-32	Acknowledgement Reason codes must be unique.	Secondary
	REQ-92	"Single Data Source" Principle : - there can only be one official source of the data - the one that is registered - this source is identified by the data source - this is the only valid source for data synchronisation and related processes	Primary
	REQ-99	The Global Registry functionality requirements can be summarised as follows: - Enable data synchronisation - Validation, registration and subscription functions - Enable global validation - Checking compliance with basic EAN.UCC rules related to the format of a GTIN/GLN and ensuring the uniqueness of the data that is being registered - Enable global search functionality that does not require full duplication of data in the Global Registry.	Primary
	REQ-100	The Global Registry is involved in the following functions and/or business cases as defined in the Item Synchronisation detailed requirements: - Validation - Registration - Subscription - Global Search	Primary
	REQ-101	Registry Validation includes : - EAN.UCC standards validation for GTIN and GLN formats (i.e. check digit) - Uniqueness validation for Item (GTIN/GLN/TM), Party (GLN) or data pool (GLN), ensuring there is only one occurrence and data source for each data record as identified by the appropriate fields.	Primary
	REQ-102	Registry validation is a part of the registration process.	Primary
	REQ-104	In summary, the registry requirements for validation are: - EAN.UCC standards validation for GTIN/GLN formats - Uniqueness validation for Item, Party and data pool key - Store and maintain EAN.UCC standards - Process validation command - Provide validation acknowledgement	Primary
	REQ-105	Registration is the process, which references all Catalogue Items and	Primary

		Parties published in all certified data pools and on which there is a need to synchronise / retrieve information. This is supported by data storage in accordance with the Registry data scope and rules.	
	REQ-106	Registering a Catalogue Item involves a check by the Global Registry for Item uniqueness. The Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data found in the Global Registry must be unique. When an Item is registered, the registry verifies that the combination of this data is unique to that Item.	Primary
	REQ-107	The registration process is triggered by the following business cases: 1. Create Catalogue Item: After the physical load and validation of the data, the registry record needs to be created before data can be published. 2. Update Catalogue Item: When a registered Catalogue Item is updated in its source data pool, updates impacting the Registry data must be reflected in the Global Registry, before the updated data can be propagated to the recipients. Registration of Catalogue Item changes only needs to happen for changes that: Impacts fields stored in the Global Registry. Are authorised according to the GTIN allocation rules. 3. Correct Catalogue Item: When a registered item is corrected in its source data pool, corrections impacting the Registry data must be reflected in the Global Registry before the updated data can be propagated to the data recipients. 4. Delete Catalogue Item: Deletions need to be reflected in the Global Registry: the discontinuation dates starts the EAN.UCC standard retention period (48 months for CPG, 36 months for apparel) as soon as GTIN has been discontinued in ALL target markets where it was active (needs to be stored in the Global Registry). 5. Cancel Catalogue Item: Communicates a trade item was never manufactured – this allows an earlier “reuse” of the GTIN i.o. standard retention period. This is achieved through the maintenance (using change function) of the cancel date. 6. Removing an Catalogue Item from the supply chain: The permanent removal of a Catalogue Item from the supply chain is achieved through the maintenance of a discontinuation date. This date has to be reflected in the Global Registry to kick off the EAN.UCC retention period. Temporary removals are not reflected in the Global Registry and only handled through the maintenance of the availability period in the data pools.	Primary
	REQ-108	Registry requirements for registration are : - Registration can only happen after successful validation. - Registration can only produce errors, no warnings. - Successful Registration of a Catalogue Item is mandatory prior to publication of any hierarchy containing that Catalogue Item. - ItemStatus needs to be included in GTIN data model to reflect validation and registration status. - Process registration command (for create, update, correct, delete). - Provide registration	Primary

		acknowledgement.	
	REQ-109	A Data Recipient requests that it receive a "notification" when a specific event occurs that meets the Recipients criteria (selective on sources, categories, etc). This is subject to the recipient's access to information as controlled by the data source through its source data pool.	Primary
	REQ-119	Future effective changes stored in the data pool are only reflected in the Global Registry when they become effective.	Primary
	REQ-121	Party: - GLN - Start Availability Date of the Party - Deletion Date of the Party - Registration Date - Source Data Pool Pointer [GLN used to] - GLN of Data Source (*Data Source is actually the 'owner' of the GLN data - Date and Time of last change - Party Validation Information (including Version, Date & Certificate ID)	Primary
	REQ-128	Source Data Pools must send notifications based on matching publications and subscriptions.	Secondary

Publish Catalogue Item Data



Use Case Name	Publish Catalogue Item Data		
Traceability Identifier	UC-24		
Use Case Description	The Publish Catalogue Item Data Use Case describes how a Data Source provides the Source Data Pool with the criteria under which their Catalogue Item Data may be distributed to Data Recipients.		
Use Cases Above	UC-23: Manage Catalogue Item Distribution Criteria		
Use Cases Below	None		
Actors	Data Source Source Data Pool (SDP)		
Performance Goals	Data Source: To inform the Source Data Pool of the criteria (Target Market, Recipient GLN) under which their Catalogue Item Data may be distributed to Data Recipients. SDP: To possess the necessary information that will allow the SDP to distribute Catalogue Item Data to the appropriate Recipient Data Pool.		
Preconditions	Each Catalogue Item has been loaded to the Source Data Pool and Registered in the Global Registry.		
Postconditions	Publication data is stored in the Source Data Pool.		
Scenario	Begins when, the Source Data Pool receives a Publication message from a Data Source. 1. The SDP validates the Publication (valid Target Market, GLN) 2. The SDP creates or updates the Synchronisation List Ends when, the Synchronisation List is created or updated.		
Alternative Scenario	ad 1. Data Source has sent invalid data: 1.1. The SDP sends an error message to the Source Data Pool specifying what was invalid. Ends when, the Data Source receives the error message		
Special Requirements	•		
Extension Points	N/A		
Requirements Covered	ID	Requirement	Weight

		between the parties involved. In the inter-operable network, acknowledgement messages are standardised and may contain the following information: - Confirmation of message receipt- Success / Failure of processing (syntax and content)- Reason for failure, with a code number and text message unique assigned to each failure	
	REQ-13	The Data Source grants visibility of item, party and partner profiles including party capabilities data to a given list of parties (identified by their GLNs) or to all parties in a given Target Market.	Primary
	REQ-20	Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.	Primary
	REQ-21	If an Catalogue Item is "Confirmed of Synchronisation" then all Catalogue items below in the Catalogue Item Hierarchy shall be included in the Synchronisation list.	Primary
	REQ-22	Relationship dependent data will only be communicated for Synchronised, Review or Accept status in the Synchronisation List.	Primary
	REQ-23	Events that can trigger notifications are: - Publication of new data / change of publication - Change of published Catalogue Item / Party / Partner Profile - Change of owner, rights - Subscription - Synchronisation List - Confirmation/ Rejection - Request for Notification - Any successful matching process	Primary
	REQ-24	Notifications must NOT be sent in the following cases since data is not yet public and validated information: - Data load (add, change, etc...) - Data validation - Registration of new Catalogue Item	Primary
	REQ-32	Acknowledgement Reason codes must be unique.	Primary
	REQ-66	When product is available again: update start/end availability date.	Primary
	REQ-82	Maintaining a publication is granting visibility and access to data.	Secondary
	REQ-83	Publications are initiated by the Data Source in the source data pool, they do not need to be synchronised in the Global Data Synchronisation Network (GDSN).	Secondary
	REQ-84	The Target Market where product is available is communicated in the product key (GTIN+GLN+TM) – this can be different from the Target Market for publication.	Secondary
	REQ-85	Data is either published: - to a Target Market: any GLN in the Target Market has access to the data (only applies to "public" Items) - to specific GLN's: only these GLN's have access to the data (only applies to "private" Items)	Secondary
	REQ-86	The purpose of the public/private flag is to provide information to the parties involved on the status of the Catalogue Item.	Secondary
	REQ-87	Notification is triggered by the matching process.	Secondary
	REQ-88	The matching process is owned and developed by each source data pool in order to trigger data distribution based on	Secondary

		publication and subscription data.	
	REQ-89	The matching process can be triggered either by publication, subscription or as a scheduled event. It is valid for all subscription types (including synchronisation list) and all publication types.	Secondary
	REQ-91	For a given publication (create/update) : - the matching process identifies subscriptions with matching criteria (TM, GLN, category, GTIN...) - for each matching subscription, a notification is created including all dependent hierarchies - for a synchronisation list, the hierarchy information included in the notification, will be limited to the GTIN's maintained in the Synchronisation list. - The notification is sent to the home data pool of the data recipient.	Secondary
	REQ-93	Although the notification process will physically move the data from one data pool to another, this data should not be stored permanently for the purpose of synchronisation with any other user than the initial subscriber. If stored, access should be limited to the initial data recipient.	Secondary
	REQ-109	A Data Recipient requests that it receive a "notification" when a specific event occurs that meets the Recipients criteria (selective on sources, categories, etc). This is subject to the recipient's access to information as controlled by the data source through its source data pool.	Primary
	REQ-128	Source Data Pools must send notifications based on matching publications and subscriptions.	Primary
	REQ-138	PublicationWho : Data Source = source GLNWhat : Item record, identified by GTIN+GLN+TMWhere : TM or GLN (= target GLN)	Secondary
	REQ-140	Publication TM does not have to be equal to the GTIN TM (i.e. I can have a product record defined for TM France, but publishing the data to Belgium only for information purposes).	Secondary
	REQ-144	Request for publication (subscription) resets the reject flag if catalogue Item has been previously rejected and reactivate the subscription.	Secondary
	REQ-145	The request for publication subscription is only executed once.	Secondary
	REQ-146	Subscriptions are passed from global Registry to data pools just once. The Global Registry passes along to the source data pool matching subscriptions in the entirety, rather than replicating for each GTIN registered.	Primary
	REQ-147	Request for notification publication (subscription) resets the reject flag if the Catalogue Item has been previously rejected and reactivate the subscription.	Primary
	REQ-148	The "Reload" attribute will contain a Boolean value (TRUE or FALSE).	Primary
	REQ-149	Upon execution of an item data notification, the source data pool will pass along the value of this attribute within the message for the recipient to properly route the inbound message. After	Primary

		executing the item data notification, the source data pool will	
	REQ-150	The team identified the need for an additional process to be known as "Request for Notification". The Request for Notification is originated by the requesting data recipient, through the recipient data pool, to the Global Registry and forwarded to the so	Primary
	REQ-151	The team wanted to reiterate the fact that new subscriptions received by a source data pool would be executed immediately a single time.	Primary
	REQ-152	The ability to set up a subscription and not get an initial full load of data. She wants to only receive the changes, adds, deletes and new items that match her subscription. (This is the same as a regular subscription with the exception of not getting	Primary
	REQ-154	The Global Registry shall send only once a subscription to a Source Data Pool.	Primary

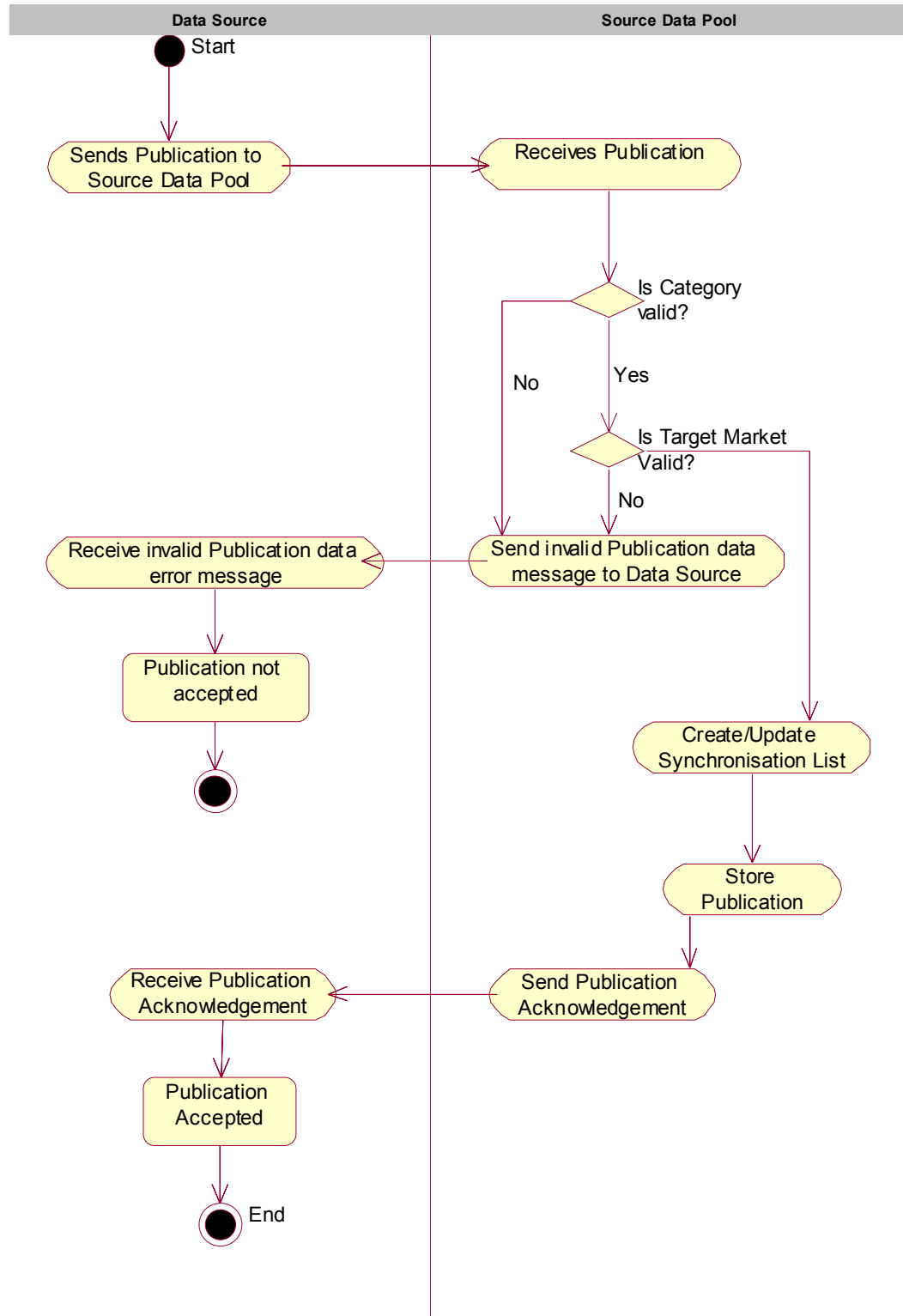


Figure 38 - Publish Catalogue Item Data Activity Diagram

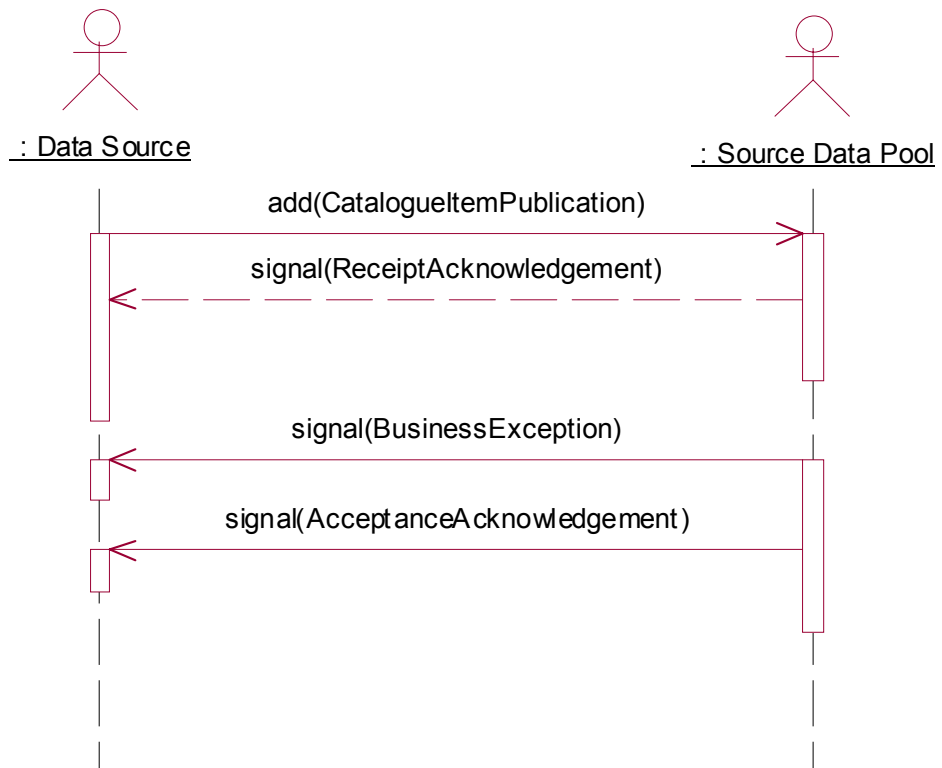


Figure 39 - Publish Catalogue Item Data Sequence Diagram

Stop Publishing Catalogue Item Data

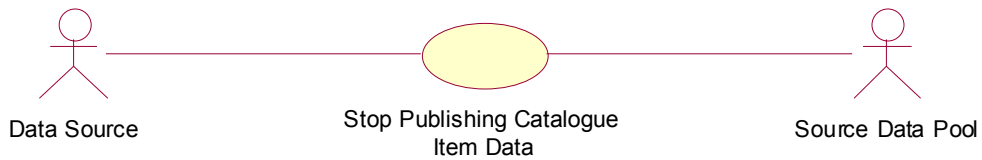


Figure 40 - Stop Publishing Catalogue Item Data Use Case Diagram

Use Case Name	Stop Publishing Catalogue Item Data	
Traceability Identifier	UC-34	
Use Case Description	<p>The Stop Publishing Catalogue Item Data Use Case describes how a Data Source informs the Source Data Pool to delete the criteria under which their Catalogue Item Data may be distributed to Data Recipients.</p> <p>The Source Data Pool will not be able to distribute the Catalogue Item Data prescribed by the criteria.</p>	
Use Cases Above	UC-23: Manage Catalogue Item Distribution Criteria	
Use Cases Below	None	
Actors	Data Source Source Data Pool (SDP)	
Performance Goals	Data Source: To inform the Source Data Pool to delete a Publication and stop distributing Catalogue Item Data. SDP: To possess the necessary information that will allow the SDP to distribute Catalogue Item Data to the appropriate Recipient Data Pool.	
Preconditions	The Publication exists in the Source Data Pool.	
Postconditions	The Source Data Pool is unable to distribute the Catalogue Item Data that was specified in the deleted Publication.	
Scenario	<p>Begins when, the Source Data Pool receives a Delete Publication message from a Data Source.</p> <ol style="list-style-type: none"> 1. The SDP validates that the Publication exists 2. The SDP updates the Synchronisation List 3. The SDP deletes the Publication. 4. The SDP sends a Publication Delete Verification message to the Data Source. <p>Ends when, the Data Source receives the Publication Delete Verification message.</p>	
Alternative Scenario	ad 1. The Publication does not exist at the Source Data Pool: 1.1. The SDP sends an error message to the Source Data Pool specifying that the Publication does not exist.	

	Ends when, the Data Source receives the error message		
Special Requirements	•		
Extension Points	N/A		
Requirements Covered	ID	Requirement	Weight
	REQ-	Every command needs a response and is	Primary
	REQ-	The Data Source grants visibility of item,	Primary
	REQ-	Subscription remains valid until it is deleted.	Primary
	REQ-	Synchronisation Lists must include every	Primary
	REQ-	If an Catalogue Item is "Confirmed of	Primary
	REQ-	Relationship dependent data will only be	Primary
	REQ-	Events that can trigger notifications are: -	Primary
	REQ-	Notifications must NOT be sent in the	Primary
	REQ-	Acknowledgement Reason codes must be	Primary
	REQ-	Communicate that product is no longer	Primary
	REQ-	When product is available again: update	Primary
	REQ-	Maintaining a publication is granting visibility	Primary
	REQ-	Publications are initiated by the Data Source	Primary
	REQ-	The Target Market where product is	Primary
	REQ-	Data is either published: - to a Target	Primary

		"private" Items)	
	REQ-86	The purpose of the public/private flag is to provide information to the parties involved on the status of the Catalogue Item.	Primary
	REQ-87	Notification is triggered by the matching process.	Primary
	REQ-88	The matching process is owned and developed by each source data pool in order to trigger data distribution based on publication and subscription data.	Primary
	REQ-89	The matching process can be triggered either by publication, subscription or as a scheduled event. It is valid for all subscription types (including synchronisation list) and all publication types.	Primary
	REQ-91	For a given publication (create/update) : - the matching process identifies subscriptions with matching criteria (TM, GLN, category, GTIN...) - for each matching subscription, a notification is created including all dependent hierarchies - for a synchronisation list, the hierarchy information included in the notification, will be limited to the GTIN's maintained in the Synchronisation list. - The notification is sent to the home data pool of the data recipient.	Primary
	REQ-93	Although the notification process will physically move the data from one data pool to another, this data should not be stored permanently for the purpose of synchronisation with any other user than the initial subscriber. If stored, access should be limited to the initial data recipient.	Primary
	REQ-109	A Data Recipient requests that it receive a "notification" when a specific event occurs that meets the Recipients criteria (selective on sources, categories, etc). This is subject to the recipient's access to information as controlled by the data source through its source data pool.	Primary
	REQ-128	Source Data Pools must send notifications based on matching publications and subscriptions.	Primary
	REQ-138	PublicationWho : Data Source = source GLNWhat : Item record, identified by GTIN+GLN+TMWhere : TM or GLN (= target GLN)	Primary
	REQ-140	Publication TM does not have to be equal to the GTIN TM (i.e. I can have a product record defined for TM France, but publishing the data to Belgium only for information purposes).	Primary
	REQ-144	Request for publication (subscription) resets the reject flag if catalogue Item has been previously rejected and reactivate the subscription.	Primary
	REQ-145	The request for publication subscription is only executed once.	Primary
	REQ-146	Subscriptions are passed from global Registry to data pools just once. The Global Registry passes along to the source data pool matching subscriptions in the entirety, rather than replicating for each GTIN registered.	Primary
	REQ-147	Request for notification publication (subscription) resets the reject flag if the Catalogue Item has been previously rejected and reactivate the subscription.	Primary
	REQ-	The "Reload" attribute will contain a Boolean	Primary

	148	value (TRUE or FALSE).	
	REQ-149	Upon execution of an item data notification, the source data pool will pass along the value of this attribute within the message for the recipient to properly route the inbound message. After executing the item data notification, the source data pool will	Primary
	REQ-150	The team identified the need for an additional process to be known as "Request for Notification". The Request for Notification is originated by the requesting data recipient, through the recipient data pool, to the Global Registry and forwarded to the so	Primary
	REQ-151	The team wanted to reiterate the fact that new subscriptions received by a source data pool would be executed immediately a single time.	Primary
	REQ-152	The ability to set up a subscription and not get an initial full load of data. She wants to only receive the changes, adds, deletes and new items that match her subscription. (This is the same as a regular subscription with the exception of not getting	Primary
	REQ-154	The Global Registry shall send only once a subscription to a Source Data Pool.	Primary

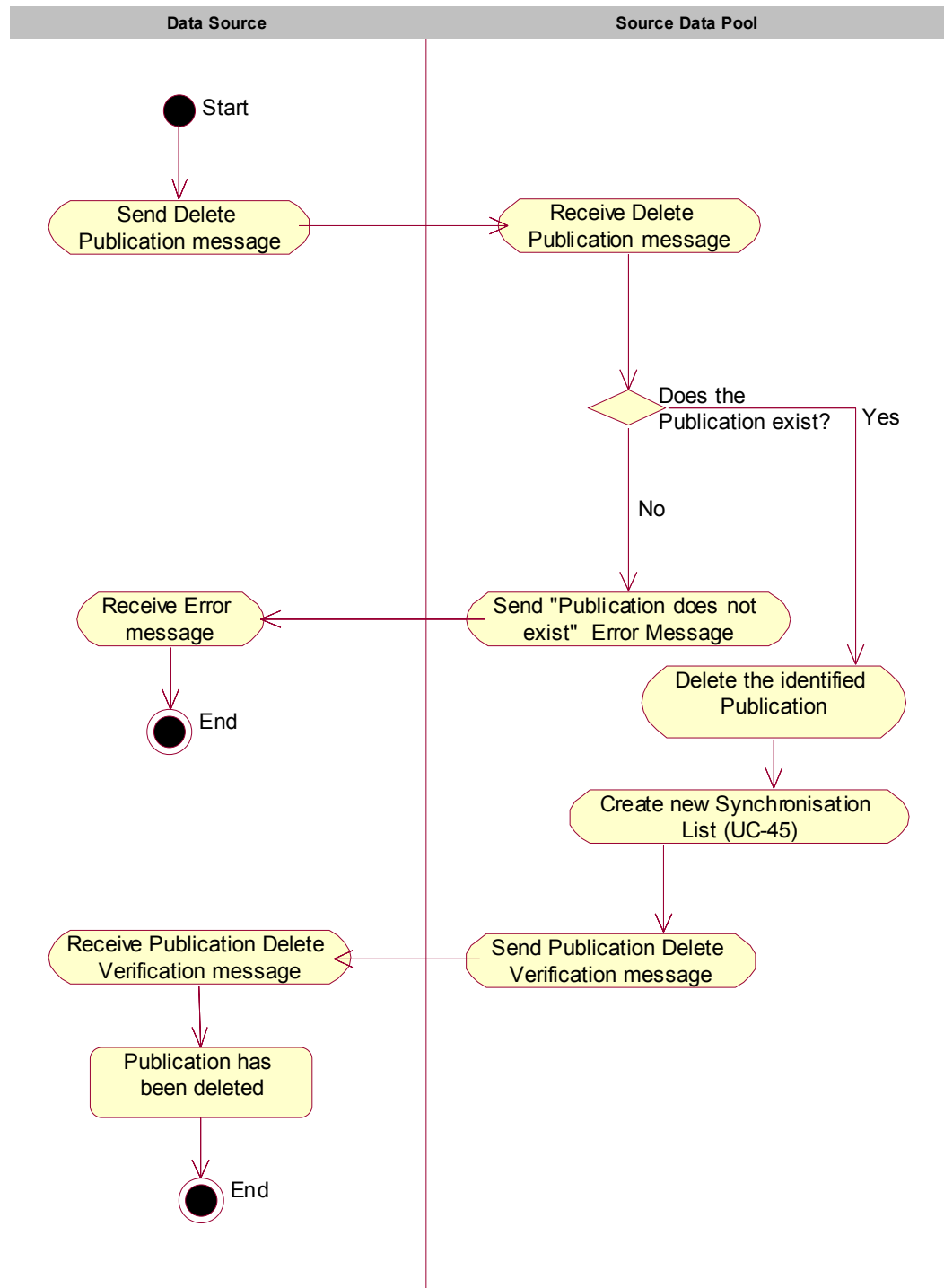


Figure 41 - Stop Publishing Catalogue Item Data Activity Diagram

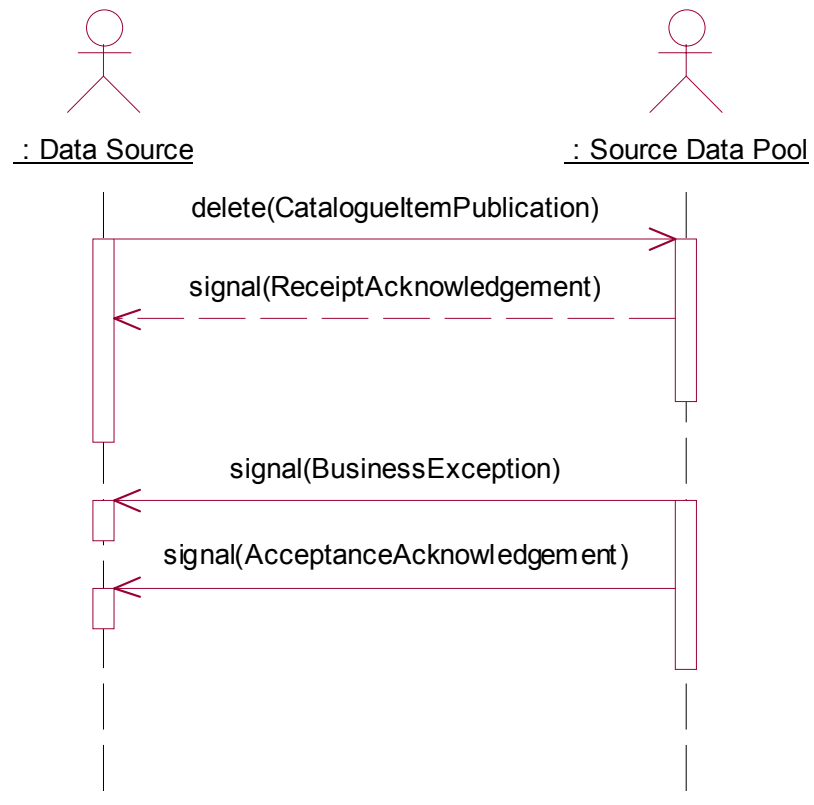


Figure 42 - Stop Publishing Catalogue Item Data Sequence Diagram

Subscribe to Catalogue Item Data

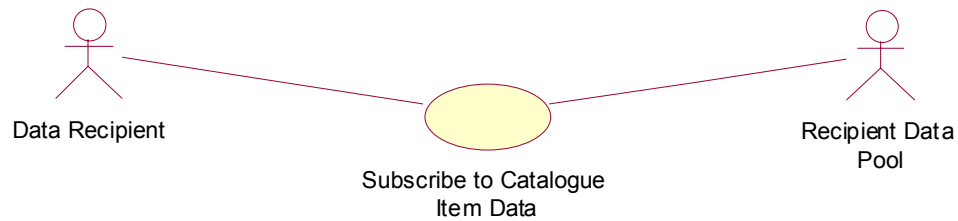


Figure 43 – Subscribe to Catalogue Item Data Use Case Diagram

Use Case Name	Subscribe to Catalogue Item Data	
Traceability Identifier	UC-27	
Use Case Description	<p>The Subscribe to Catalogue Item Data Use Case describes how a Data Recipient informs the Recipient Data Pool with the criteria under which Catalogue Item Data may be distributed to the Data Recipient.</p> <p>Once the Subscription is created, the Recipient Data Pool will forward it to the Global Registry which, in turn, will forward it to appropriate Source Data Pools (see UC-35 Distribute Subscription Data).</p>	
Use Cases Above	UC-23: Manage Catalogue Item Distribution Criteria	
Use Cases Below	None	
Actors	Data Recipient Recipient Data Pool (RDP)	
Performance Goals	Data Recipient: To inform the Recipient Data Pool of the criteria by which Catalogue Item Data may be forwarded to the Recipient. RDP: To possess the necessary information that will allow the RDP to send subscriptions to the Global Registry.	
Preconditions	None	
Postconditions	The Recipient Data Pool has a Subscription that can be shared with the Global Registry.	
Scenario	<p>Begins when, the Recipient Data Pool receives a Subscription Publication message from a Data Recipient.</p> <ol style="list-style-type: none"> 1. The RDP sends a message acknowledgement to the Data Recipient 2. The RDP validates the Subscription criteria (GTIN, GLN of data owner, Target Market or Category). 3. The RDP sends a Subscription Verification to the Data Recipient <p>Ends when, the Data Recipient acknowledges the Subscription Verification message.</p>	

Alternative Scenario	ad 1. The Subscription already exists: 1.1. The RDP sends an error message to the Data Recipient specifying that the Subscription exists. Ends when, the Data Recipient receives the error message Ad 2. The validation fails: 2.1. The RDP sends an error message to the Data Recipient specifying the field in error Ends when, the Data Recipient receives the error message																																						
Special Requirements	•																																						
Extension Points	N/A																																						
Requirements Covered	<table><tr><th>ID</th><th>Requirement</th><th>Weight</th></tr><tr><td>REQ-12</td><td>Every command needs a response and is handled according to the agreement between the parties involved. In the inter-operable network, acknowledgement messages are standardised and may contain the following information: - Confirmation of message receipt- Success / Failure of processing (syntax and content)- Reason for failure, with a code number and text message unique assigned to each failure</td><td>Primary</td></tr><tr><td>REQ-14</td><td>A subscription must be able to be maintained on the following levels : - GTIN - GLN of Data Source - Target Market - Lowest level of EAN.UCC ClassificationOr any combination of these 4 elements.</td><td>Secondary</td></tr><tr><td>REQ-15</td><td>With the set up of a subscription, a Data Recipient sets a profile to receive ongoing updates of the matching data (including all hierarchies, independently from the level subscribed on).</td><td>Secondary</td></tr><tr><td>REQ-16</td><td>Subscription remains valid until it is deleted. Hence, it can not be updated.</td><td>Primary</td></tr><tr><td>REQ-17</td><td>Subscriptions must be created by data recipients in their Recipients Data Pool and sent to the Global Registry.</td><td>Secondary</td></tr><tr><td>REQ-19</td><td>The system must maintain detailed subscription lists.</td><td>Secondary</td></tr><tr><td>REQ-20</td><td>Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.</td><td>Primary</td></tr><tr><td>REQ-21</td><td>If an Catalogue Item is "Confirmed of Synchronisation" then all Catalogue items below in the Catalogue Item Hierarchy shall be included in the Synchronisation list.</td><td>Primary</td></tr><tr><td>REQ-22</td><td>Relationship dependent data will only be communicated for Synchronised, Review or Accept status in the Synchronisation List.</td><td>Primary</td></tr><tr><td>REQ-23</td><td>Events that can trigger notifications are: - Publication of new data / change of publication - Change of published Catalogue Item / Party / Partner Profile - Change of owner, rights - Subscription - Synchronisation List - Confirmation/ Rejection - Request for Notification - Any successful matching process</td><td>Primary</td></tr><tr><td>REQ-</td><td>Notifications must NOT be sent in the</td><td>Primary</td></tr></table>			ID	Requirement	Weight	REQ-12	Every command needs a response and is handled according to the agreement between the parties involved. In the inter-operable network, acknowledgement messages are standardised and may contain the following information: - Confirmation of message receipt- Success / Failure of processing (syntax and content)- Reason for failure, with a code number and text message unique assigned to each failure	Primary	REQ-14	A subscription must be able to be maintained on the following levels : - GTIN - GLN of Data Source - Target Market - Lowest level of EAN.UCC ClassificationOr any combination of these 4 elements.	Secondary	REQ-15	With the set up of a subscription, a Data Recipient sets a profile to receive ongoing updates of the matching data (including all hierarchies, independently from the level subscribed on).	Secondary	REQ-16	Subscription remains valid until it is deleted. Hence, it can not be updated.	Primary	REQ-17	Subscriptions must be created by data recipients in their Recipients Data Pool and sent to the Global Registry.	Secondary	REQ-19	The system must maintain detailed subscription lists.	Secondary	REQ-20	Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.	Primary	REQ-21	If an Catalogue Item is "Confirmed of Synchronisation" then all Catalogue items below in the Catalogue Item Hierarchy shall be included in the Synchronisation list.	Primary	REQ-22	Relationship dependent data will only be communicated for Synchronised, Review or Accept status in the Synchronisation List.	Primary	REQ-23	Events that can trigger notifications are: - Publication of new data / change of publication - Change of published Catalogue Item / Party / Partner Profile - Change of owner, rights - Subscription - Synchronisation List - Confirmation/ Rejection - Request for Notification - Any successful matching process	Primary	REQ-	Notifications must NOT be sent in the	Primary
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REQ-	Notifications must NOT be sent in the	Primary																																					

	24	following cases since data is not yet public and validated information: - Data load (add, change, etc...) - Data validation - Registration of new Catalogue Item	
	REQ-29	The confirmation process must take place in the home data pool of the data recipient.	Primary
	REQ-32	Acknowledgement Reason codes must be unique.	Primary
	REQ-69	Data recipient maintains subscription.	Secondary
	REQ-70	Data recipient will continue to receive updates until he rejects the data.	Primary
	REQ-72	Reject is optional: in the absence of confirmation & reject, the data recipient would still receive updates.	Primary
	REQ-73	Confirmed GTIN: - subscription: go to synchronisation list - synchronisation list: no action required	Secondary
	REQ-74	Only new products matching the initial subscription will be distributed to avoid resending data that was previously rejected.	Primary
	REQ-78	Subscription: for every matching GTIN, independently from its level, all hierarchies will be returned.	Secondary
	REQ-79	Synchronisation list: - Includes every GTIN id (GTIN+GLN+TM) that needs to be synchronised - Can be a result of the Confirmation process - All GTIN's equal or lower in the hierarchy than the GTIN confirmed will be returned	Primary
	REQ-81	Synchronisation List is only synchronised between the involved source and recipient data pools for applicable data: synchronisation list is built based on confirmation received by a source data pool and nothing else.	Primary
	REQ-88	The matching process is owned and developed by each source data pool in order to trigger data distribution based on publication and subscription data.	Primary
	REQ-89	The matching process can be triggered either by publication, subscription or as a scheduled event. It is valid for all subscription types (including synchronisation list) and all publication types.	Primary
	REQ-90	For a given subscription (create/update): - the matching process identifies Items published to the GLN or TM of the subscription owner. - for each item, a notification is created including all dependent hierarchies. - for a synchronisation list, the hierarchy information included in the notification, will be limited to the GTIN's maintained in the Synchronisation list. - The notification is sent to the home data pool of the data recipient.	Secondary
	REQ-99	The Global Registry functionality requirements can be summarised as follows: - Enable data synchronisation - Validation, registration and subscription functions - Enable global validation - Checking compliance with basic EAN.UCC rules related to the format of a GTIN/GLN and ensuring the uniqueness	Primary

		of the data that is being registered - Enable global search functionality that does not require full duplication of data in the Global Registry.	
	REQ-100	The Global Registry is involved in the following functions and/or business cases as defined in the Item Synchronisation detailed requirements: - Validation - Registration - Subscription - Global Search	Primary
	REQ-109	A Data Recipient requests that it receive a "notification" when a specific event occurs that meets the Recipients criteria (selective on sources, categories, etc). This is subject to the recipient's access to information as controlled by the data source through its source data pool.	Primary
	REQ-110	After a Subscription is created, the Global Registry will then disseminate relevant subscriptions to appropriate Source Data Pools (current and future new data pools).	Secondary
	REQ-111	Registry requirements for subscription are: - Receive and store subscriptions - Provide subscription acknowledgement - Matching process of subscriptions with Source Data Pools - Forward subscriptions	Secondary
	REQ-123	Recipient maintains a subscription, including the "Reload" flag.	Secondary
	REQ-124	The notification triggered by a subscription must also carry the "Reload" flag value.	Secondary
	REQ-126	If a new Reload is needed, the Recipient must delete the previous Reload Subscription, then create a new Subscription with the "Reload" flag set.	Secondary
	REQ-128	Source Data Pools must send notifications based on matching publications and subscriptions.	Primary
	REQ-129	GTIN and Category are mutually exclusive subscription criteria as the Category is uniquely defined for a given GTIN, independently from the GLN and from the TM.	Secondary
	REQ-132	The events that can trigger the distribution of a subscription are: - new/updated registration: check existing subscriptions, if new data pools are found : distribute subscriptions - new subscription: check existing registrations, if new data pools are found: distribute subscriptions - delete subscriptions: distribute "delete" to source data pools where subscription had been sent	Primary
	REQ-133	Subscriptions cannot be updated, they are created or deleted.	Primary
	REQ-134	Subscriptions must be stored in the recipient's data pool.	Primary
	REQ-135	For every subscription, the Registry must store the GLN of the Source Data Pool to which the subscription was sent and when it was sent.	Primary
	REQ-136	Ability to identify new or updated registered Catalogue Items that match a subscription and forward the subscription to the Source Data Pool.	Primary
	REQ-137	Match new subscriptions with registered Catalogue Items and forward the subscription to the Source Data Pool.	Primary

	REQ-139	SubscriptionWho : Data Recipient = target GLNWhat : Any combination of GTIN, GLN, TM and Category	Primary
	REQ-141	Deletion of a Subscription stops New Catalogue Items from being sent to RDP, but, doesn't stop Catalogue Items already in the Synchronisation List from being updated.	Primary
	REQ-142	Request for Notification is not retained in the Global Registry and acts like a Subscription that is applied to the Synchronisation List, then deleted (no New Catalogue Item data will be sent).	Primary
	REQ-143	"Reload" flag is passed through to Recipient.	Primary
	REQ-144	Request for publication (subscription) resets the reject flag if catalogue Item has been previously rejected and reactivate the subscription.	Primary
	REQ-145	The request for publication subscription is only executed once.	Primary
	REQ-146	Subscriptions are passed from global Registry to data pools just once. The Global Registry passes along to the source data pool matching subscriptions in the entirety, rather than replicating for each GTIN registered.	Primary
	REQ-147	Request for notification publication (subscription) resets the reject flag if the Catalogue Item has been previously rejected and reactivate the subscription.	Primary
	REQ-148	The "Reload" attribute will contain a Boolean value (TRUE or FALSE).	Primary
	REQ-149	Upon execution of an item data notification, the source data pool will pass along the value of this attribute within the message for the recipient to properly route the inbound message. After executing the item data notification, the source data pool will	Primary
	REQ-150	The team identified the need for an additional process to be known as "Request for Notification". The Request for Notification is originated by the requesting data recipient, through the recipient data pool, to the Global Registry and forwarded to the so	Primary
	REQ-151	The team wanted to reiterate the fact that new subscriptions received by a source data pool would be executed immediately a single time.	Primary
	REQ-152	The ability to set up a subscription and not get an initial full load of data. She wants to only receive the changes, adds, deletes and new items that match her subscription. (This is the same as a regular subscription with the exception of not getting	Primary
	REQ-154	The Global Registry shall send only once a subscription to a Source Data Pool.	Primary

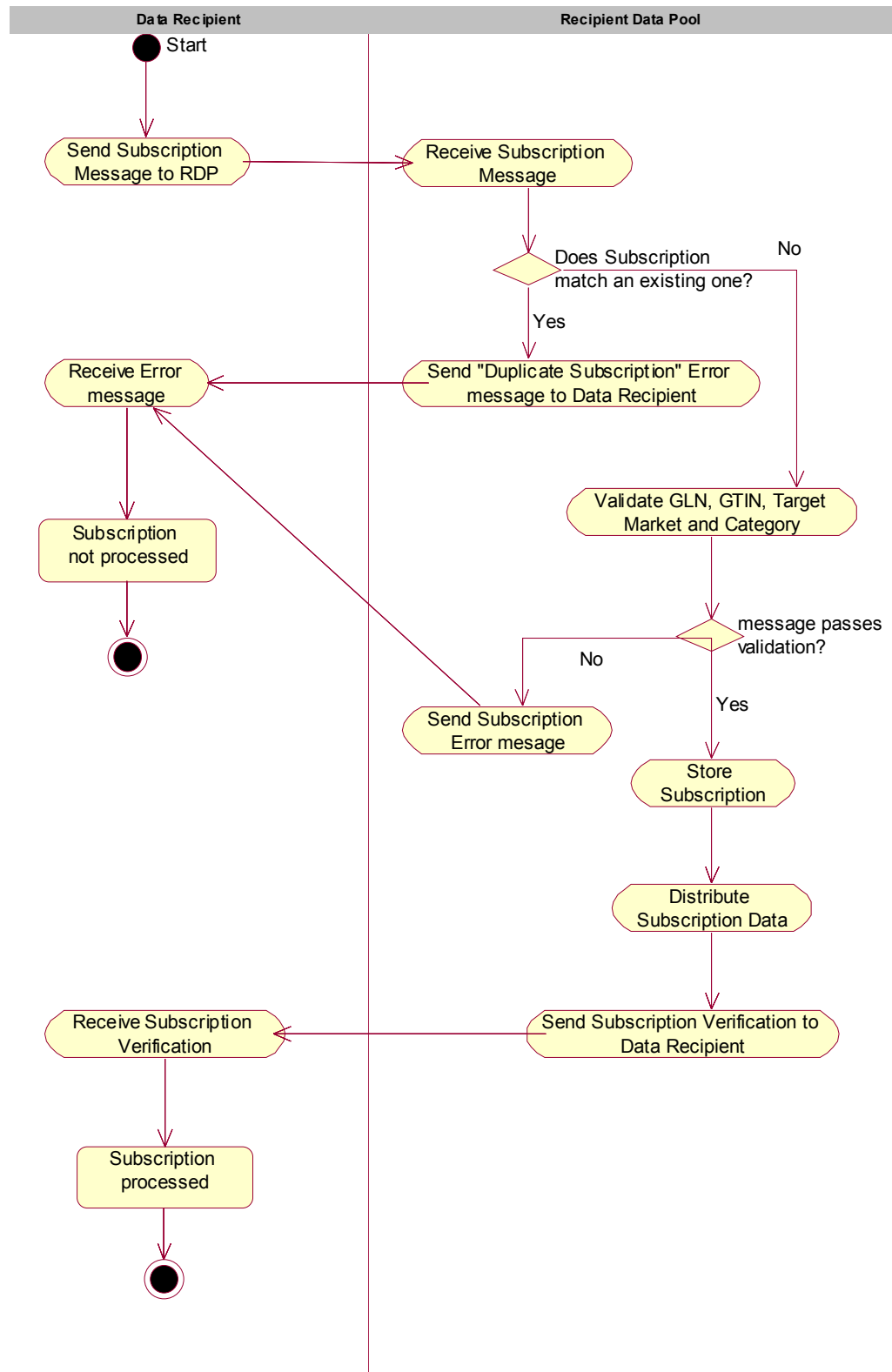


Figure 44 - Subscribe to Catalogue Item Data Activity Diagram

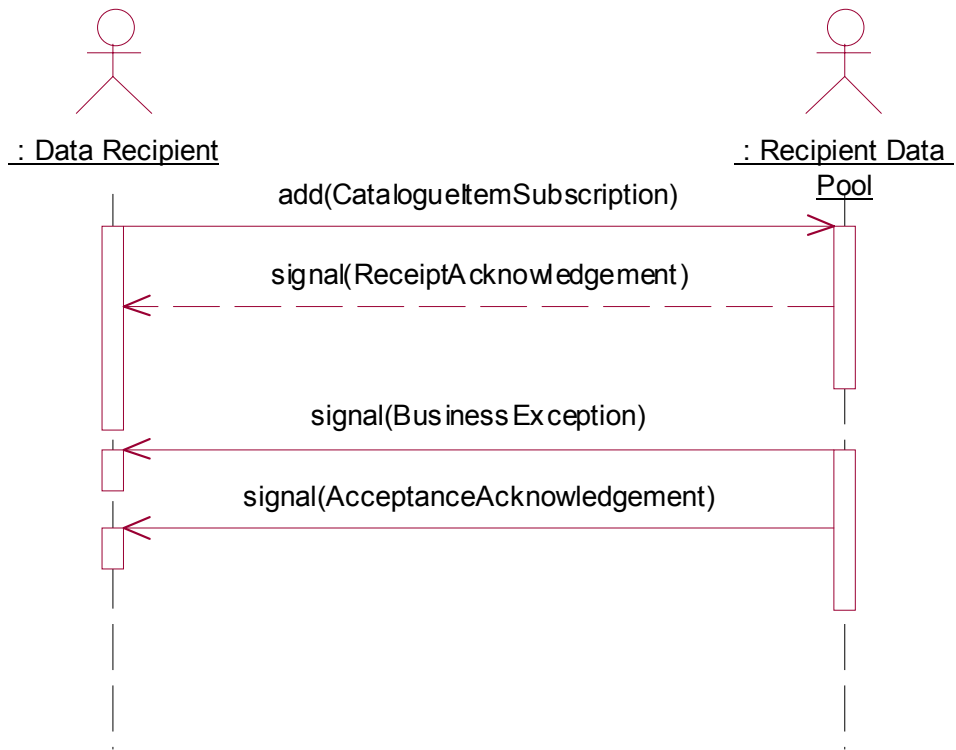


Figure 45 - Subscribe to Catalogue Item Data Sequence Diagram

Remove Catalogue Item Subscription

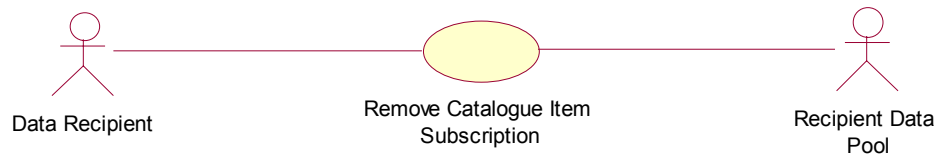


Figure 46 - Remove Catalogue Item Subscription Use Case Diagram

Use Case Name	Remove Catalogue Item Subscription	
Traceability Identifier	UC-28	
Use Case Description	<p>The Remove Catalogue Item Subscription Use Case describes how a Data Recipient informs the Recipient Data Pool to delete a subscription.</p> <p>Once the Subscription is removed, the Recipient Data Pool will forward the removal information to the Global Registry which, in turn, will forward it to appropriate Source Data Pools (see UC-35 Distribute Subscription Data).</p> <p>The Source Data Pools will remove the subscription. Thereafter, the Source Data Pools will not send new Catalogue Item data to the Data Recipient (via their Recipient Data Pool). The removal of a subscription does not affect the Synchronisation list held by the Source Data pool. The Data Recipient will continue to receive changes, corrections and deletions based on the Synchronisation List.</p>	
Use Cases Above	UC-23: Manage Catalogue Item Distribution Criteria	
Use Cases Below	None	
Actors	Data Recipient Recipient Data Pool (RDP)	
Performance Goals	<p>Data Recipient: To inform the Recipient Data Pool of the removal of a subscription. Essentially (via the Distribute Subscription Use Case) stopping new Catalogue Item data from being forwarded.</p> <p>RDP: To possess the necessary information that will allow the RDP and appropriate Source Data Pools to distribute Catalogue Item Data to the Recipient.</p>	
Preconditions	The Data recipient has a Subscription held by the Recipient Data Pool.	
Postconditions	The Subscription no longer exists in the Recipient Data Pool or (via the Distribute Subscription Use Case) the Registry and Source Data Pools.	
Scenario	Begins when, the Recipient Data Pool receives a Delete Subscription message from a Data Recipient.	

	<div>1. The RDP sends a message acknowledgement to the Data Recipient</div> <div>2. The RDP validates that the Subscription exists.</div> <div>3. The RDP sends a Subscription Verification to the Data Recipient</div> <div>Ends when, the Data Recipient acknowledges the Subscription Verification message.</div>																														
Alternative Scenario	<div>ad 2. The Subscription does not exist:</div> <div>2.1. The RDP sends an error message to the Data Recipient specifying that the Subscription does not exist.</div> <div>Ends when, the Data Recipient receives the error message</div>																														
Special Requirements	<div></div>																														
Extension Points	N/A																														
Requirements Covered	<table><tr><th>ID</th><th>Requirement</th><th>Weight</th></tr><tr><td>REQ-12</td><td>Every command needs a response and is handled according to the agreement</td><td>Primary</td></tr><tr><td>REQ-14</td><td>A subscription must be able to be maintained on the following levels : -</td><td>Primary</td></tr><tr><td>REQ-15</td><td>With the set up of a subscription, a Data Recipient sets a profile to receive ongoing</td><td>Primary</td></tr><tr><td>REQ-16</td><td>Subscription remains valid until it is deleted. Hence, it can not be updated.</td><td>Secondary</td></tr><tr><td>REQ-19</td><td>The system must maintain detailed subscription lists.</td><td>Primary</td></tr><tr><td>REQ-20</td><td>Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that</td><td>Primary</td></tr><tr><td>REQ-21</td><td>If an Catalogue Item is "Confirmed of Synchronisation" then all Catalogue items</td><td>Primary</td></tr><tr><td>REQ-22</td><td>Relationship dependent data will only be communicated for Synchronised, Review</td><td>Primary</td></tr><tr><td>REQ-23</td><td>Events that can trigger notifications are: - Publication of new data / change of</td><td>Primary</td></tr></table>	ID	Requirement	Weight	REQ-12	Every command needs a response and is handled according to the agreement	Primary	REQ-14	A subscription must be able to be maintained on the following levels : -	Primary	REQ-15	With the set up of a subscription, a Data Recipient sets a profile to receive ongoing	Primary	REQ-16	Subscription remains valid until it is deleted. Hence, it can not be updated.	Secondary	REQ-19	The system must maintain detailed subscription lists.	Primary	REQ-20	Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that	Primary	REQ-21	If an Catalogue Item is "Confirmed of Synchronisation" then all Catalogue items	Primary	REQ-22	Relationship dependent data will only be communicated for Synchronised, Review	Primary	REQ-23	Events that can trigger notifications are: - Publication of new data / change of	Primary
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REQ-12	Every command needs a response and is handled according to the agreement	Primary																													
REQ-14	A subscription must be able to be maintained on the following levels : -	Primary																													
REQ-15	With the set up of a subscription, a Data Recipient sets a profile to receive ongoing	Primary																													
REQ-16	Subscription remains valid until it is deleted. Hence, it can not be updated.	Secondary																													
REQ-19	The system must maintain detailed subscription lists.	Primary																													
REQ-20	Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that	Primary																													
REQ-21	If an Catalogue Item is "Confirmed of Synchronisation" then all Catalogue items	Primary																													
REQ-22	Relationship dependent data will only be communicated for Synchronised, Review	Primary																													
REQ-23	Events that can trigger notifications are: - Publication of new data / change of	Primary																													

		Rejection - Request for Notification - Any successful matching process	
	REQ-24	Notifications must NOT be sent in the following cases since data is not yet public and validated information: - Data load (add, change, etc...) - Data validation - Registration of new Catalogue Item	Primary
	REQ-29	The confirmation process must take place in the home data pool of the data recipient.	Primary
	REQ-32	Acknowledgement Reason codes must be unique.	Primary
	REQ-70	Data recipient will continue to receive updates until he rejects the data.	Secondary
	REQ-71	For a synchronisation list / subscription, the reject will remove that GTIN from the synchronisation list.	Secondary
	REQ-72	Reject is optional: in the absence of confirmation & reject, the data recipient would still receive updates.	Secondary
	REQ-77	Filtering out rejected data is a source data pool responsibility.	Primary
	REQ-78	Subscription: for every matching GTIN, independently from its level, all hierarchies will be returned.	Primary
	REQ-79	Synchronisation list: - Includes every GTIN id (GTIN+GLN+TM) that needs to be synchronised - Can be a result of the Confirmation process - All GTIN's equal or lower in the hierarchy than the GTIN confirmed will be returned	Primary
	REQ-80	Rejection at any level of a hierarchy will trigger the rejection of all GTIN's equal or higher in the hierarchy of the rejected GTIN.	Primary
	REQ-81	Synchronisation List is only synchronised between the involved source and recipient data pools for applicable data: synchronisation list is built based on confirmation received by a source data pool and nothing else.	Primary
	REQ-88	The matching process is owned and developed by each source data pool in order to trigger data distribution based on publication and subscription data.	Primary
	REQ-89	The matching process can be triggered either by publication, subscription or as a scheduled event. It is valid for all subscription types (including synchronisation list) and all publication types.	Primary
	REQ-90	For a given subscription (create/update): - the matching process identifies Items published to the GLN or TM of the subscription owner. - for each item, a notification is created including all dependent hierarchies. - for a synchronisation list, the hierarchy information included in the notification, will be limited to the GTIN's maintained in the Synchronisation list. - The notification is sent to the home data pool of the data recipient.	Primary
	REQ-98	Note : rejection should not remove data previously authorised, for instance in a different hierarchy.	Primary
	REQ-	The Global Registry functionality	Primary

	99	requirements can be summarised as follows: - Enable data synchronisation - Validation, registration and subscription functions - Enable global validation - Checking compliance with basic EAN.UCC rules related to the format of a GTIN/GLN and ensuring the uniqueness of the data that is being registered - Enable global search functionality that does not require full duplication of data in the Global Registry.	
	REQ-100	The Global Registry is involved in the following functions and/or business cases as defined in the Item Synchronisation detailed requirements: - Validation - Registration - Subscription - Global Search	Primary
	REQ-109	A Data Recipient requests that it receive a "notification" when a specific event occurs that meets the Recipients criteria (selective on sources, categories, etc). This is subject to the recipient's access to information as controlled by the data source through its source data pool.	Primary
	REQ-110	After a Subscription is created, the Global Registry will then disseminate relevant subscriptions to appropriate Source Data Pools (current and future new data pools).	Primary
	REQ-111	Registry requirements for subscription are: - Receive and store subscriptions - Provide subscription acknowledgement - Matching process of subscriptions with Source Data Pools - Forward subscriptions	Primary
	REQ-123	Recipient maintains a subscription, including the "Reload" flag.	Primary
	REQ-124	The notification triggered by a subscription must also carry the "Reload" flag value.	Primary
	REQ-126	If a new Reload is needed, the Recipient must delete the previous Reload Subscription, then create a new Subscription with the "Reload" flag set.	Primary
	REQ-128	Source Data Pools must send notifications based on matching publications and subscriptions.	Primary
	REQ-129	GTIN and Category are mutually exclusive subscription criteria as the Category is uniquely defined for a given GTIN, independently from the GLN and from the TM.	Primary
	REQ-132	The events that can trigger the distribution of a subscription are: - new/updated registration: check existing subscriptions, if new data pools are found : distribute subscriptions - new subscription: check existing registrations, if new data pools are found: distribute subscriptions - delete subscriptions: distribute "delete" to source data pools where subscription had been sent	Primary
	REQ-133	Subscriptions cannot be updated, they are created or deleted.	Secondary
	REQ-134	Subscriptions must be stored in the recipient's data pool.	Primary
	REQ-135	For every subscription, the Registry must store the GLN of the Source Data Pool to which the subscription was sent and when it was sent.	Primary

	REQ-136	Ability to identify new or updated registered Catalogue Items that match a subscription and forward the subscription to the Source Data Pool.	Primary
	REQ-137	Match new subscriptions with registered Catalogue Items and forward the subscription to the Source Data Pool.	Primary
	REQ-139	SubscriptionWho : Data Recipient = target GLNWhat : Any combination of GTIN, GLN, TM and Category	Primary
	REQ-141	Deletion of a Subscription stops New Catalogue Items from being sent to RDP, but, doesn't stop Catalogue Items already in the Synchronisation List from being updated.	Secondary
	REQ-142	Request for Notification is not retained in the Global Registry and acts like a Subscription that is applied to the Synchronisation List, then deleted (no New Catalogue Item data will be sent).	Primary
	REQ-143	"Reload" flag is passed through to Recipient.	Primary
	REQ-144	Request for publication (subscription) resets the reject flag if catalogue Item has been previously rejected and reactivate the subscription.	Primary
	REQ-145	The request for publication subscription is only executed once.	Primary
	REQ-146	Subscriptions are passed from global Registry to data pools just once. The Global Registry passes along to the source data pool matching subscriptions in the entirety, rather than replicating for each GTIN registered.	Primary
	REQ-147	Request for notification publication (subscription) resets the reject flag if the Catalogue Item has been previously rejected and reactivate the subscription.	Primary
	REQ-148	The "Reload" attribute will contain a Boolean value (TRUE or FALSE).	Primary
	REQ-149	Upon execution of an item data notification, the source data pool will pass along the value of this attribute within the message for the recipient to properly route the inbound message. After executing the item data notification, the source data pool will	Primary
	REQ-150	The team identified the need for an additional process to be known as "Request for Notification". The Request for Notification is originated by the requesting data recipient, through the recipient data pool, to the Global Registry and forwarded to the so	Primary
	REQ-151	The team wanted to reiterate the fact that new subscriptions received by a source data pool would be executed immediately a single time.	Primary
	REQ-152	The ability to set up a subscription and not get an initial full load of data. She wants to only receive the changes, adds, deletes and new items that match her subscription. (This is the same as a regular subscription with the exception of not getting	Primary
	REQ-154	The Global Registry shall send only once a subscription to a Source Data Pool.	Primary

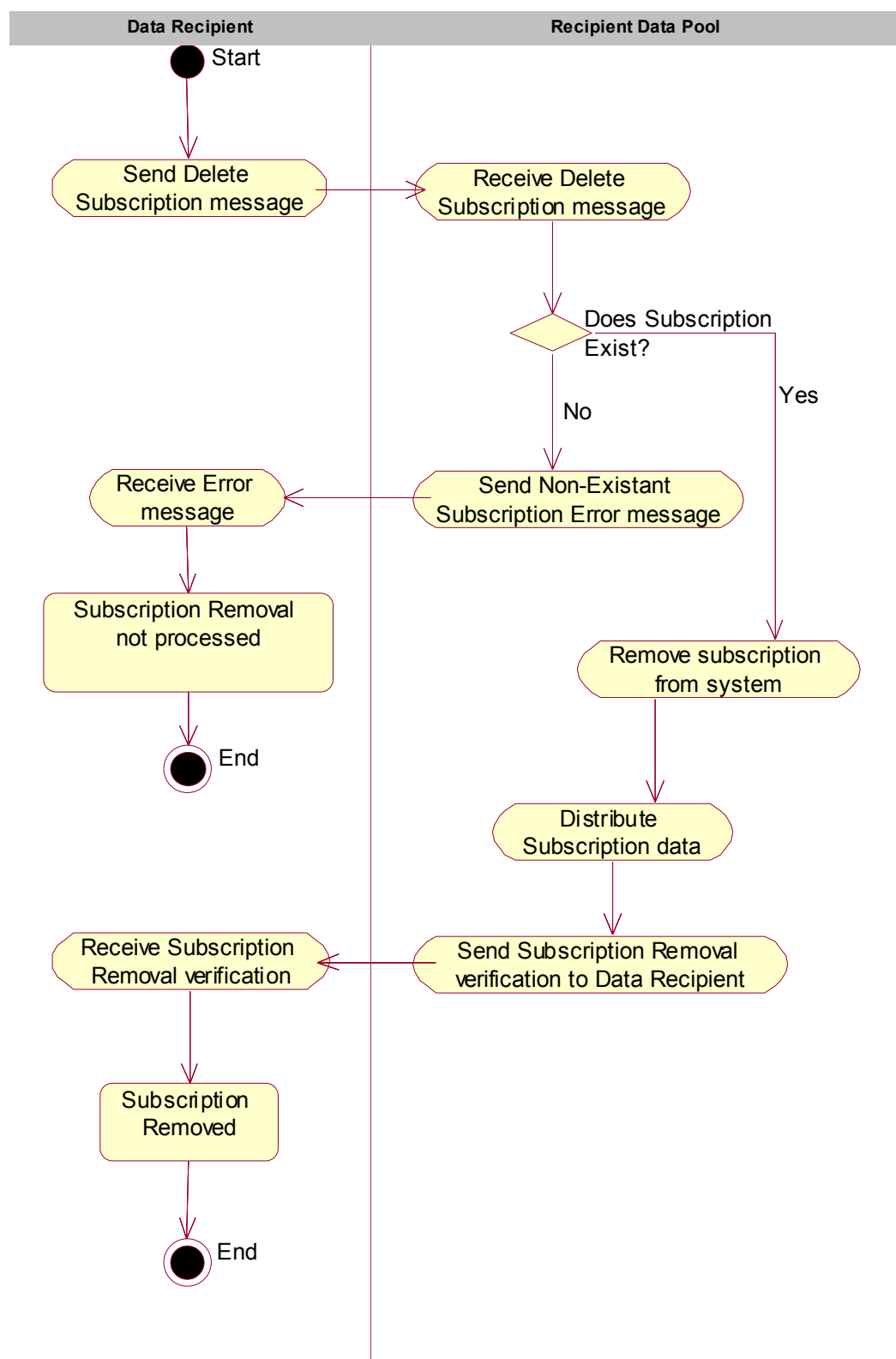


Figure 47 - Remove Catalogue Item Subscription Activity Diagram

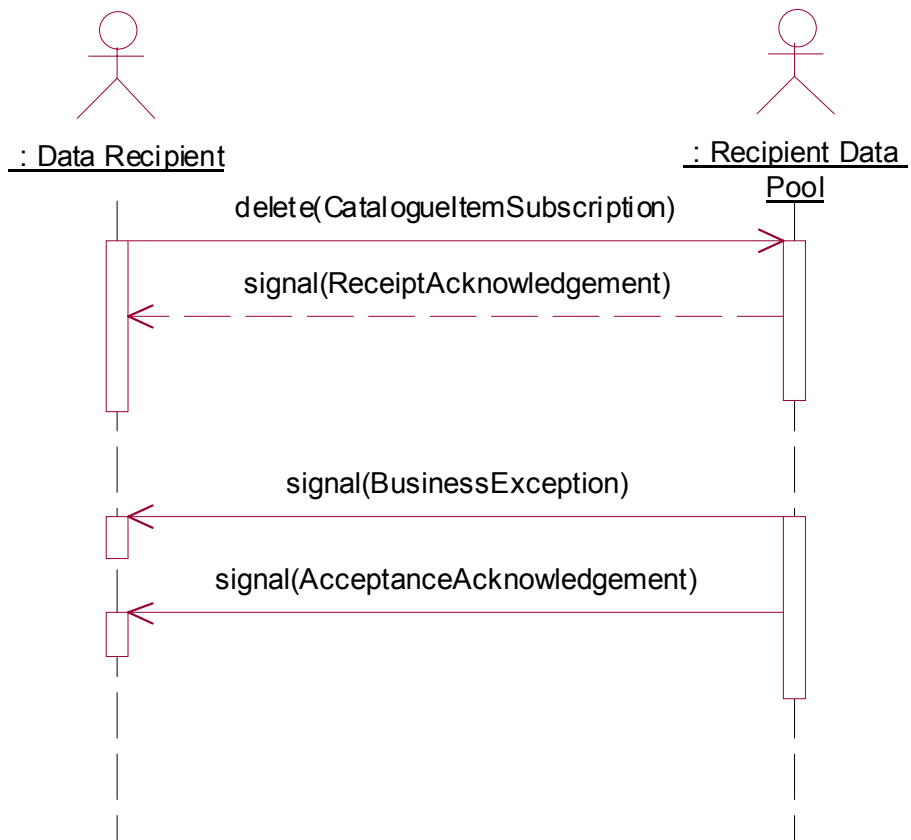
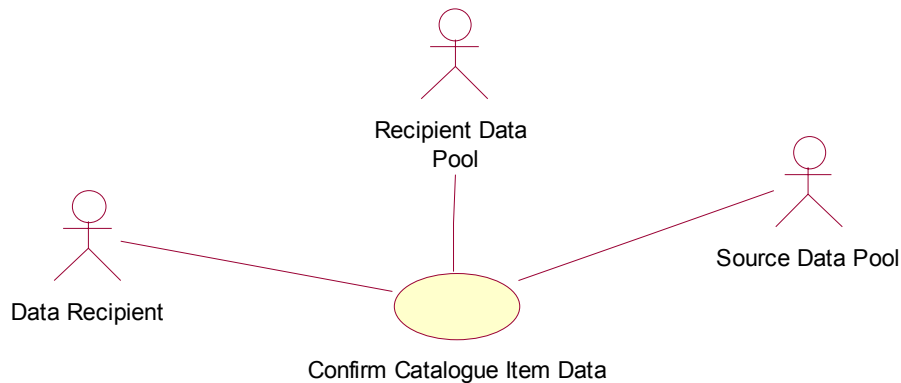


Figure 48 - Remove Subscription Sequence Diagram

Confirm Catalogue Item Data



Use Case Name	Confirm Catalogue Item Subscription
Traceability Identifier	UC-26
Use Case Description	<p>The Confirm Catalogue Item Data Use Case describes how a Data Recipient informs the Source Data Pool of its intentions regarding the Catalogue Item.</p> <p>The four states that can be communicated are Accepted, Synchronised, Rejected, or Review. In the absence of a confirmation, the Source Data Pool will continue to send updates to the Recipient Data Pool.</p>
Use Cases Above	UC-23: Manage Catalogue Item Distribution Criteria
Use Cases Below	None
Actors	Data Recipient Recipient Data Pool (RDP) Source Data Pool (SDP)
Performance Goals	<p>Data Recipient: To inform the Source Data Pool of its intentions regarding the Catalogue Item</p> <p>RDP: To possess the necessary information that will allow the RDP and appropriate Source Data Pools to distribute Catalogue Item Data to the Recipient.</p> <p>SDP: To identify Data Recipients that are actively using Synchronised Item data.</p>
Preconditions	The Data recipient has received Catalogue Item data.
Postconditions	The RDP and SDP are aware of the Data Recipient's intentions regarding a specific Catalogue Item. In the case of a reject, the SDP knows not to continue sending updates on the particular Item.
Scenario	<p>Begins when, the Data Recipient sends a Catalogue Item Confirmation to the RDP.</p> <ol style="list-style-type: none"> 1. The RDP sends a message acknowledgement to the Data Recipient

	<p>2. The RDP validates the Confirmation message. 3. The RDP sends a acknowledgement to the Data Recipient. 4. The RDP sends the Catalogue Item Confirmation to the SDP.</p> <p>Ends when, the SDP receives the Catalogue Item Confirmation.</p>
Alternative Scenario	<p>ad 2. The Confirmation message is invalid: 2.1. The RDP sends an error message to the Data Recipient specifying the errors in the Confirmation message. Ends when, the Data Recipient receives the error message</p>
Special Requirements	<ul style="list-style-type: none"> •
Extension Points	N/A
Requirements Covered	

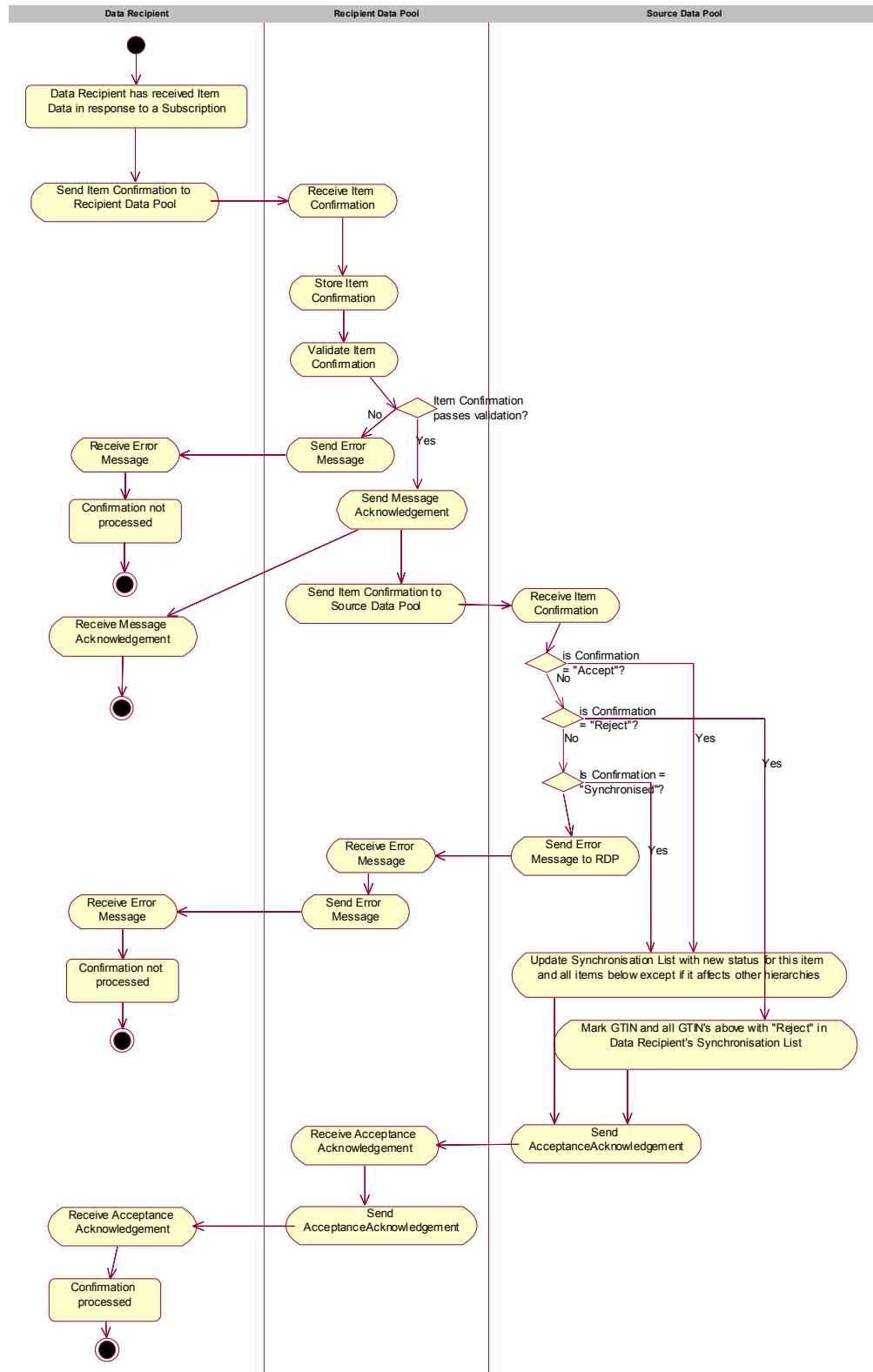


Figure 49 - Confirm Catalogue Item Data Activity Diagram

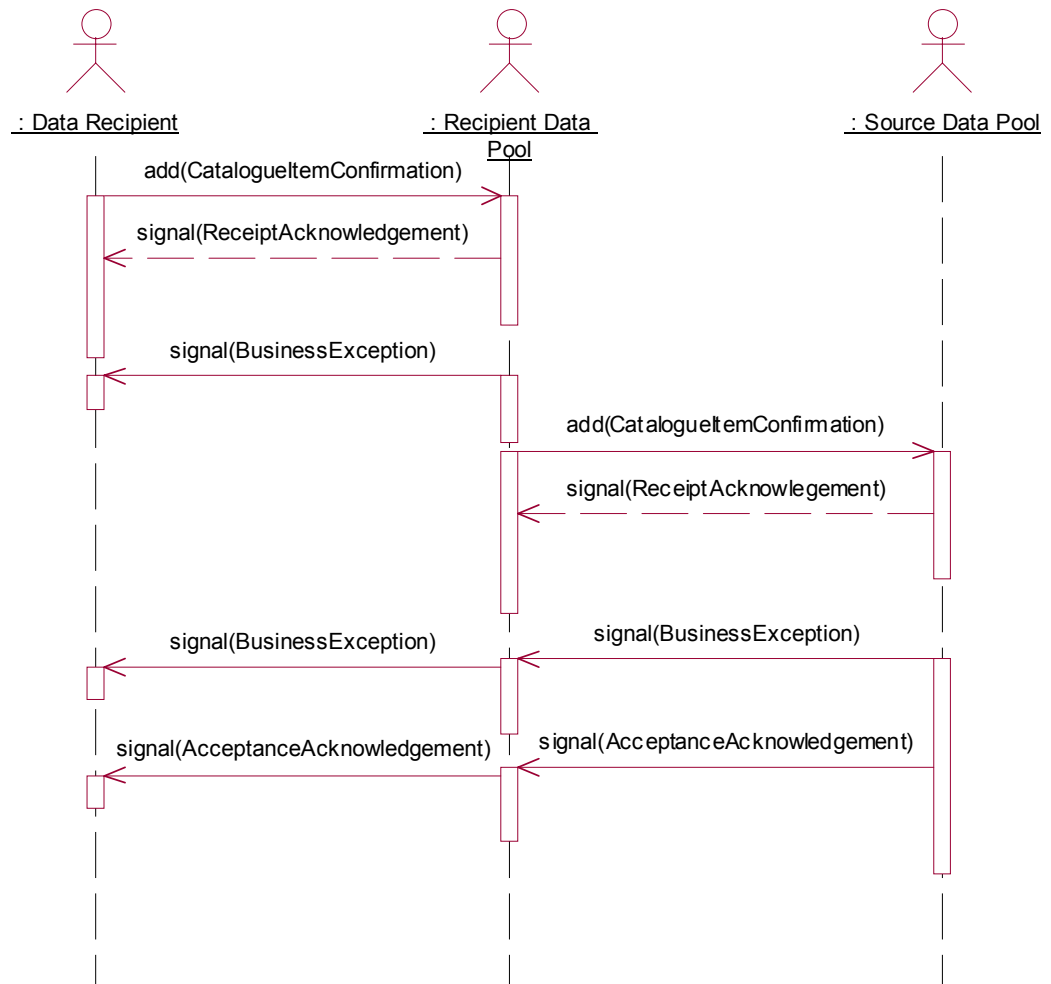


Figure 50 - Confirm Catalogue Item Data Sequence Diagram

Request Catalogue Item Data

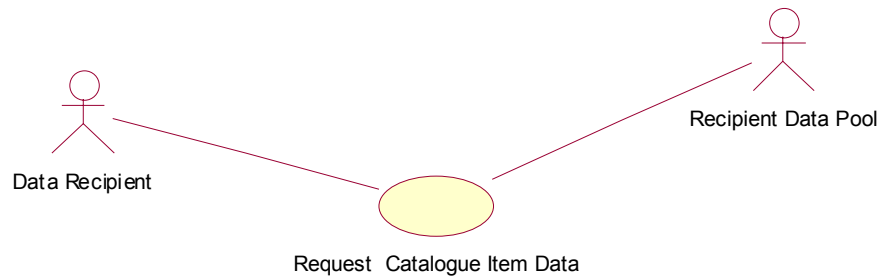


Figure 51 - Request Catalogue Item Data

Use Case Name	Request Catalogue Item Data
Traceability Identifier	UC-48
Use Case Description	<p>The Request Catalogue Item Data Use Case describes how a Data Recipient informs the Source Data Pool to resend certain Catalogue Item data. This Use Case makes use of the Request for Catalogue Item Notification message.</p> <p>This request is identical to a subscription with the difference being that the Global Registry will not retain the message once all relevant Source Data Pools receive the message. A special case of the Request is when the Data Recipient includes the “reload” flag in the message. This flag is attached to the resultant Catalogue Item Notification.</p>
Use Cases Above	UC-23: Manage Catalogue Item Distribution Criteria
Use Cases Below	None
Actors	Data Recipient Recipient Data Pool (RDP)
Performance Goals	<p>Data Recipient: To inform the Source Data Pool that it Would like certain Catalogue Item data to be resent.</p> <p>RDP: To posses the necessary information that will allow the RDP and appropriate Source Data Pools to distribute Catalogue Item Data to the Recipient.</p>
Preconditions	The Data recipient has received Catalogue Item data.
Postconditions	The RDP is aware that certain Catalogue Item data is to be resent to the Data Recipient.
Scenario	<p>Begins when, the Data Recipient sends a RequestForCatalogueItemNotification to the RDP.</p> <ol style="list-style-type: none"> 1. The RDP sends a message acknowledgement to the Data Recipient 2. The RDP validates the request message. 3. The RDP sends an acknowledgement to the Data Recipient.

	Ends when, the Data Recipient receives the acknowledgement.
Alternative Scenario	<p>ad 2. The request message is invalid:</p> <p>2.1. The RDP sends an error message to the Data Recipient specifying the errors in the original message.</p> <p>Ends when, the Data Recipient receives the error message</p>
Special Requirements	<ul style="list-style-type: none"> •
Extension Points	N/A
Requirements Covered	

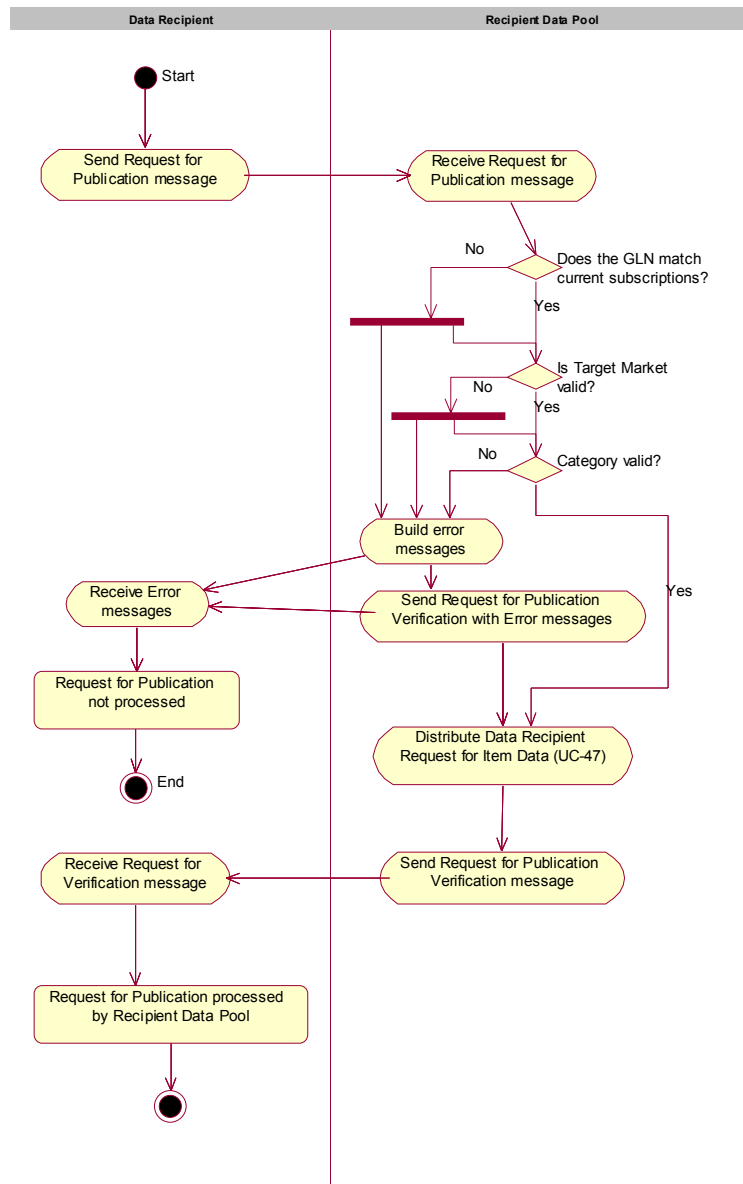


Figure 52 - Request Catalogue Item Data Activity Diagram

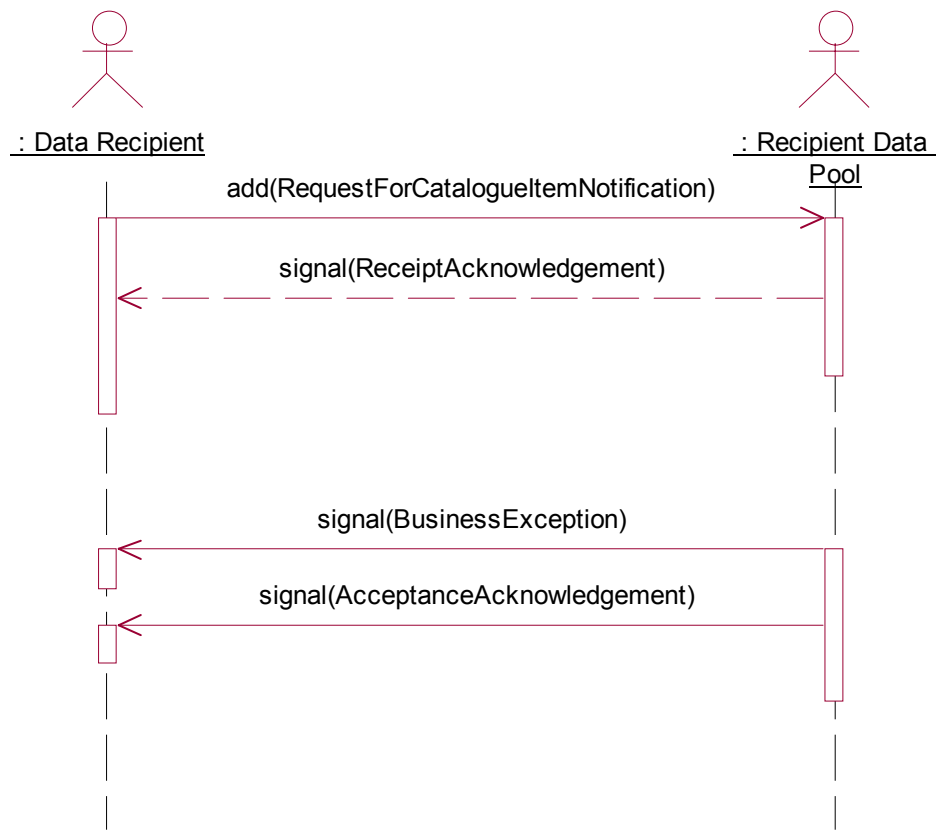


Figure 53 - Request Catalogue Item Data Sequence Diagram

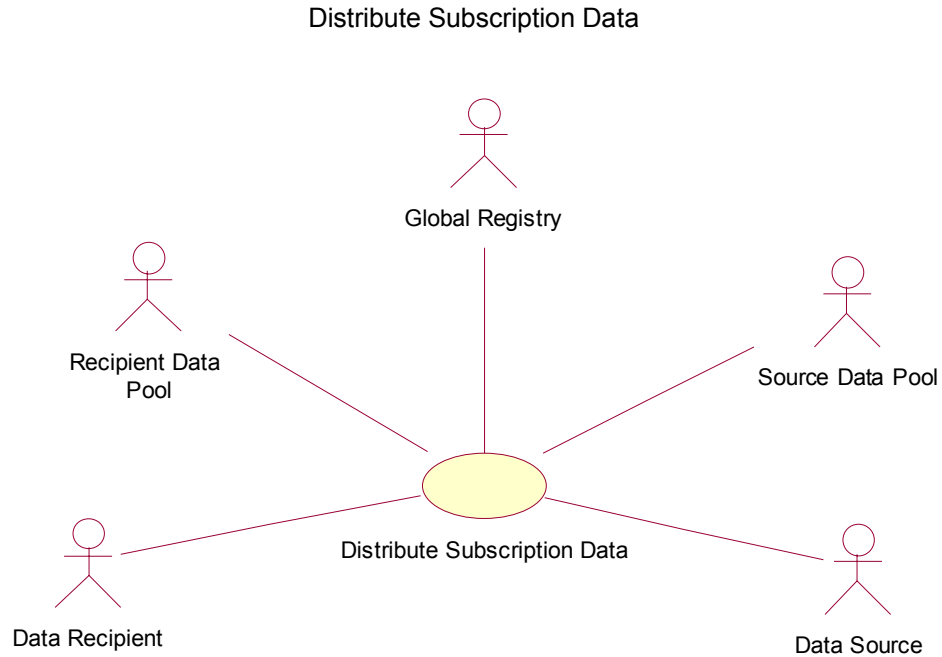


Figure 54 - Distribute Subscription Data Use Case

Use Case Name	Distribute Subscription Data	
Traceability Identifier	UC-35	
Use Case Description	The Distribute Subscription Data Use Case describes how new and delete Subscription messages are propagated throughout the Data Synchronisation system.	
Use Cases Above	UC-23: Manage Catalogue Item Distribution Criteria	
Use Cases Below	None	
Actors	Data Recipient Recipient Data Pool (RDP) Global Registry Source Data Pool (SDP) Data Source	
Performance Goals	Data Recipient:	To share Subscriptions and removal of Subscriptions with the appropriate Source Data Pools and Data Sources.
	RDP:	To possess the necessary information that will allow the RDP and appropriate Source Data Pools to distribute Catalogue Item Data to the Recipient.
	Global Registry:	To propagate Subscriptions to appropriate Data Pools.
	SDP:	To possess the necessary information that will allow the SDP to distribute Catalogue Item Data to the

	Recipient (via their RDP). Data Source: To keep track of current and potential customer's usage of Catalogue Item Data.											
Preconditions	The Data recipient has either created or deleted a Subscription in their Recipient Data Pool.											
Postconditions	The Subscription or delete subscription message is propagated to the Registry and proper Source Data Pools and Data Sources.											
Scenario	<p>Begins when, the Recipient Data Pool receives a Subscription or Delete Subscription message from a Data Recipient and has validated it.</p> <p>1. The RDP sends the Add/Delete Subscription to the Global Registry. 2. The Global Registry validates the message. 3. The Global Registry matches the subscription to Catalogue Item data in the Registry. 4. The Global Registry sends the Add/Delete Subscription to the matching SDP 5. The SDP sends the Add/Delete Subscription to the appropriate Data Source</p> <p>Ends when, the Data Source acknowledges the Subscription message.</p>											
Alternative Scenario	<p>ad 1. A new Catalogue Item is added to the Registry: 1.1 The Global Registry matches the new Catalogue Item against existing Subscriptions. 1.2 The Global Registry Sends all matching Subscriptions to the SDP of the new Catalogue Item. 1.3 The SDP forwards the Subscription to the Data Source that Published the Catalogue Item. Ends when, the Data Source sends an acknowledgement of the Subscription</p> <p>ad 2. The Subscription fails validation at the Registry: 2.1. The Global Registry sends an error message to the RDP. 2.2. The RDP sends an error message to the Data Recipient. Ends when, the Data Recipient receives the error message</p>											
Special Requirements	•											
Extension Points	N/A											
Requirements Covered	<table><tr><th>ID</th><th>Requirement</th><th>Weight</th></tr><tr><td>REQ-12</td><td>Every command needs a response and is handled according to the agreement between the parties involved. In the inter-operable network, acknowledgement messages are standardised and may contain the following information: -</td><td>Primary</td></tr><tr><td>REQ-14</td><td>A subscription must be able to be maintained on the following levels : - GTIN - GLN of Data Source - Target Market - Lowest level of EAN.UCC Classification Or any combination of these 4 elements.</td><td>Primary</td></tr></table>			ID	Requirement	Weight	REQ-12	Every command needs a response and is handled according to the agreement between the parties involved. In the inter-operable network, acknowledgement messages are standardised and may contain the following information: -	Primary	REQ-14	A subscription must be able to be maintained on the following levels : - GTIN - GLN of Data Source - Target Market - Lowest level of EAN.UCC Classification Or any combination of these 4 elements.	Primary
ID	Requirement	Weight										
REQ-12	Every command needs a response and is handled according to the agreement between the parties involved. In the inter-operable network, acknowledgement messages are standardised and may contain the following information: -	Primary										
REQ-14	A subscription must be able to be maintained on the following levels : - GTIN - GLN of Data Source - Target Market - Lowest level of EAN.UCC Classification Or any combination of these 4 elements.	Primary										

	REQ-14	A subscription must be able to be maintained on the following levels : - GTIN - GLN of Data Source - Target Market - Lowest level of EAN.UCC ClassificationOr any combination of these 4 elements.	Primary
	REQ-15	With the set up of a subscription, a Data Recipient sets a profile to receive ongoing updates of the matching data (including all hierarchies, independently from the level subscribed on).	Primary
	REQ-17	Subscriptions must be created by data recipients in their Recipients Data Pool and sent to the Global Registry.	Primary
	REQ-18	A new Source Data Pool will get their relevant subscriptions as soon as they start registering their GTIN's.	Secondary
	REQ-19	The system must maintain detailed subscription lists.	Primary
	REQ-20	Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.	Primary
	REQ-21	If an Catalogue Item is "Confirmed of Synchronisation" then all Catalogue items below in the Catalogue Item Hierarchy shall be included in the Synchronisation list.	Primary
	REQ-22	Relationship dependent data will only be communicated for Synchronised, Review or Accept status in the Synchronisation List.	Primary
	REQ-23	Events that can trigger notifications are: - Publication of new data / change of publication - Change of published Catalogue Item / Party / Partner Profile - Change of owner, rights - Subscription - Synchronisation List - Confirmation/ Rejection - Request for Notification - Any successful matching process	Primary
	REQ-24	Notifications must NOT be sent in the following cases since data is not yet public and validated information: - Data load (add, change, etc...) - Data validation - Registration of new Catalogue Item	Primary
	REQ-25	The Data Distribution, which is the movement of data from one entity to another, must be handled through a specific notification type.	Primary
	REQ-29	The confirmation process must take place in the home data pool of the data recipient.	Primary
	REQ-32	Acknowledgement Reason codes must be unique.	Primary
	REQ-69	Data recipient maintains subscription.	Primary
	REQ-70	Data recipient will continue to receive updates until he rejects the data.	Primary
	REQ-71	For a synchronisation list / subscription, the reject will remove that GTIN from the synchronisation list.	Primary
	REQ-72	Reject is optional: in the absence of confirmation & reject, the data recipient would still receive updates.	Primary
	REQ-73	Confirmed GTIN: - subscription: go to synchronisation list - synchronisation list: no action required	Primary
	REQ-	Only new products matching the initial	Secondary

	74	subscription will be distributed to avoid resending data that was previously rejected.	
	REQ-78	Subscription: for every matching GTIN, independently from its level, all hierarchies will be returned.	Primary
	REQ-79	Synchronisation list: - Includes every GTIN id (GTIN+GLN+TM) that needs to be synchronised - Can be a result of the Confirmation process - All GTIN's equal or lower in the hierarchy than the GTIN confirmed will be returned	Primary
	REQ-80	Rejection at any level of a hierarchy will trigger the rejection of all GTIN's equal or higher in the hierarchy of the rejected GTIN.	Primary
	REQ-81	Synchronisation List is only synchronised between the involved source and recipient data pools for applicable data: synchronisation list is built based on confirmation received by a source data pool and nothing else.	Primary
	REQ-88	The matching process is owned and developed by each source data pool in order to trigger data distribution based on publication and subscription data.	Primary
	REQ-89	The matching process can be triggered either by publication, subscription or as a scheduled event. It is valid for all subscription types (including synchronisation list) and all publication types.	Primary
	REQ-90	For a given subscription (create/update): - the matching process identifies Items published to the GLN or TM of the subscription owner. - for each item, a notification is created including all dependent hierarchies. - for a synchronisation list, the hierarchy information included in the notification, will be limited to the GTIN's maintained in the Synchronisation list. - The notification is sent to the home data pool of the data recipient.	Primary
	REQ-99	The Global Registry functionality requirements can be summarised as follows: - Enable data synchronisation - Validation, registration and subscription functions - Enable global validation - Checking compliance with basic EAN.UCC rules related to the format of a GTIN/GLN and ensuring the uniqueness of the data that is being registered - Enable global search functionality that does not require full duplication of data in the Global Registry.	Primary
	REQ-100	The Global Registry is involved in the following functions and/or business cases as defined in the Item Synchronisation detailed requirements: - Validation - Registration - Subscription - Global Search	Primary
	REQ-109	A Data Recipient requests that it receive a "notification" when a specific event occurs that meets the Recipients criteria (selective on sources, categories, etc). This is subject to the recipient's access to information as controlled by the data source through its source data pool.	Primary
	REQ-	After a Subscription is created, the Global	Primary

	110	Registry will then disseminate relevant subscriptions to appropriate Source Data Pools (current and future new data pools).	
	REQ-111	Registry requirements for subscription are: - Receive and store subscriptions - Provide subscription acknowledgement - Matching process of subscriptions with Source Data Pools - Forward subscriptions	Primary
	REQ-127	The Global Registry must distribute Subscriptions only to relevant Source Data Pools.	Secondary
	REQ-129	GTIN and Category are mutually exclusive subscription criteria as the Category is uniquely defined for a given GTIN, independently from the GLN and from the TM.	Primary
	REQ-130	GTIN, GLN (of Data Source), Target Market and Classification must be stored in the Global Registry, and are linked to the Source Data Pool(s) where the data can be found. For instance, if given a GTIN, the Global Registry will be able to return all the data pools where data can be found on that GTIN, independently from the GLN of the Data Source, the Target Market or the Category.	Secondary
	REQ-131	The distribution of subscriptions is either a scheduled event or is triggered by an other event.	Secondary
	REQ-132	The events that can trigger the distribution of a subscription are: - new/updated registration: check existing subscriptions, if new data pools are found : distribute subscriptions - new subscription: check existing registrations, if new data pools are found: distribute subscriptions - delete subscriptions: distribute "delete" to source data pools where subscription had been sent	Secondary
	REQ-133	Subscriptions cannot be updated, they are created or deleted.	Primary
	REQ-134	Subscriptions must be stored in the recipient's data pool.	Secondary
	REQ-135	For every subscription, the Registry must store the GLN of the Source Data Pool to which the subscription was sent and when it was sent.	Secondary
	REQ-136	Ability to identify new or updated registered Catalogue Items that match a subscription and forward the subscription to the Source Data Pool.	Secondary
	REQ-137	Match new subscriptions with registered Catalogue Items and forward the subscription to the Source Data Pool.	Secondary
	REQ-139	SubscriptionWho : Data Recipient = target GLNWhat : Any combination of GTIN, GLN, TM and Category	Secondary
	REQ-141	Deletion of a Subscription stops New Catalogue Items from being sent to RDP, but, doesn't stop Catalogue Items already in the Synchronisation List from being updated.	Primary
	REQ-142	Request for Notification is not retained in the Global Registry and acts like a Subscription that is applied to the Synchronisation List, then deleted (no New Catalogue Item data will be sent).	Secondary
	REQ-	"Reload" flag is passed through to	Primary

	143	Recipient.	
	REQ-144	Request for publication (subscription) resets the reject flag if catalogue Item has been previously rejected and reactivate the subscription.	Primary
	REQ-145	The request for publication subscription is only executed once.	Primary
	REQ-146	Subscriptions are passed from global Registry to data pools just once. The Global Registry passes along to the source data pool matching subscriptions in the entirety, rather than replicating for each GTIN registered.	Secondary
	REQ-147	Request for notification publication (subscription) resets the reject flag if the Catalogue Item has been previously rejected and reactivate the subscription.	Secondary
	REQ-148	The "Reload" attribute will contain a Boolean value (TRUE or FALSE).	Secondary
	REQ-149	Upon execution of an item data notification, the source data pool will pass along the value of this attribute within the message for the recipient to properly route the inbound message. After executing the item data notification, the source data pool will	Secondary
	REQ-150	The team identified the need for an additional process to be known as "Request for Notification". The Request for Notification is originated by the requesting data recipient, through the recipient data pool, to the Global Registry and forwarded to the so	Secondary
	REQ-151	The team wanted to reiterate the fact that new subscriptions received by a source data pool would be executed immediately a single time.	Secondary
	REQ-152	The ability to set up a subscription and not get an initial full load of data. She wants to only receive the changes, adds, deletes and new items that match her subscription. (This is the same as a regular subscription with the exception of not getting	Secondary
	REQ-154	The Global Registry shall send only once a subscription to a Source Data Pool.	Secondary

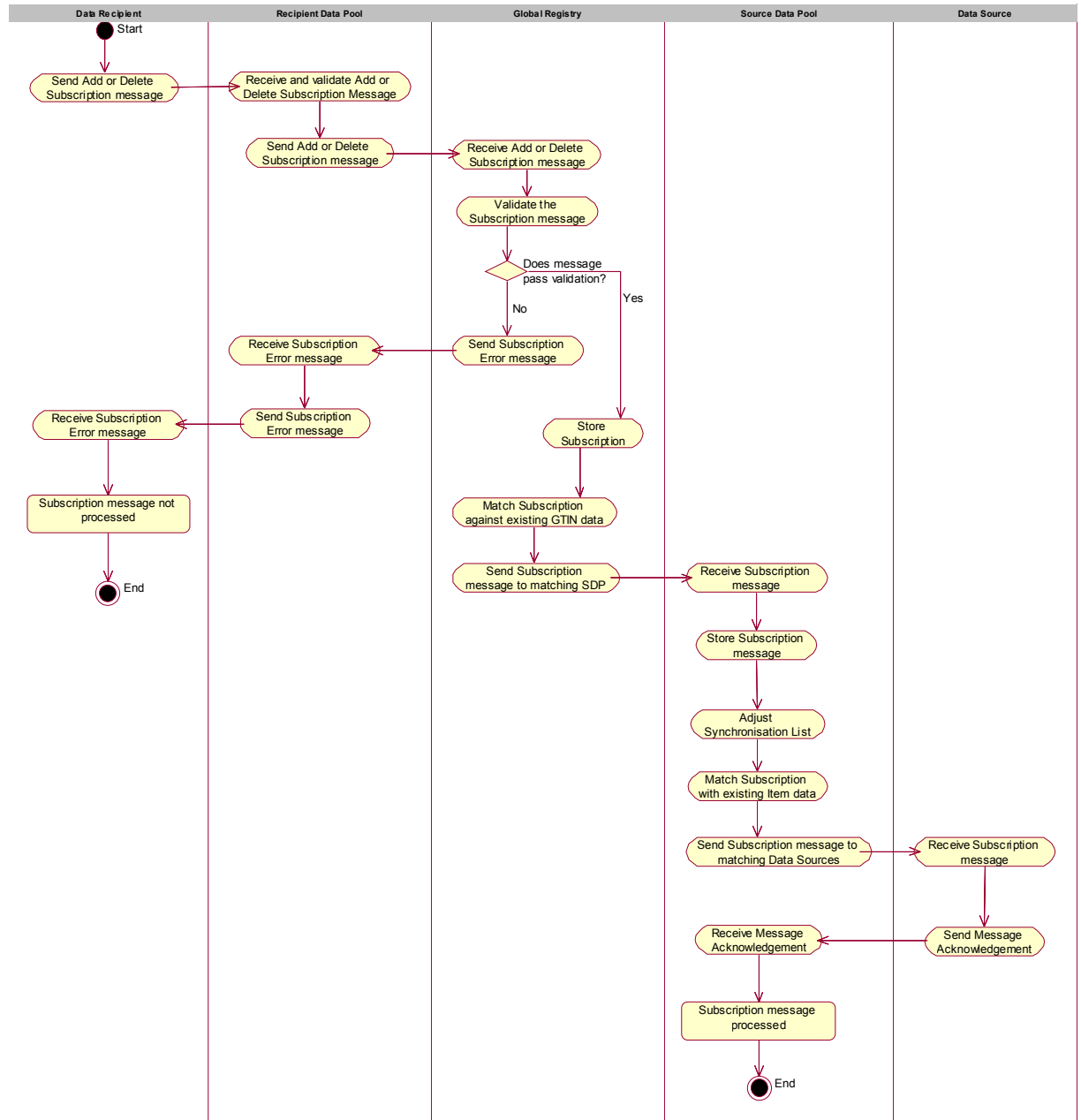


Figure 55 - Distribute Subscription Data Activity Diagram

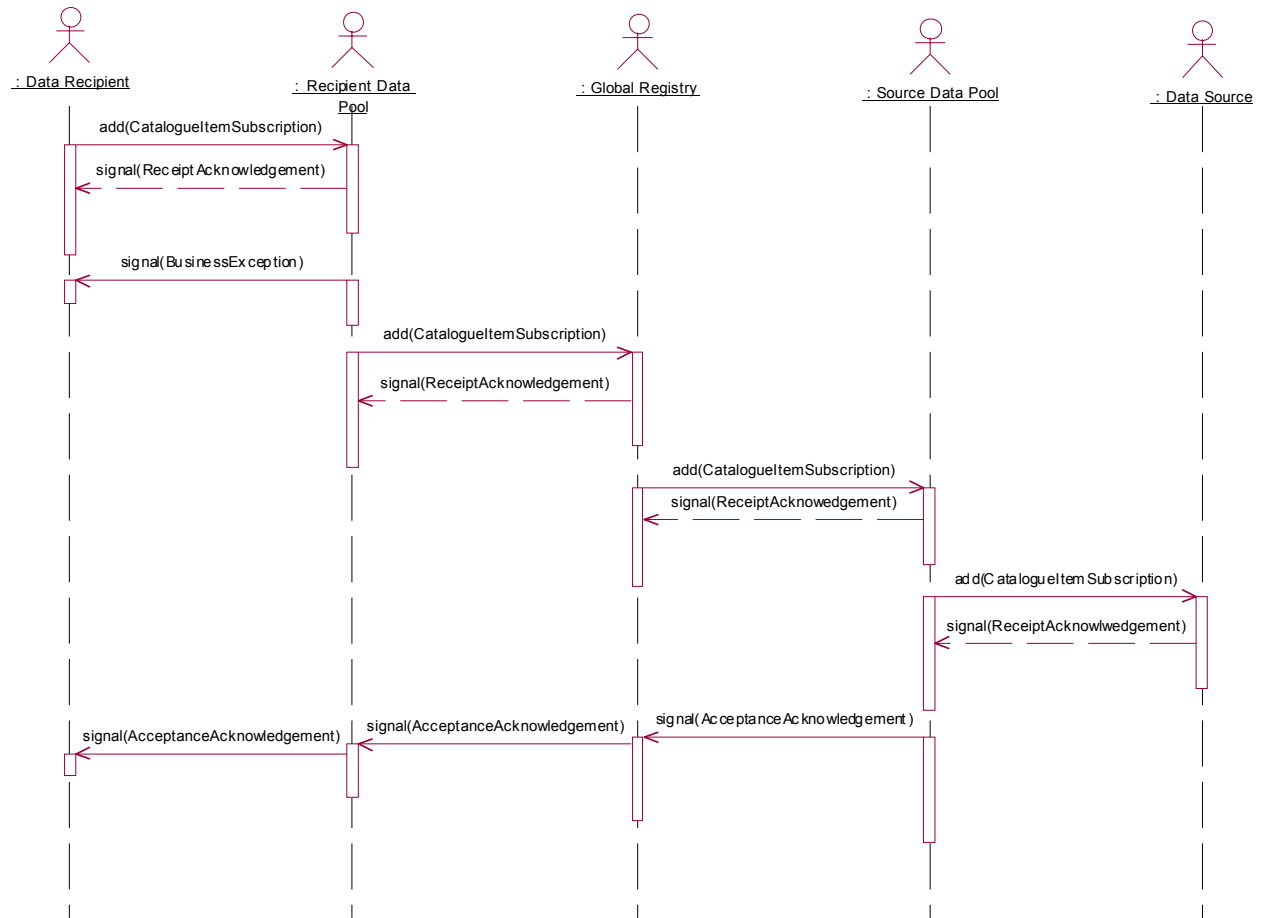


Figure 56 - Distribute Subscription Data Sequence Diagram

Distribute Confirmation Data

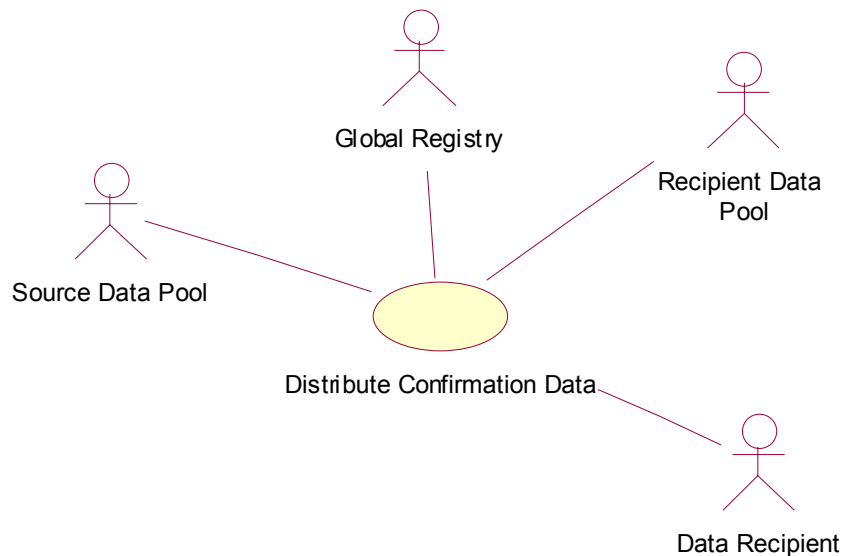


Figure 57 - Distribute Confirmation Data Use Case Diagram

Use Case Name	Distribute Confirmation Data
Traceability Identifier	UC-43
Use Case Description	<p>The Distribute Confirmation Data Use Case describes how the Data Recipient informs the Source Data pool of the status of an individual Catalogue Item Data synchronisation that was the result of a Publication / Subscription match. Valid values for the status are: "no value" (continue to send updates), "Accept" (Data Recipient signals that they are interested in the Catalogue Item, continue to send updates), "Synchronised" (Data Recipient signals that they intend to keep their database synchronised, continue to send updates) and "Reject" (Data Recipient signals that they are not interested in the Catalogue Item, do not continue to send updates).</p> <p>Confirmations are passed to the Source Data Pool from the Recipient Data Pool.</p>
Use Cases Above	UC-47: Distribute Data Recipient Requests for Catalogue Item Data
Use Cases Below	None
Actors	Data Recipient Recipient Data Pool (RDP) Source Data Pool (SDP)
Performance	Data Recipient: To prohibit future synchronisations of specific

Goals	<p>Catalogue Item Data, or, to notify the Source Data Pool of the Data Recipient's intentions regarding the Catalogue Item data.</p> <p>RDP: To possess the necessary information that will allow the RDP and appropriate Source Data Pools to distribute Catalogue Item Data to the Recipient.</p> <p>SDP: To possess the necessary information that will allow the SDP to distribute Catalogue Item Data to the Recipient (via their RDP).</p>		
Preconditions	The Data recipient has either created a Subscription in their Recipient Data Pool and has received Catalogue Item data.		
Postconditions	In the case of a "Rejection", the Data Recipient no longer receives updates to the specific Catalogue Item. The Catalogue Item is removed from the Synchronisation list for that Data Recipient. For all other authorizations, the Source Data Pool is aware of the Data Recipient's intentions regarding the Catalogue Item data.		
Scenario	<p>Begins when, the Data Recipient sends a Confirmation message to the Recipient Data Pool</p> <ol style="list-style-type: none"> 1. The RDP sends the Confirmation to the SDP. 2. The SDP validates the message. 3. The SDP matches the Confirmation with the Recipient's Synchronisation List. 4. In the case of a "Reject" Confirmation, the SDP removes the affected Catalogue Item from the Data Recipient Synchronisation List. 5. For all other Confirmations, the SDP applies the change to the Data Recipient Synchronisation List. 6. The SDP sends the Confirmation to the Data Source. 7. The SDP sends a Confirmation Acknowledgement to the RDP. 8. The RDP forwards the Confirmation Acknowledgement to the Data Recipient. <p>Ends when, the Data Recipient sends an acknowledgement of the Recipient Data Pool's message.</p>		
Alternative Scenario	<p>ad 2. The Confirmation message does not pass validation:</p> <ol style="list-style-type: none"> 2.1 The SDP sends a Confirmation Error message to the RDP. 2.2 The RDP forwards the Confirmation Error message to the Data Recipient. <p>Ends when, the Data Recipient sends an acknowledgement of the error message</p>		
Special Requirements	•		
Extension Points	N/A		
Requirements Covered	ID	Requirement	Weight

		messages are standardised and may contain the following information: - Confirmation of message receipt- Success / Failure of processing (syntax and content)- Reason for failure, with a code number and text message unique assigned to each failure	
	REQ-17	Subscriptions must be created by data recipients in their Recipients Data Pool and sent to the Global Registry.	Primary
	REQ-18	A new Source Data Pool will get their relevant subscriptions as soon as they start registering their GTIN's.	Primary
	REQ-20	Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.	Primary
	REQ-21	If an Catalogue Item is "Confirmed of Synchronisation" then all Catalogue items below in the Catalogue Item Hierarchy shall be included in the Synchronisation list.	Primary
	REQ-22	Relationship dependent data will only be communicated for Synchronised, Review or Accept status in the Synchronisation List.	Primary
	REQ-23	Events that can trigger notifications are: - Publication of new data / change of publication - Change of published Catalogue Item / Party / Partner Profile - Change of owner, rights - Subscription - Synchronisation List - Confirmation/ Rejection - Request for Notification - Any successful matching process	Primary
	REQ-24	Notifications must NOT be sent in the following cases since data is not yet public and validated information: - Data load (add, change, etc...) - Data validation - Registration of new Catalogue Item	Primary
	REQ-25	The Data Distribution, which is the movement of data from one entity to another, must be handled through a specific notification type.	Primary
	REQ-29	The confirmation process must take place in the home data pool of the data recipient.	Secondary
	REQ-32	Acknowledgement Reason codes must be unique.	Primary
	REQ-75	Updates for confirmed products will be distributed based on the synchronisation list.	Secondary
	REQ-76	Confirmation (accept or synchronised) will indicate the data recipient's commitment to synchronise the data in its internal systems.	Secondary
	REQ-77	Filtering out rejected data is a source data pool responsibility.	Secondary
	REQ-78	Subscription: for every matching GTIN, independently from its level, all hierarchies will be returned.	Primary
	REQ-79	Synchronisation list: - Includes every GTIN id (GTIN+GLN+TM) that needs to be synchronised - Can be a result of the Confirmation process - All GTIN's equal or lower in the hierarchy than the GTIN confirmed will be returned	Secondary
	REQ-80	Rejection at any level of a hierarchy will trigger the rejection of all GTIN's equal or	Secondary

		higher in the hierarchy of the rejected GTIN.	
	REQ-81	Synchronisation List is only synchronised between the involved source and recipient data pools for applicable data: synchronisation list is built based on confirmation received by a source data pool and nothing else.	Primary
	REQ-88	The matching process is owned and developed by each source data pool in order to trigger data distribution based on publication and subscription data.	Primary
	REQ-89	The matching process can be triggered either by publication, subscription or as a scheduled event. It is valid for all subscription types (including synchronisation list) and all publication types.	Primary
	REQ-90	For a given subscription (create/update): - the matching process identifies Items published to the GLN or TM of the subscription owner. - for each item, a notification is created including all dependent hierarchies. - for a synchronisation list, the hierarchy information included in the notification, will be limited to the GTIN's maintained in the Synchronisation list. - The notification is sent to the home data pool of the data recipient.	Primary
	REQ-94	Confirmation is not mandatory and can provide 4 outcomes: 1. Synchronised: data is integrated, in synch and added to the synchronisation list 2. Accept: data is added to the synchronisation list and will be in synch 3. Reject: data will no longer be synchronised or updates will no longer be provided 4. Review: data was synchronised before and a new update cannot be synchronised by the recipient as such - recipient expects the data owner to take action (applies to changes & corrections) If no confirmation is send, data updates will continue to be provided until the data recipient accepts, rejects or updates the subscription, or until the data source changes the publication. For a new Catalogue Item the same confirmation can be used.	Secondary
	REQ-95	The list of authorised values for the confirmation message does not imply a sequence in which the message has to be used.	Secondary
	REQ-96	The same "confirmation" message can be used to stop synchronising a Catalogue Item. In that case, the "Reject" status will be used to remove the Catalogue Item of the synchronisation list.	Secondary
	REQ-97	"Synchronised" status is sent once – parties are assumed to be in synch unless a reject/review status is exchanged.	Secondary
	REQ-98	Note : rejection should not remove data previously authorised, for instance in a different hierarchy.	Secondary
	REQ-99	The Global Registry functionality requirements can be summarised as follows: - Enable data synchronisation - Validation, registration and subscription functions - Enable global validation -	Primary

		Checking compliance with basic EAN.UCC rules related to the format of a GTIN/GLN and ensuring the uniqueness of the data that is being registered - Enable global search functionality that does not require full duplication of data in the Global Registry.	
	REQ-100	The Global Registry is involved in the following functions and/or business cases as defined in the Item Synchronisation detailed requirements: - Validation - Registration - Subscription - Global Search	Primary
	REQ-109	A Data Recipient requests that it receive a "notification" when a specific event occurs that meets the Recipients criteria (selective on sources, categories, etc). This is subject to the recipient's access to information as controlled by the data source through its source data pool.	Primary
	REQ-110	After a Subscription is created, the Global Registry will then disseminate relevant subscriptions to appropriate Source Data Pools (current and future new data pools).	Primary
	REQ-111	Registry requirements for subscription are: - Receive and store subscriptions - Provide subscription acknowledgement - Matching process of subscriptions with Source Data Pools - Forward subscriptions	Primary
	REQ-127	The Global Registry must distribute Subscriptions only to relevant Source Data Pools.	Primary
	REQ-129	GTIN and Category are mutually exclusive subscription criteria as the Category is uniquely defined for a given GTIN, independently from the GLN and from the TM.	Primary
	REQ-130	GTIN, GLN (of Data Source), Target Market and Classification must be stored in the Global Registry, and are linked to the Source Data Pool(s) where the data can be found. For instance, if given a GTIN, the Global Registry will be able to return all the data pools where data can be found on that GTIN, independently from the GLN of the Data Source, the Target Market or the Category.	Primary
	REQ-131	The distribution of subscriptions is either a scheduled event or is triggered by an other event.	Primary
	REQ-132	The events that can trigger the distribution of a subscription are: - new/updated registration: check existing subscriptions, if new data pools are found : distribute subscriptions - new subscription: check existing registrations, if new data pools are found: distribute subscriptions - delete subscriptions: distribute "delete" to source data pools where subscription had been sent	Primary
	REQ-133	Subscriptions cannot be updated, they are created or deleted.	Primary
	REQ-134	Subscriptions must be stored in the recipient's data pool.	Primary
	REQ-135	For every subscription, the Registry must store the GLN of the Source Data Pool to which the subscription was sent and when it was sent.	Primary

	REQ-136	Ability to identify new or updated registered Catalogue Items that match a subscription and forward the subscription to the Source Data Pool.	Primary
	REQ-137	Match new subscriptions with registered Catalogue Items and forward the subscription to the Source Data Pool.	Primary
	REQ-139	SubscriptionWho : Data Recipient = target GLNWhat : Any combination of GTIN, GLN, TM and Category	Primary
	REQ-141	Deletion of a Subscription stops New Catalogue Items from being sent to RDP, but, doesn't stop Catalogue Items already in the Synchronisation List from being updated.	Primary
	REQ-142	Request for Notification is not retained in the Global Registry and acts like a Subscription that is applied to the Synchronisation List, then deleted (no New Catalogue Item data will be sent).	Primary
	REQ-143	"Reload" flag is passed through to Recipient.	Primary
	REQ-144	Request for publication (subscription) resets the reject flag if catalogue Item has been previously rejected and reactivate the subscription.	Primary
	REQ-145	The request for publication subscription is only executed once.	Primary
	REQ-146	Subscriptions are passed from global Registry to data pools just once. The Global Registry passes along to the source data pool matching subscriptions in the entirety, rather than replicating for each GTIN registered.	Primary
	REQ-147	Request for notification publication (subscription) resets the reject flag if the Catalogue Item has been previously rejected and reactivate the subscription.	Primary
	REQ-148	The "Reload" attribute will contain a Boolean value (TRUE or FALSE).	Primary
	REQ-149	Upon execution of an item data notification, the source data pool will pass along the value of this attribute within the message for the recipient to properly route the inbound message. After executing the item data notification, the source data pool will	Primary
	REQ-150	The team identified the need for an additional process to be known as "Request for Notification". The Request for Notification is originated by the requesting data recipient, through the recipient data pool, to the Global Registry and forwarded to the so	Primary
	REQ-151	The team wanted to reiterate the fact that new subscriptions received by a source data pool would be executed immediately a single time.	Primary
	REQ-152	The ability to set up a subscription and not get an initial full load of data. She wants to only receive the changes, adds, deletes and new items that match her subscription. (This is the same as a regular subscription with the exception of not getting	Primary
	REQ-154	The Global Registry shall send only once a subscription to a Source Data Pool.	Primary

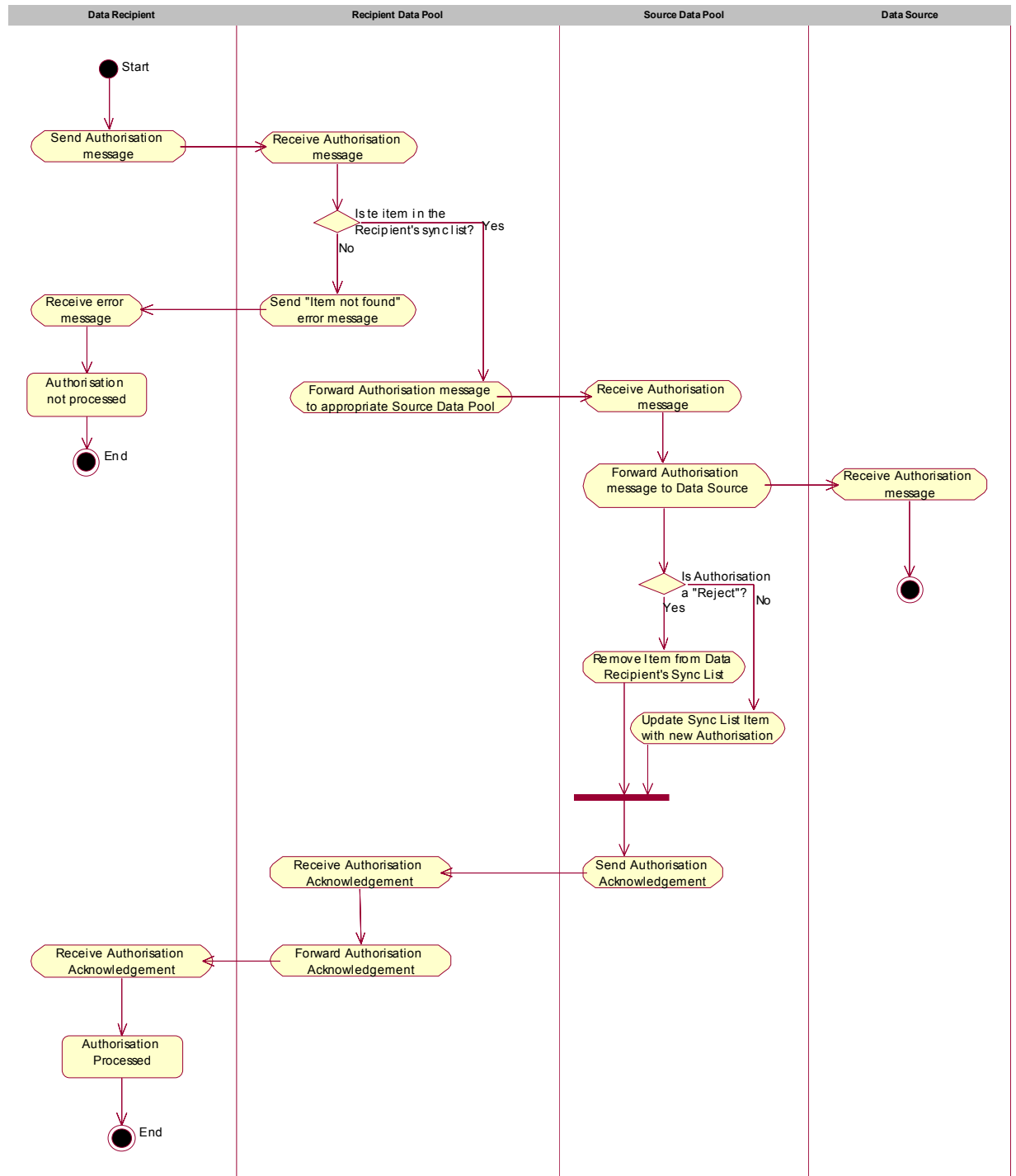


Figure 58 - Distribute Confirmation Data Activity Diagram

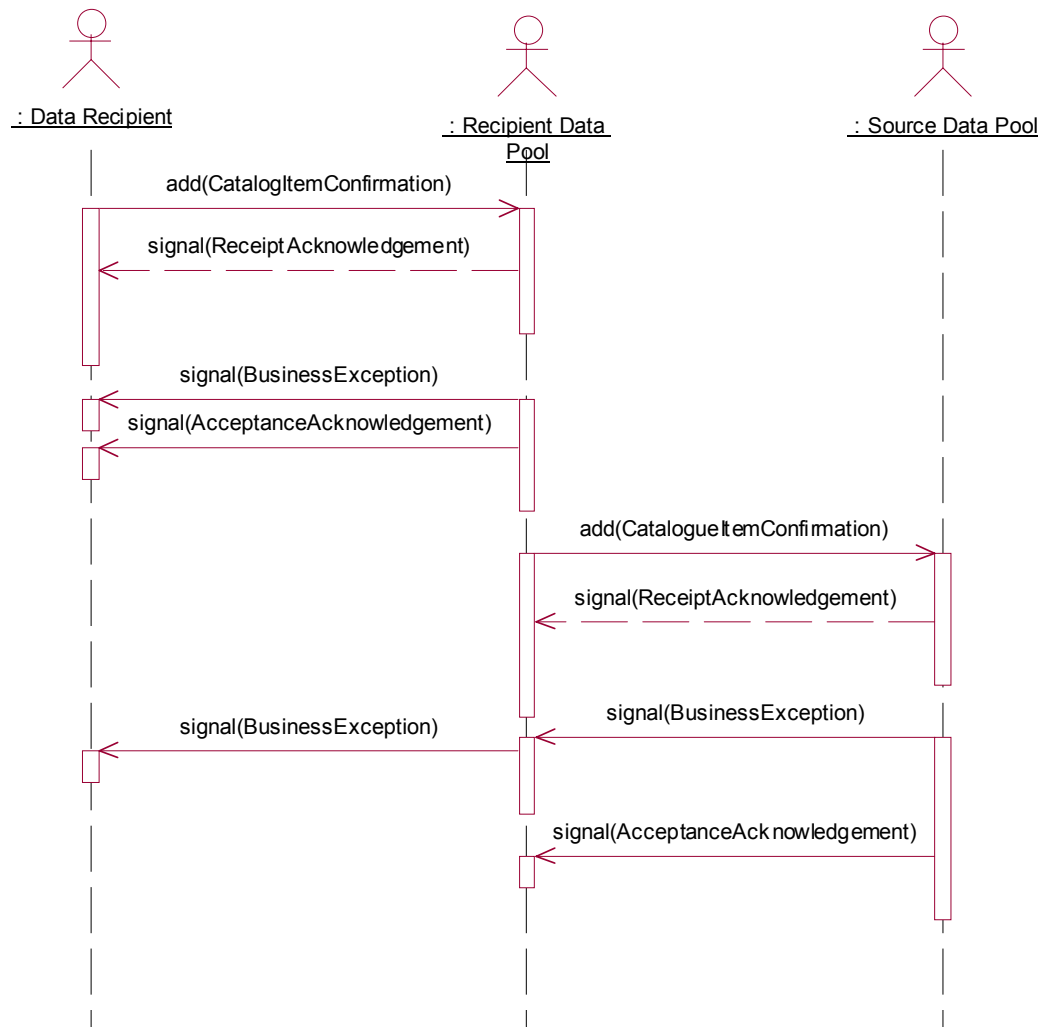


Figure 59 - Distribute Catalogue Item Confirmation Sequence Diagram

Distribute Request for Catalogue Item Notification

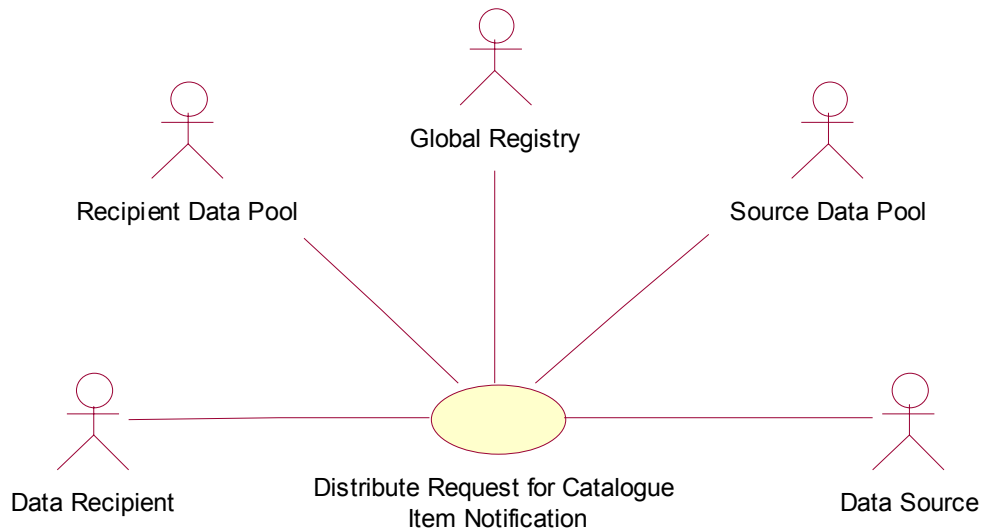


Figure 60 - Distribute Request for Catalogue Item Notification Use Case Diagram

Use Case Name	Distribute Request for Catalogue Item Notification
Traceability Identifier	UC-22
Use Case Description	<p>The Distribute Request for Catalogue Item Notification Use Case describes how the message is passed from Data Recipient through to the Source Data Pool and Data Source.</p> <p>This Use Case makes use of the RequestForCatalogueItemNotification message. This message is identical to the CatalogueItemSubscription with the addition of a "reload" flag. This reload flag is later attached to the resultant CatalogueItemNotification message to allow the Data Recipient to process it differently than a normal notification. The RequestForCatalogueItemNotification message is also different from a Subscription in that it is not retained in the Global Registry after the Source Data Pools have received it.</p>
Use Cases Above	UC-47: Distribute Data Recipient Requests for Catalogue Item Data
Use Cases Below	None
Actors	Data Recipient Recipient Data Pool (RDP) Global Registry Source Data Pool (SDP) Data Source
Performance Goals	Data Recipient: To request that previously sent Catalogue Item data be resent.

	<p>RDP: To possess the necessary information that will allow the RDP and appropriate Source Data Pools to distribute Catalogue Item Data to the Recipient.</p> <p>Global Registry: To forward to appropriate Source Data Pools all requests from Data Recipients.</p> <p>SDP: To possess the necessary information that will allow the SDP to distribute Catalogue Item Data to the Recipient (via their RDP).</p> <p>Data Source: To be aware of all usages of supplied data.</p>
Preconditions	The Data recipient has created a Subscription in their Recipient Data Pool and has received Catalogue Item data.
Postconditions	The request is passed to the Global Registry, appropriate Source Data pools and the Data Source.
Scenario	<p>Begins when, the Data Recipient sends a Request message to the Recipient Data Pool</p> <ol style="list-style-type: none"> 1. The RDP sends the Request to the Global Registry. 2. The Global Registry matches the Request with a list of Source Data Pools. 3. The Global Registry sends the request to the appropriate Source Data Pool. 4. The Source Data Pool sends a copy of the request to the Data Source.
Alternative Scenario	
Special Requirements	
Extension Points	N/A
Requirements Covered	

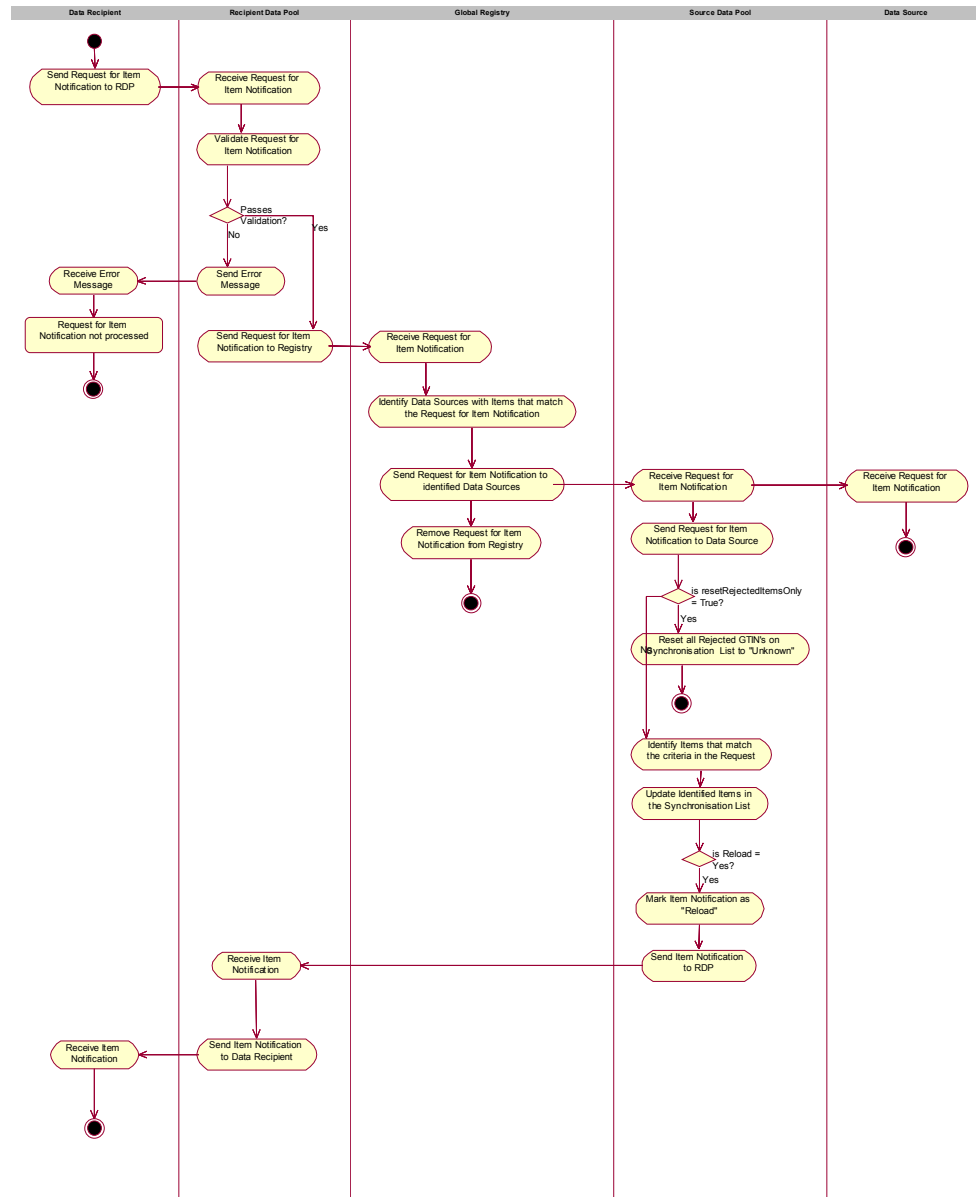


Figure 61 - Distribute Request for Catalogue Item Notification

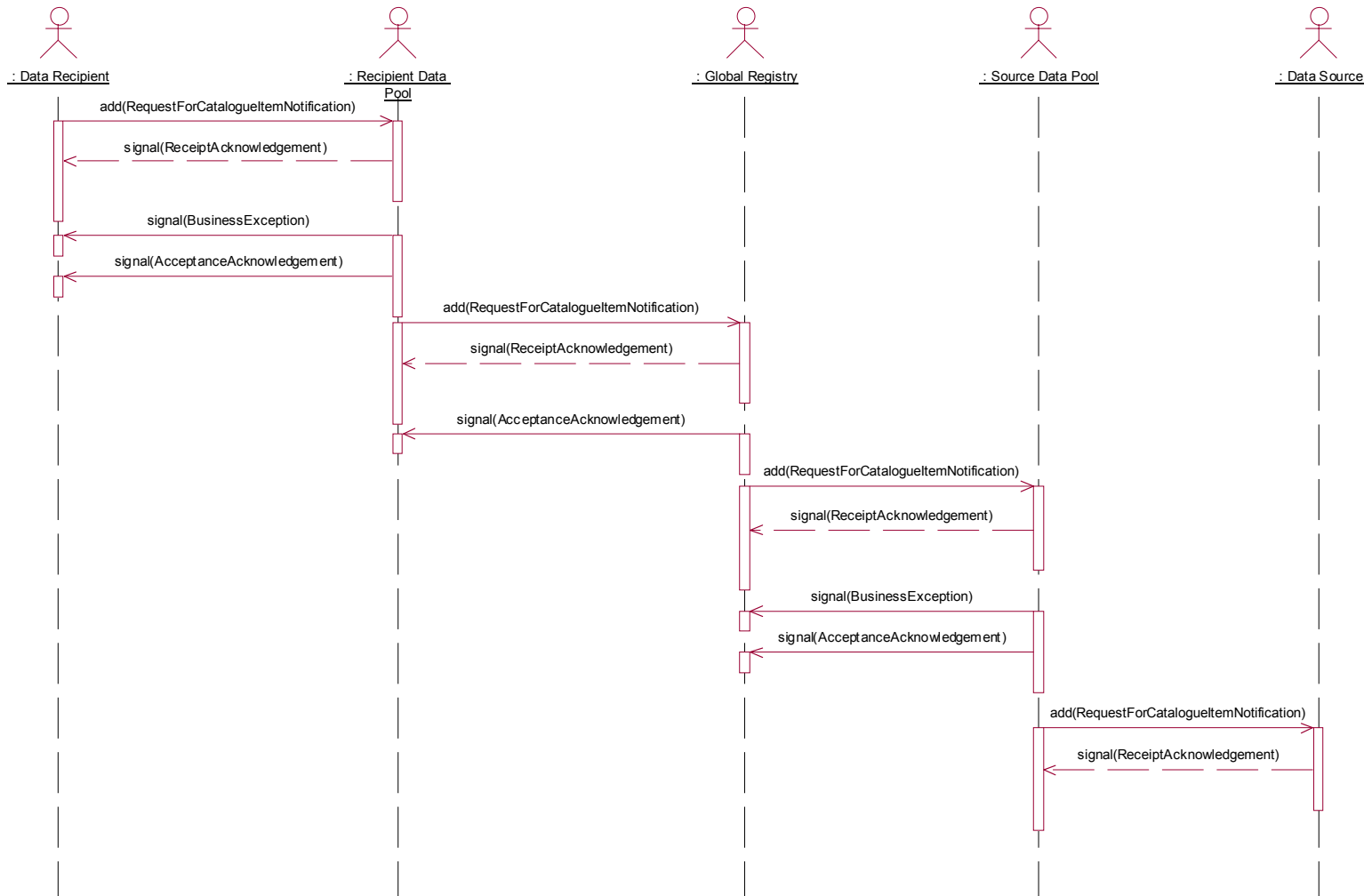


Figure 62 - Distribute Request for Catalogue Item Notification Sequence Diagram

Create Synchronisation List

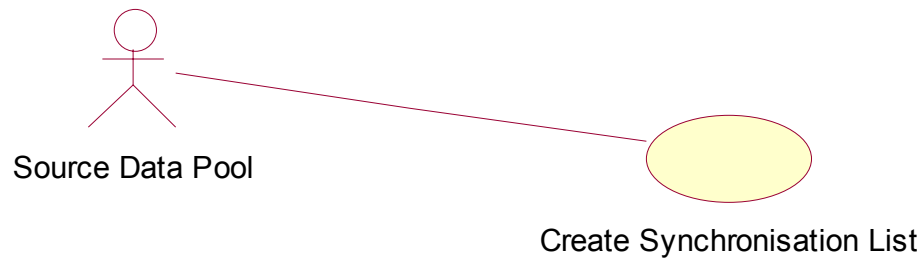


Figure 63 - Create Synchronisation List

Use Case Name	Create Synchronisation List
Traceability Identifier	UC-45
Use Case Description	<p>The Synchronisation list is the sole means by which a Source Data Pool determines the Catalogue Item Data that is to be sent to a Data Recipient (via the Recipient's Recipient Data Pool).</p> <p>The Synchronisation list is created based on Publications, Subscriptions and Confirmations. Each one of these pares down the matches between Catalogue Item and Recipient. The delta, or net positive matches are placed into the Synchronisation List, which is used by the "Distribute Catalogue Item Data from SDP to RDP" (UC-37) and "Distribute Catalogue Item Data from RDP to Data Recipient" (UC-38) Use Cases.</p> <p>UC-37 will use the Synchronisation List to send Recipient bound Catalogue Item Data to the Recipient Data Pool. UC-38 will then pass all appropriate Catalogue Item data to the Recipient.</p>
Use Cases Above	UC-23: Manage Catalogue Item Distribution Criteria
Use Cases Below	None
Actors	Source Data Pool (SDP)
Performance Goals	SDP: To determine which Recipient should be sent what Catalogue Item Hierarchy data.
Preconditions	Publications, Subscriptions and Confirmations exist in the Source Data Pool.
Postconditions	The Synchronisation List is created and able to be used to direct the Source Data Pool in moving appropriate Catalogue Item data to Recipient Data Pools.
Scenario	Begins when, the Source Data Pool receives an add or delete

	<p>of a Publication, an Add of a Subscription, Confirmation ,or a Add, Change, Correct of an Catalogue Item Hierarchy message.</p> <ol style="list-style-type: none"> 1. The SDP Identifies all GTIN's of publications to a target market 2. The SDP Identifies all GTIN's of Subscriptions by Recipient's Target Market 3. Subset all GTIN's that are in both lists 4. Remove GTINs that have been rejected by the Recipient 5. Add Source GLN, RDP GLN, Recipient GLN, Source GTIN and Source TM to the Synchronisation List <p>Ends when, Synchronisation Listed is complete.</p>
Alternative Scenario	None
Special Requirements	•
Extension Points	N/A
Requirements Covered	

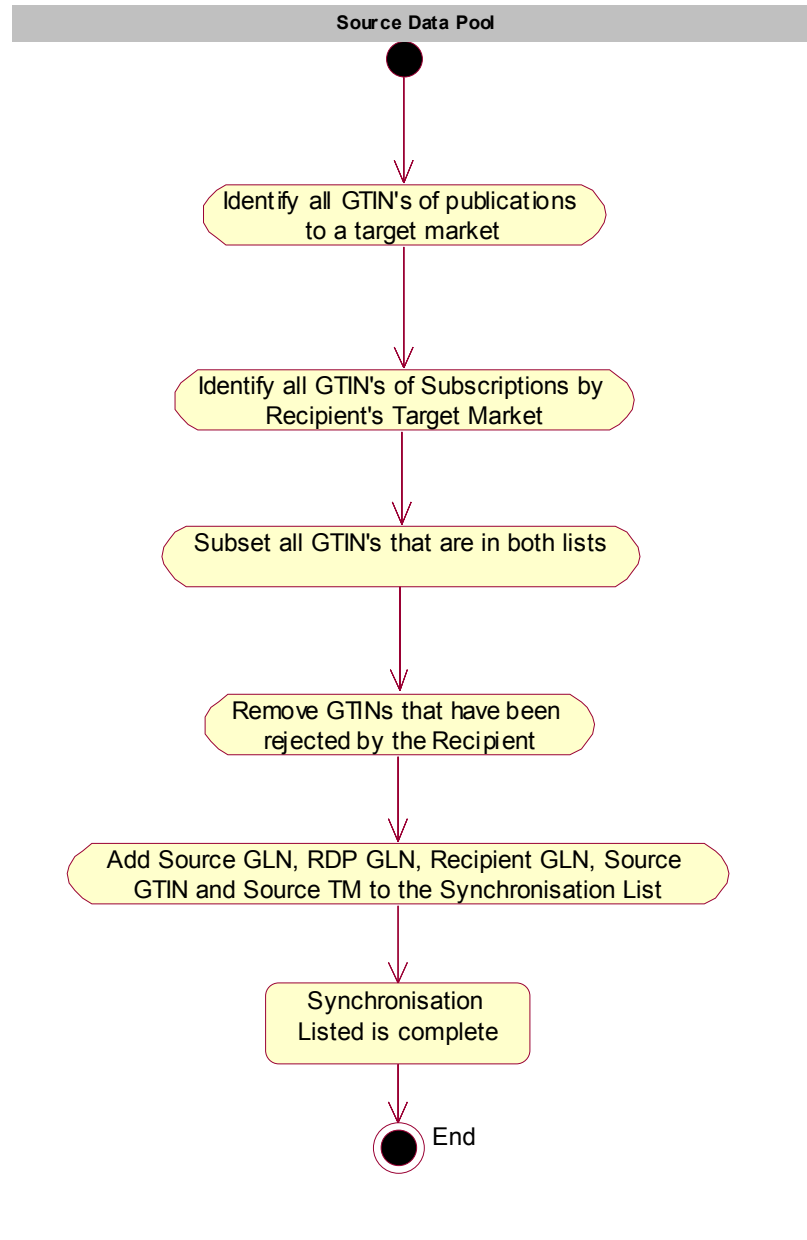


Figure 64 - Create Synchronisation List

Distribute Catalogue Item Data from SDP to RDP

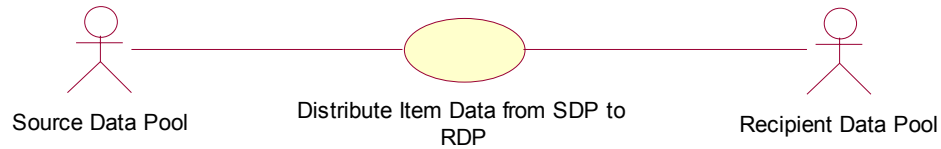


Figure 65 - Distribute Catalogue Item Data from SDP to RDP Use Case Diagram

Use Case Name	Distribute Catalogue Item Data from SDP to RDP		
Traceability Identifier	UC-37		
Use Case Description	Using the Distribution Criteria, the Catalogue Item Data are distributed from SDP to RDP.		
Use Cases Above	UC-29: Distribute Catalogue Item Data		
Use Cases Below	N/A		
Actors	Source Data Pool (SDP) Recipient Data Pool (RDP)		
Performance Goals	SDP:	Distribute Catalogue Item Data to the RDP based on the Distribution Criteria.	
	RDP:	To receive Catalogue Item Data that comply with the Distribution Criteria.	
Preconditions	Publications are available at the SDP. Subscriptions are communicated to the SDP. The SDP has the updated Synchronisation list based on the subscriptions and Confirmations received. The SDP knows which RDP needs to receive Catalogue Item Data for each Recipient.		
Postconditions	RDP has received Catalogue Item Data that comply with the Distribution Criteria.		
Scenario	Begins when, the SDP filters the Catalogue Item Data using the Synchronisation list. <ul style="list-style-type: none">• The SDP sends filtered Catalogue Item Data to the RDP.• The RDP receives the Catalogue Item Data. Ends when, the RDP uses the Subscription and Confirmations of the recipient to filter the Catalogue Item Data to identify any Catalogue Items that should not have been sent.		
Alternative Scenario	None at this summary level		
Special Requirements	<ul style="list-style-type: none">•		
Extension Points	N/A		
Requirements Covered	ID	Requirement	Weight
	REQ-12	Every command needs a response and is handled according to the agreement between the parties involved. In the inter-operable network, acknowledgement	Primary

		messages are standardised and may contain the following information: - Confirmation of message receipt- Success / Failure of processing (syntax and content)- Reason for failure, with a code number and text message unique assigned to each failure	
	REQ-13	The Data Source grants visibility of item, party and partner profiles including party capabilities data to a given list of parties (identified by their GLNs) or to all parties in a given Target Market.	Primary
	REQ-20	Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.	Primary
	REQ-21	If an Catalogue Item is "Confirmed of Synchronisation" then all Catalogue items below in the Catalogue Item Hierarchy shall be included in the Synchronisation list.	Primary
	REQ-22	Relationship dependent data will only be communicated for Synchronised, Review or Accept status in the Synchronisation List.	Primary
	REQ-23	Events that can trigger notifications are: - Publication of new data / change of publication - Change of published Catalogue Item / Party / Partner Profile - Change of owner, rights - Subscription - Synchronisation List - Confirmation/ Rejection - Request for Notification - Any successful matching process	Primary
	REQ-24	Notifications must NOT be sent in the following cases since data is not yet public and validated information: - Data load (add, change, etc...) - Data validation - Registration of new Catalogue Item	Primary
	REQ-25	The Data Distribution, which is the movement of data from one entity to another, must be handled through a specific notification type.	Secondary
	REQ-26	Notification to the data recipient will always include the entire hierarchy. (applies to add & update by adding a higher level)	Secondary
	REQ-27	In case of an ItemLink correction, the entire hierarchy will be indicated as corrected in the notification.	Primary
	REQ-28	The updated hierarchy always fully replaces the current hierarchy. This action is called "Full Refresh".	Primary
	REQ-32	Acknowledgement Reason codes must be unique.	Primary
	REQ-58	Deletes are not synchronised across data pools.	Primary
	REQ-81	Synchronisation List is only synchronised between the involved source and recipient data pools for applicable data: synchronisation list is built based on confirmation received by a source data pool and nothing else.	Secondary
	REQ-88	The matching process is owned and developed by each source data pool in order to trigger data distribution based on publication and subscription data.	Primary
	REQ-89	The matching process can be triggered either by publication, subscription or as a scheduled event. It is valid for all	Primary

		subscription types (including synchronisation list) and all publication types.	
	REQ-93	Although the notification process will physically move the data from one data pool to another, this data should not be stored permanently for the purpose of synchronisation with any other user than the initial subscriber. If stored, access should be limited to the initial data recipient.	Primary
	REQ-109	A Data Recipient requests that it receive a "notification" when a specific event occurs that meets the Recipients criteria (selective on sources, categories, etc). This is subject to the recipient's access to information as controlled by the data source through its source data pool.	Primary
	REQ-125	The Source Data Pool is responsible to reset the "Reload" flag once it sends all requested data.	Secondary
	REQ-126	If a new Reload is needed, the Recipient must delete the previous Reload Subscription, then create a new Subscription with the "Reload" flag set.	Secondary
	REQ-143	"Reload" flag is passed through to Recipient.	Primary

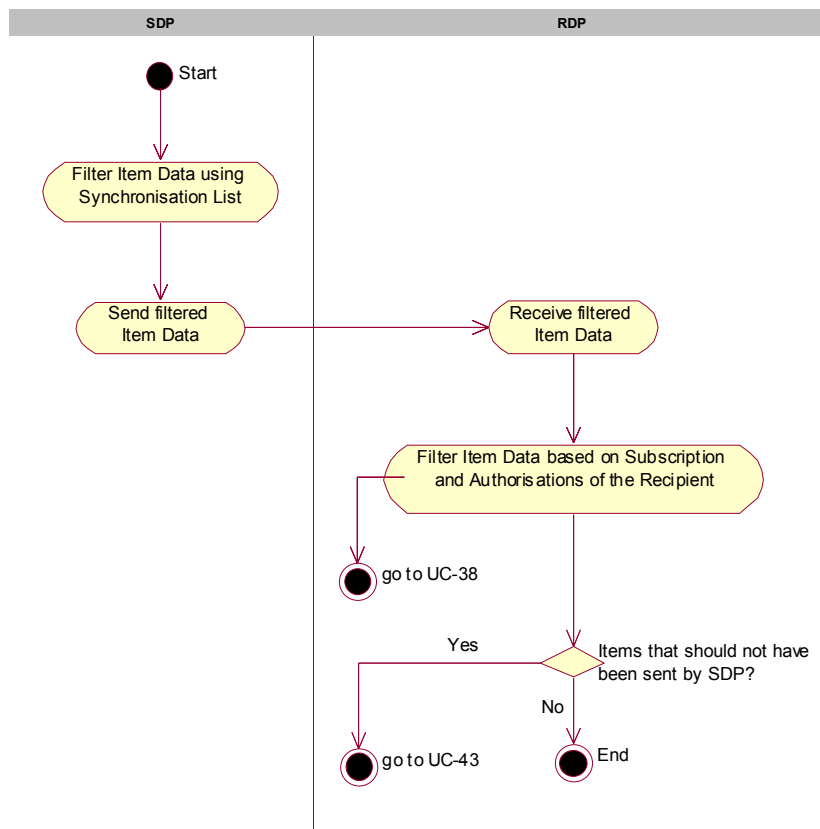


Figure 66 - Distribute Catalogue Item Data from SDP to RDP Activity Diagram

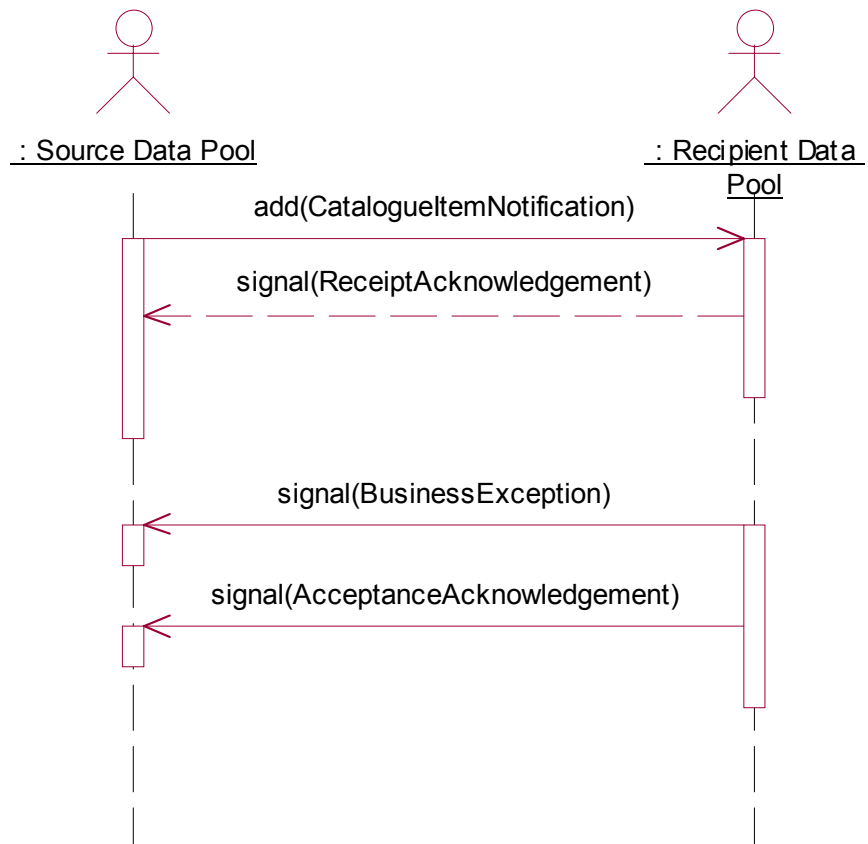


Figure 67- Distribute Catalogue Item Data from SDP to RDP Sequence Diagram

Distribute Catalogue Item Data from RDP to Data Recipient

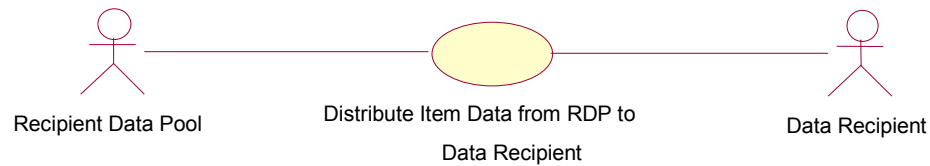


Figure 68 - Distribute Catalogue Item Data from RDP to Data Recipient Use Case Diagram

Use Case Name	Distribute Catalogue Item Data from RDP to Data Recipient		
Traceability Identifier	UC-38		
Use Case Description	Catalogue Item Data are distributed from RDP to the Data Recipient.		
Use Cases Above	UC-29: Distribute Catalogue Item Data		
Use Cases Below	N/A		
Actors	Recipient Data Pool (RDP) Data Recipient		
Performance Goals	RDP:	Distribute Catalogue Item Data to the Recipient based on the Subscriptions and Confirmations.	
	Data Recipient:	To receive Catalogue Item Data that comply with their Subscriptions and Confirmations.	
Preconditions	Publications, Subscriptions and Confirmations have been defined. The Catalogue Item Data are filtered by the RDP (see UC-37).		
Postconditions	Data Recipient has received Catalogue Item Data that comply with their Subscriptions and Confirmations.		
Scenario	Begins when, the RDP sends the filtered Catalogue Item Data to the Data recipient. Ends when, the Data Recipient receives the Catalogue Item Data from its RDP.		
Alternative Scenario	None at this summary level		
Special Requirements	•		
Extension Points	N/A		
Requirements Covered	ID	Requirement	Weight
	REQ-12	Every command needs a response and is handled according to the agreement	Primary

		code number and text message unique assigned to each failure	
	REQ-20	Synchronisation Lists must include every Catalogue Item (GTIN+GLN+TM) that needs to be synchronised.	Primary
	REQ-21	If an Catalogue Item is "Confirmed of Synchronisation" then all Catalogue items below in the Catalogue Item Hierarchy shall be included in the Synchronisation list.	Primary
	REQ-22	Relationship dependent data will only be communicated for Synchronised, Review or Accept status in the Synchronisation List.	Primary
	REQ-23	Events that can trigger notifications are: - Publication of new data / change of publication - Change of published Catalogue Item / Party / Partner Profile - Change of owner, rights - Subscription - Synchronisation List - Confirmation/ Rejection - Request for Notification - Any successful matching process	Primary
	REQ-24	Notifications must NOT be sent in the following cases since data is not yet public and validated information: - Data load (add, change, etc...) - Data validation - Registration of new Catalogue Item	Primary
	REQ-25	The Data Distribution, which is the movement of data from one entity to another, must be handled through a specific notification type.	Primary
	REQ-26	Notification to the data recipient will always include the entire hierarchy. (applies to add & update by adding a higher level)	Primary
	REQ-27	In case of an ItemLink correction, the entire hierarchy will be indicated as corrected in the notification.	Primary
	REQ-28	The updated hierarchy always fully replaces the current hierarchy. This action is called "Full Refresh".	Primary
	REQ-32	Acknowledgement Reason codes must be unique.	Primary
	REQ-109	A Data Recipient requests that it receive a "notification" when a specific event occurs that meets the Recipients criteria (selective on sources, categories, etc). This is subject to the recipient's access to information as controlled by the data source through its source data pool.	Secondary
	REQ-143	"Reload" flag is passed through to Recipient.	Secondary

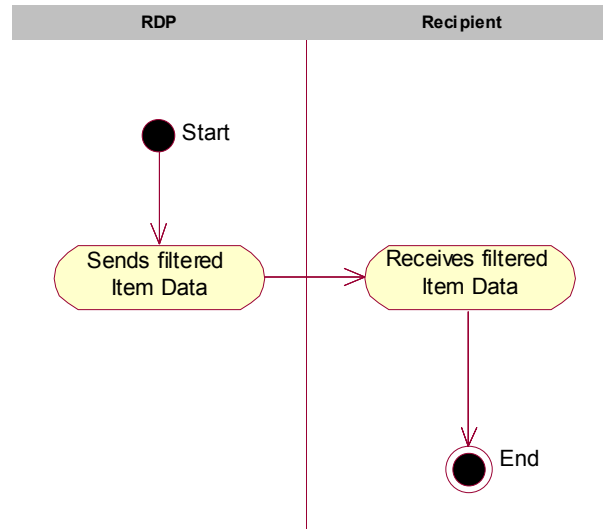


Figure 69 - Distribute Catalogue Item Data from RDP to Recipient Activity Diagram

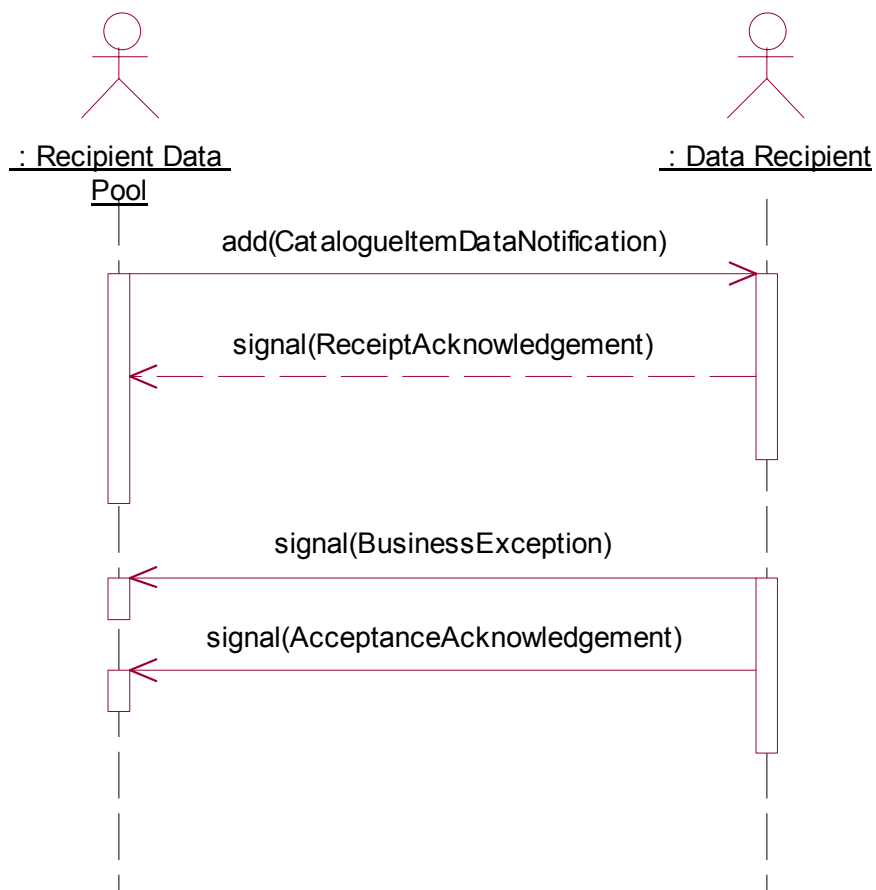


Figure 70 - Distribute Catalogue Item Data from RDP to Recipient Sequence Diagram

Common Use Cases

Validate Data Pool

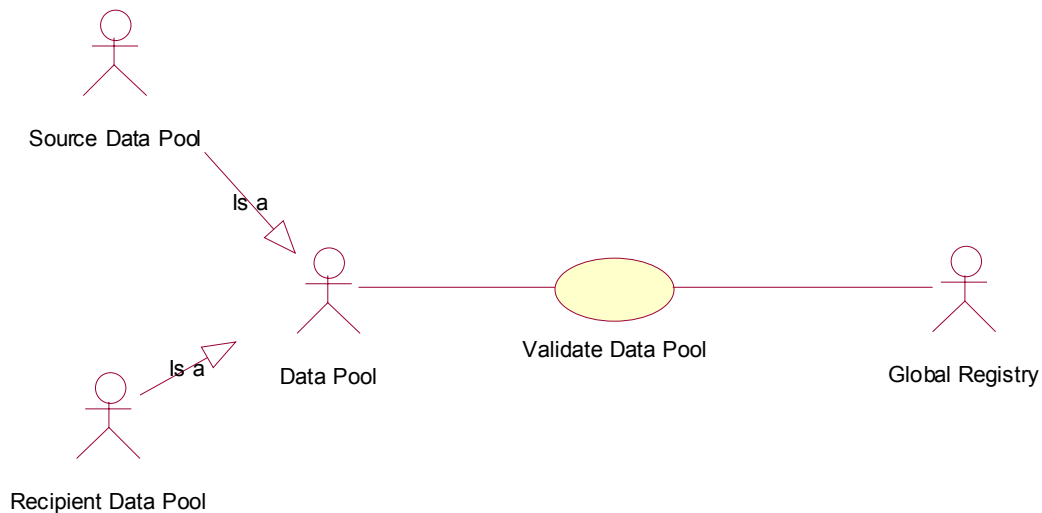


Figure 71 - Validate Data Pool

Use Case Name	Validate Data Pool
Traceability Identifier	UC-32
Use Case Description	<p>As only certified Data Pools can send and receive messages to and from the Global Registry, there must be a way to validate that the sending Data Pool is certified. As Global Registry will only accept messages from certified Data Pools, all responses to messages (other than certification errors) will be to certified Data Pools.</p> <p>This Use Case describes the process the Global Registry will perform to verify that the sender of a message is a certified Data Pool and has permission to send the type of message on behalf of the Data Source.</p> <p>This process is triggered by any incoming message to the Global Registry.</p>
Use Cases Above	UC-17: Registry Validation

Use Cases Below	None
Actors	Data Pool (Source Data Pool or Recipient Data Pool) Global Registry
Performance Goals	<p>Data Pool: To provide the Global Registry with verification that each message originates from a certified Data Pool.</p> <p>Global Registry: To ensure that only certified Data Pools access the Global Registry.</p>
Preconditions	<p>The Data Pool has sent their Data Pool Profile to the Global Registry and has passed certification.</p> <p>The Data Pool sends any supported message to the Global Registry.</p>
Postconditions	The message is accepted for processing by the Global Registry.
Scenario	<p>Begins when, the Global Registry receives a message.</p> <ol style="list-style-type: none"> 1. The Global Registry matches the senders GLN with the Data Pool Profile to ensure the Data Pool has a Profile. 2. The Global Registry matches the IP address of the message with the Profile. 3. The Global Registry ensures that the Start Availability Date is today's date or before Today's Date 4. The Global Registry ensures that the End Availability Date is after Today's date 5. The Global Registry ensures that the Certification Start Date is today's date or before Today's Date 6. The Global Registry ensures that the Certification End Date is after Today's date 7. The Global Registry ensures that the Certification Status is "Certified" <p>Ends when, The Global Registry accepts the message for processing</p>
Alternative Scenario	<p>ad 1., 7. Data Pool not certified: 1.1, 7.1. The Global Registry sends an error message to the Source Data Pool Ends when, the Source Data Pool receives the error message</p> <p>ad 2. The IP address does not match: 2.1. Global Registry sends an error message to the IP address in the Profile 2.2. Manual (phone call) intervention takes place</p> <p>Ends when, the Source Data Pool receives the IP error message</p> <p>ad 3., 4., 5., 6. Any of these dates are out of range: 3.1, 4.1, 5.1, 6.1. The Global Registry sends a validation error message to the Source Data Pool Ends when, the Source Data Pool receives the validation error message</p>

Special Requirements	None		
Extension Points	N/A		
Requirements Covered	ID	Requirement	Weight
	REQ-12	Every command needs a response and is handled according to the agreement between the parties involved. In the inter-operable network, acknowledgement messages are standardised and may contain the following information: -	Primary
	REQ-39	The ability to provide incremental updates is: - optional – not required for data pool certification - functionality provided between the recipient's data pool and its users	Secondary
	REQ-49	Rules for archiving or physical deletes will be agreed with the data pools and in the scope of the certification process.	Secondary
	REQ-99	The Global Registry functionality requirements can be summarised as follows: - Enable data synchronisation - Validation, registration and subscription functions - Enable global validation - Checking compliance with basic	Primary
	REQ-100	The Global Registry is involved in the following functions and/or business cases as defined in the Item Synchronisation detailed requirements: - Validation - Registration - Subscription - Global Search	Primary
	REQ-101	Registry Validation includes : - EAN.UCC standards validation for GTIN and GLN formats (i.e. check digit) - Uniqueness validation for Item (GTIN/GLN/TM), Party (GLN) or data pool (GLN), ensuring there is only one occurrence and data source	Primary
	REQ-102	Registry validation is a part of the registration process.	Primary
	REQ-103	Data Pool Validation includes the validation according to any other EAN.UCC standard applicable to the synchronised data and not included in the Global Registry validation scope.	Secondary
	REQ-104	In summary, the registry requirements for validation are: - EAN.UCC standards validation for GTIN/GLN formats - Uniqueness validation for Item, Party and data pool key - Store and maintain EAN.UCC standards - Process validation	Primary
	REQ-105	Registration is the process, which references all Catalogue Items and Parties published in all certified data pools and on which there is a need to synchronise / retrieve information. This is supported by data storage in accordance	Primary

	105	references all Catalogue Items and Parties published in all certified data pools and on which there is a need to synchronise / retrieve information. This is supported by data storage in accordance with the Registry data scope and rules.	
	REQ-106	Registering a Catalogue Item involves a check by the Global Registry for Item uniqueness. The Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data found in the Global Registry must be unique. When an Item is registered, the registry verifies that the combination of this data is unique to that Item.	Primary
	REQ-107	The registration process is triggered by the following business cases: 1. Create Catalogue Item: After the physical load and validation of the data, the registry record needs to be created before data can be published. 2. Update Catalogue Item: When a registered Catalogue Item is updated in its source data pool, updates impacting the Registry data must be reflected in the Global Registry, before the updated data can be propagated to the recipients. Registration of Catalogue Item changes only needs to happen for changes that: Impacts fields stored in the Global Registry. Are authorised according to the GTIN allocation rules. 3. Correct Catalogue Item: When a registered item is corrected in its source data pool, corrections impacting the Registry data must be reflected in the Global Registry before the updated data can be propagated to the data recipients. 4. Delete Catalogue Item: Deletions need to be reflected in the Global Registry: the discontinuation dates starts the EAN.UCC standard retention period (48 months for CPG, 36 months for apparel) as soon as GTIN has been discontinued in ALL target markets where it was active (needs to be stored in the Global Registry). 5. Cancel Catalogue Item: Communicates a trade item was never manufactured – this allows an earlier “reuse” of the GTIN i.o. standard retention period. This is achieved through the maintenance (using change function) of the cancel date. 6. Removing an Catalogue Item from the supply chain: The permanent removal of a Catalogue Item from the supply chain is achieved through the maintenance of a discontinuation date. This date has to be reflected in the Global Registry to kick off the EAN.UCC retention period. Temporary removals are not reflected in the Global Registry and only handled through the maintenance of the availability period in the data pools.	Primary
	REQ-108	Registry requirements for registration are : - Registration can only happen after successful validation. - Registration can only produce errors, no warnings. - Successful Registration of a Catalogue Item is mandatory prior to publication of any hierarchy containing that Catalogue Item. - ItemStatus needs to be included in GTIN data model to reflect validation and registration status. - Process registration command (for create, update, correct,	Primary

		delete). - Provide registration acknowledgement.	
	REQ-112	The data pool validation is the compliance checking of new or changed data versus EAN.UCC Global Data Standards, principles and rules, including: - EAN.UCC Item and Party data model validation - Syntax checks (field formats...) - Consistency checks (pick lists, authorised values...) - Legal checks (local data requirements...) - Quality checks (measurements, hierarchy representation...) This will be handled through a validation engine.	Primary
	REQ-113	The Global Registry provider will be expected to store and distribute what has been described as a "Validation Engine". This software module will be executed by the data pools to ensure common standards compliance.	Secondary
	REQ-114	Additionally, EAN.UCC standards should be stored centrally – potentially in the Global Registry by version.	Secondary
	REQ-121	Party: - GLN - Start Availability Date of the Party - Deletion Date of the Party - Registration Date - Source Data Pool Pointer [GLN used to ...] - GLN of Data Source (*Data Source is actually the 'owner' of the GLN data - Date and Time of last change - Party Validation Information (including Version, Date & Certificate ID)	Primary
	REQ-122	Data Pool Profile: - GLN of the data pool - Name of data pool - Address of the Data Pool (IP or URL) - Creation date of data pool provider [for audit of setup predating certification] - Start availability date of the Data Pool - End availability date of the Data Pool - Certification Start Date - Certification Expiration Date - Certification Status - Identification of the Certification Body - Certification ID (with version)	Secondary
	REQ-153	The Global Registry and the data pools should be able to process current and previous versions of the Catalogue Item Synchronisation messages. The Global Registry and the data pools should also be able to process a new version within a certain time frame.	Secondary

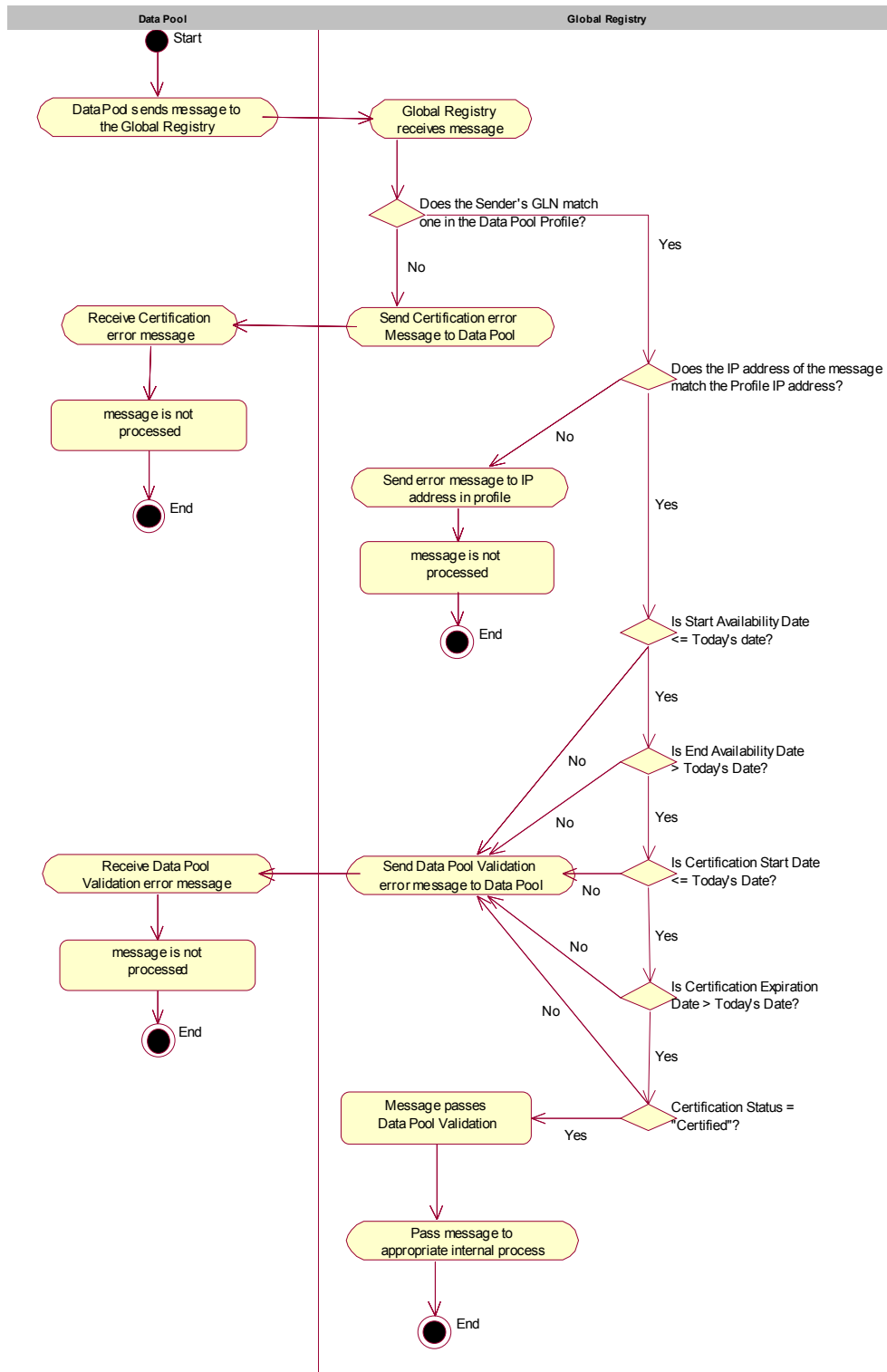


Figure 72 - Validate Data Pool Activity Diagram

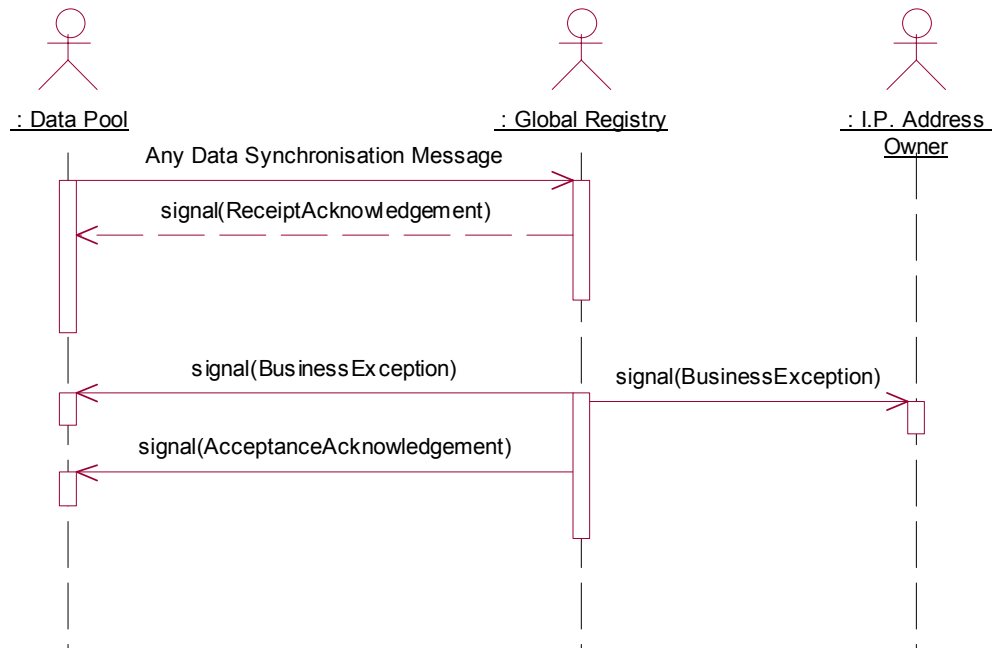


Figure 73 - Validate Data Pool Sequence Diagram

Validate Catalogue Item Data for Registry

Use Case Name	Validate Catalogue Item Data for Registry
Traceability Identifier	UC-33
Use Case Description	
Use Cases Above	UC-17: Registry Validation
Use Cases Below	None
Actors	Data Pool (Source Data Pool or Recipient Data Pool) Global Registry
Performance Goals	Data Pool: Global Registry:
Preconditions	
Postconditions	
Scenario	
Alternative Scenario	
Special Requirements	None
Extension Points	N/A
Requirements Covered	•

Data View

Data Definition Table

New Item?	Mandatory ?	Class Name	Role Name	Attribute Name	Definition	Attribute Data Type	Attribute Length

Message Hierarchy Table(s)

into this section of the BRD.}

{The purpose of these tables is to shown the hierarchy and relationship of the data listed in the data definition table.
A numbered listing shall designate the hierarchy. The top of the hierarchy shall be the root class.}

DataSynchronisationError

(Root)	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
DataSynchronisationError							
	DataSynchronisationErrorReference						
		+gTIN[GlobalTradeItemNumber]					
		+publicationID[EntityIdentification]					
		+subscriptionID[EntityIdentification]					
		+itemConfirmationID[EntityIdentification]					
		+requestForNotificationID[EntityIdentification]					
	DataSynchronisationErrorInformation						
		ErrorNumber					
		errorName					

RegistryCatalogueItem

(Root) 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
RegistryCatalogItem						
	Document					
	+documentIdentification[EntityIdentification]					
	CatalogueItemReference					
		+dataSource[GlobalLocationNumber]				
		+gTIN[GlobalTradeItemNumber]				
		+targetMarket[TargetMarketCode]				
	DataSynchronisationValidationInformation					
	RegistryCatalogueItemState					
		state				
			REGISTERED			
			CANCELED			
			DISCONTINUED			
	CatalogueItemDates					
		registrationDate				
		deletionDate				
		cancelDate				
		discontinuedDate				
		lastChangedDate				
	Classification					

CatalogueItemRegistrationAcknowledgement

(Root)	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
	CatalogueItemRegistrationAcknowledgement						
		DataSynchronisationItemReference					
			+dataSource[GlobalLocationNumber]				
			+gTIN[GlobalTradeItemNumber]				
			+targetMarket[TargetMarketCode]				
		CatalogueItemRegistrationInformation					
			registrationDate				
			lastChangedDate				

CatalogueItemNotification

(Root)	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
CatalogueItemNotification							
		Document					
		CatalogueItem					
			+sourceDataPool[GlobalLocationNumber]				
			+dataRecipient[GlobalLocationNumber]				
			CatalogueItemChildItemLink				
				quantity			
			CatalogueItemReference				
				+dataSource[GlobalLocationNumber]			
				+gTIN[GlobalTradeItemNumber]			
				+targetMarket[TargetMarketCode]			
			CatalogueItemState				
				state			
					ItemStateList		
						DISCONTINUED	
						CANCELED	
						UNPUBLISHED	
				discontinuedDate			
				cancelDate			
			+documentNumber[EntityIdentification]				
			ItemInformation				

CatalogueItemSubscription

(Root)	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
CatalogueItemSubscription							
		Document					
		+subscriptionIdentification[EntityIdentification]					
		+gTIN[GlobalTradeItemNumber]					
		+recipientDataPool[GlobalLocationNumber]					
		+dataSource[GlobalLocationNumber]					
		+dataRecipient[GlobalLocationNumber]					
		+targetMarket[TargetMarketCode]					
		+classification[ItemClassification]					

RequestForCatalogueItemNotification

(Root)	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
RequestForCatalogueItemNotification							
		CatalogItemSubscription					
		reload					

CatalogueItemPublication

(Root)	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
CatalogueItemPublication							
		Document					
		+publicationIdentification[EntityIdentification]					
		CatalogueItemReference					
			+gTIN[GlobalTradeItemNumber]				
			+dataSource[GlobalLocationNumber]				
			+targetMarket[TargetMarketCode]				
		+publishToTargetMarket[TargetMarketCode]					
		+publishToGLN[GlobalLocationNumber]					

CatalogueItemConfirmation

(Root)	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
CatalogueItemConfirmation							
	Document						
	+documentIdentification[EntityIdentification]						
	CatalogueItemReference						
		+gTIN[GlobalTradeItemNumber]					
		+dataSource[GlobalLocationNumber]					
		+targetMarket[TargetMarketCode]					
	CatalogueItemConfirmationState						
		state					
		+state					
			CatalogueItemConfirmationStateList				
				ACCEPTED			
				SYNCHRONISED			
				REJECTED			
				REVIEW			
		+recipientGLN[GlobalLocationNumber]					
		+recipientDataPool[GlobalLocationNumber]					

DataSynchronisationDataPoolProfile

(Root)	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
DataSynchronisationDataPoolProfile							
		Document					
		+dataPoolProfileIdentification[EntityIdentification]					
		electronicAddress					
		startAvailabilityDate					
		endAvailabilityDate					
		CertificationInformation					
			certificationID				
			certificationBody				
			certificationStartDate				
			certificationExpirationDate				
			certificationStatus				
				+certificationStatus[CertificationStatusList]			
					CERTIFICATION_PENDING		
					CERTIFICATION PENDING		
					REVIEWED_FOR_CERTIFICATION		
					CERTIFIED		
		+dataPoolNameAndAddress[NameAndAddress]					
		+dataPoolGLN[GlobalLocationNumber]					

CatalogueItemLink

(Root) Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
CatalogueItemLink						
	Document					
	+catalogueItemLinkIdentification[EntityIdentification]					
	+gLN[GlobalLocationNumber]					
	+parentGTIN[GlobalTradeItemNumber]					
	+childGTIN[GlobalTradeItemNumber]					
	+targetMarket[TargetMarketCode]					
	+targetMarket[TatgetMarketCode]					

Implementation Considerations

Implementation Notes

Relationships to TradeltemIdentification:

- GlobalTradeltemNumber is always used in the Catalogue Item Synchronisation process.
- AlternateTradeltemIdentification is never used in the Catalogue Item Synchronisation process.

Relationship between TradeltemInformation and TargetMarketInformation:

- Cardinality is always 1 (not 0..n as in the diagram). This means that Tradeltem information must be sent for each Target Market separately.

cancelDate:

- The cancelDate within the Tradeltem refers to the date that the Tradeltem owner has canceled the Tradeltem.
- The cancelDate within the Catalogue Item (Class: CatalogueltemDates) refers to the date that the Data Source has canceled the Catalogue Item. In this event, the Trade Item may still be manufactured and offered for sale within other Target Markets or by other sources.

discontinuedDate:

- The discontinuedDate within the Tradeltem refers to the date that the Tradeltem owner has discontinued the Tradeltem.
- The discontinuedDate within the Catalogue Item (Class: CatalogueltemDates) refers to the date that the Data Source has discontinued the Catalogue Item. In this event, the Trade Item may still be manufactured and offered for sale within other Target Markets or by other sources.

Item Containment within the Trade Item:

- At this writing, the Trade Item model includes only one level down (one level of children) per parent Trade Item. Requirement #28 states that “The updated hierarchy always fully replaces the current hierarchy.” As such, the Containment that is modeled in the Trade Item message is not used in the Catalogue Item Synchronisation Process. Catalogue Item Hierarchy is communicated via the “CatalogueltemChildLink” class in the “CatalogueltemNotification” message.

Definitions & Principles

Single Data Source Principle

- there can only be one official source of the data – the one that is registered
- this source is identified by the data owner
- this is the only valid source for data synchronisation and related processes

Although the notification process will physically move the data from one data pool to another, this data should not be stored permanently for the purpose of synchronisation with any other user than the initial subscriber.

If stored, access should be limited to the initial data recipient.

Catalogue Item Identification

In the synchronisation process,

- a Catalogue Item is uniquely identified by GTIN + GLN + TM
- a ItemLink is uniquely identified by the Parent Item Key + Child Item Key + quantity contained

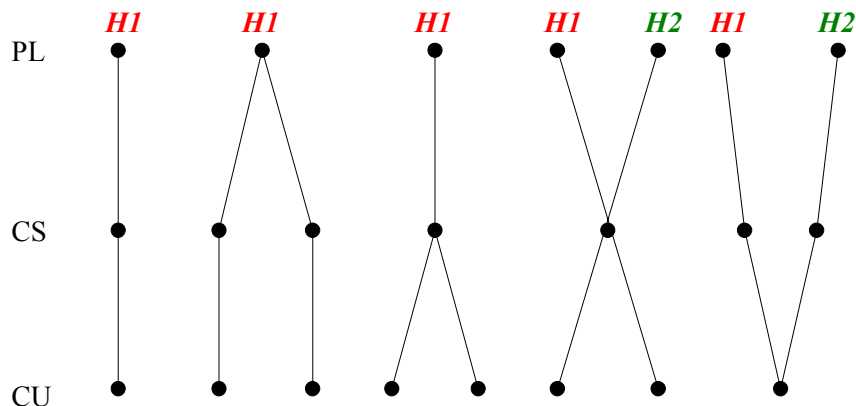
Full Hierarchies

All Catalogue Item messages communicated by full hierarchy. In other words, all communication at the highest level of the hierarchy. This begins with publication messages, and follows with all distribution messages and then all response messages.

Definition

Construct of data containing a set of GTIN's and links that make up a unique relationship from the highest level GTIN with no parent down to the lowest level GTIN(s) with no children.

Full Hierarchy Examples



Overview

Data Loading Business Cases

A data source sends a full data set (Catalogue Item Hierarchy) to its source data pool.

The data loaded can be published only after validation by the data pool and registration in the Global Registry. This function covers:

- Add new Catalogue Item Hierarchy
- Correct mistakes: changes to an existing Catalogue Item Record record to correct errors
- Change of information to reflect changes in the original object
- Delete obsolete Catalogue Item Hierarchy in this function the related data records are flagged as inactive but not physically deleted from the data pool. Data cleansing and data archiving mechanisms have to be implemented in data pools and Global Registry.

The source data pool is the unique reference point for registered GTIN's, even if the data is not physically stored there.

New Catalogue Item Hierarchy

To create a new Catalogue Item Hierarchy, the Data Source enters a full Catalogue Item Hierarchy (Catalogue Item and ItemLink data) into the Source Data Pool.

The data pool verifies that the information loaded is "correct", i.e. expected and complete and then sends the relevant Catalogue Item data to the registry for registration.

ItemLink data is not sent to the Registry as ItemLinks do not need to be registered

Example :

```
Command :      Add
PayLoad :      Catalogue Item Data
                  Catalogue Item1 (CU)
                  Catalogue Item2 (CS)
                  Catalogue Item3 (PL)
                ItemLink Data
                  Itemlink 1 (2 → 1)
                  Itemlink 2 (3 → 2)
```

The validation of the data is a 2-step process:

1. Data Pool Validation is the compliance checking of new or changed data versus EAN.UCC Global Data Standards, principles and rules, including:

- EAN.UCC Item and Party data model validation
 - Syntax checks (field formats...)
 - Consistency checks (pick lists, authorized values...)
 - Legal checks (local data requirements...)
 - Quality checks (measurements, hierarchy representation...)
- This will be handled through a validation engine.
EAN.UCC standards used for validation are stored centrally (could be in the registry)

2. Registry Validation is the checking compliance with basic EAN.UCC standards related to the format of a GTIN/GLN and ensuring the uniqueness of the data that is being registered.

In summary:

- EAN.UCC standards validation for GTIN and GLN format
- Uniqueness validation for Catalogue Item (GTIN/GLN/TM), Party (GLN) or data pool (GLN) – only applies to the occurrence of the key, not to the uniqueness of the information related to it.

Registration is the process, which references all Catalogue Items and parties published in all certified data pools and on which there is a need to synchronise / retrieve information. This is supported by data storage in accordance with the Registry data scope and rules.

Registering a Trade Item involves a check by the Registry for uniqueness. The Trade Item is identified by the following elements: GTIN, GLN, Target Market. Each combination of this key data found in the Registry must be unique.

Change Catalogue Item Hierarchy

To make changes to a Catalogue Item Hierarchy already existing in a data pool, whether the Catalogue Items have been registered or not.

Changes have to comply with validation rules.

If the Catalogue Items in the Hierarchy were registered, updates impacting the Registry data must be reflected in the Registry.

Registration of Catalogue Item changes only needs to happen for changes that :

- Impact fields stored in the registry
- Are authorized according to the GTIN allocation rules

Validation is done against existing data, applying GDD standard and GTIN Allocation rules.

The change function implies a full replacement of all attributes of the previously created Catalogue Item – this will be reflected in the subsequent notification, including a full refresh of the changed record.

The ability to provide incremental updates is :

- optional – not required for data pool certification
- functionality provided between the recipient's data pool and its users

Correct Catalogue Item Hierarchy

Correction is the update of data in ways that would not be allowed by the standard GTIN allocation rules (i.e. changes that would otherwise require the allocation of a new GTIN).

All other validations (i.e. syntax, consistency, legal compliancy) still apply.

Correction will trigger a different process at the data recipient's end.

This process is intended to correct errors, not to circumvent the validation process as part of a standard data update.

Incorrect core data (i.e. attributes that cannot be updated according to allocation rules) can only be updated through a specific correction functionality.

This functionality will:

- trigger syntactical and content validation
- skip GTIN allocation rules validation
- set a flag on the GTIN data record to inform the data recipient of the correction (see data distribution / notification)
- the correction will also be reflected in the registry if it impacts registry data

According to GTIN allocation rules, ItemLinks can never be updated, as they reflect the relationship between 2 GTIN's. There is, however, a need for a process to correct data that was incorrectly maintained.

The correction will be handled differently depending whether it impacts the integrity of the hierarchy or not :

- if the correction impacts the hierarchy, then it will be handled by deleting the incorrect ItemLink and adding a new Item Link - **Add/Delete Scenario's**
- else, Catalogue Item or ItemLink attributes will be updated through the correction command - **Correction Scenario's**

Correction Scenarios

1. Correct Catalogue Item Data Element

Process:

- no impact on logical hierarchy
- update data element with Correct.Catalogue ItemHierarchy

2. Correct ItemLink Data Element

Example:

- ItemLink : QuantityContained
- Catalogue Item : Weight
- current hierarchy :
 - Parent : GTIN1
 - Child : GTIN2
 - Quantity Contained : 10
- correction :
 - Quantity Contained : 12

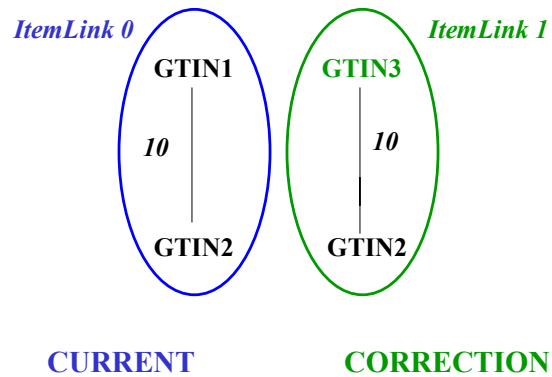
Process:

- no impact on logical hierarchy
- update data element with Correct.ItemHierarchy

Add/Delete Scenarios

1. Parent / Child Correction

Example:

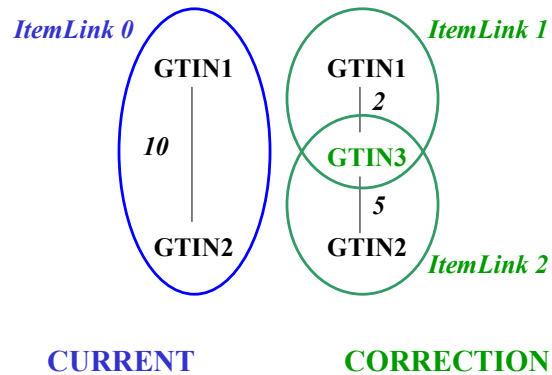


Process:

- Delete.ItemLink0
- Add.GTIN3
- Add.ItemLink1

2. Insert Intermediate layer in existing hierarchy

Example:

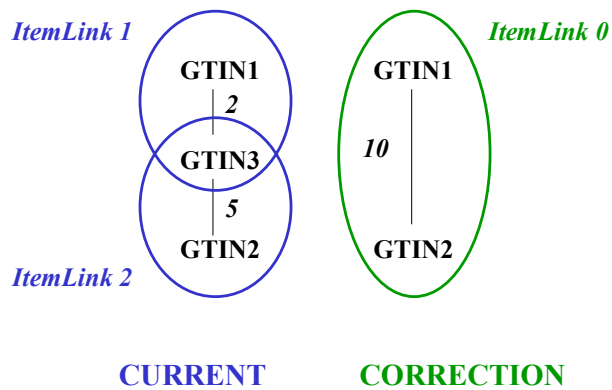


Process:

- Delete.ItemLink 0
- Add.GTIN3
- Add.ItemLink 1
- Add.ItemLink 2

3. Delete Intermediate layer in existing hierarchy

Example:

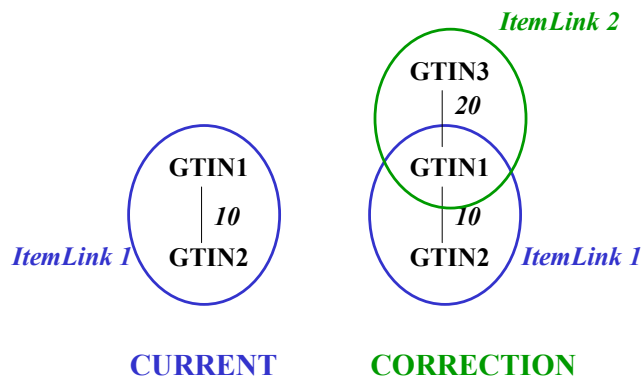


Process:

- Delete ItemLink 1
- Delete ItemLink 2
- Delete GTIN3 if not used anywhere else
- Add ItemLink 0

4. Add new layer on top of existing hierarchy

Example:

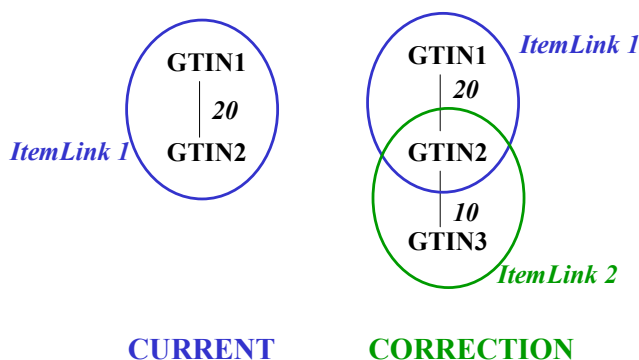


Process:

- Add.Item (GTIN3)
- Add.ItemLink 2

5. Add new layer at bottom of existing hierarchy

Example:



Process:

- update GTIN2 : no longer BU
- Add.Item(GTIN3) – new BU
- Add.ItemLink 2

Delete Catalogue Item Hierarchy

The objective of the “Delete” Function is not to physically remove data from the data pool, but to “Flag for deletion”, authorizing the deletion of the data.

The deletion needs to be validated against a number of criteria, e.g. Catalogue Item is no longer published, Catalogue Item discontinued, retention limit (EAN/UCC specifications)...

Rules for archiving or physical deletes will be agreed with the data pools and in the scope of the certification process.

Deletions need to be reflected in the registry (deletion flag + effective change date = deletion date in the registry)

Comments:

- To protect data integrity within the data pool, the deletion of a child can only occur after the deletion of the parents. Validation for deleted Catalogue Items ensures the parents have been deleted before the deletion of the child is performed.
- Deletion of a Catalogue Item must trigger the invalidation of any hierarchy links involving that Catalogue Item, whether that Catalogue Item is the parent or the child in the link. This is completed by the Refresh.ItemLink message. Ackn.ItemLink will be repeated for every link that was refreshed or invalidated.
- Deletion needs to be validated against:
 - Publication status
 - Availability Status (end availability + discontinued Y/N)
 - Hierarchy: parents have to be deleted before children
- the discontinuation dates starts the standard retention period depending on the sector as soon as GTIN has been discontinued in ALL target markets where it was active (needs to be stored in the registry)
- A deletion cannot be corrected – only the discontinuation can be reversed.
- Deletes are not synchronised across data pools

ItemLinks can only be deleted:

- as the correction of an error
- as the result of a delete.Item

The ItemLink validity in time is defined by the validity of the Parent Item and Child Item. When either parent or child expire, the related ItemLink(s) have to expire as well.

When a parent or child is deleted:

- the links pointing down must be deleted
- the links above must be deleted
- all Catalogue Items above must be deleted

Whether that happens automatically or not is a matter of implementation.

The deletion of an Catalogue Item Hierarchy will trigger the clean up of the synchronisation list.

Removing and restoring a Catalogue Item from the supply chain

3 business cases:

1. Catalogue Item was never manufactured: Cancel Catalogue Item
2. Catalogue Item is temporarily removed from the supply chain
3. Catalogue Item is permanently removed from the supply chain

1. Cancel Catalogue Item

Communicates a trade item was never manufactured – this allows the reuse of the GTIN 12 months after cancellation i.o. 48

This is achieved through the maintenance (using change function) of the cancel date

Next steps:

- need cancel date in Catalogue Item data model
- cancel date needs to be included in the registry

2. Temporarily

Communicate that product is no longer available: maintain end availability date

When product is available again: update start/end availability date

3. Permanently

Communicate the product is no longer going to be manufactured: discontinued = Y + effective change date = discontinued date in the registry

Communicate the product is no longer going to be available: maintain end availability date

The maintenance of the discontinued date will start the retention period for the GTIN in the Registry.

As a GTIN can be active in several Target Markets at the same time, it does not have to be discontinued in all Target Markets at the same time.

This implies that the retention period for a given GTIN can only start after that GTIN has been discontinued in all Target Markets.

The Registry will need to provide information to the GTIN owner about the actual start of the retention period.

If a Catalogue Item was previously discontinued, it can only be re-introduced through a correction.

If a public Catalogue Item is discontinued, it is discontinued for the entire market.

It has no effect on the synchronisation list, the recipients will be notified of the change in Catalogue Item data.

The synchronisation list will only be cleaned up after the data source requests the deletion of the Catalogue Item.

Overview

Data Distribution Business Cases

Data Distribution refers to the movement of data to the correct destination according to defined criteria.

It also includes the ongoing maintenance of these criteria..

This function includes:

- the creation and synchronisation of subscriptions
- the maintenance of publication
- the notification of data based on a publication/subscription matching process

Create and Synchronise Subscriptions

A Data Recipient requests that it receive a “notification” when a specific event occurs that meets the Recipients criteria (selective on sources, categories, etc).

This is subject to the recipient's access to information as controlled by the data source through its source data pool.

A subscription can be maintained on following levels :

- GTIN
- GLN of data owner
- Target Market
- Classification

Or any combination of these 4 elements.

With the set up of a subscription, a Data Recipient sets a profile to receive ongoing updates of the matching data (including all hierarchies, independently from the level subscribed on).

Subscriptions remain valid until they are deleted.

Subscriptions are created by data recipients in their home data pool and sent to the registry.

The Registry will then disseminate relevant subscriptions to appropriate Home Data Pools (current and future new data pools)

A new data pool will get their relevant subscriptions as soon as they start registering their GTIN's

Subscription Scenario

- Data recipient maintains subscription
- Data recipient will continue to receive updates until he rejects the data
- For a synchronisation list / subscription, the reject will remove that GTIN from the synchronisation list
- Reject is optional : in the absence of authorization & reject, the data recipient would still receive updates
- Authorized GTIN :
 - subscription : go to synchronisation list
 - synchronisation list : no action required
- Only new products matching the initial subscription will be distributed to avoid resending data that was previously rejected
- Updates for authorized products will be distributed based on the synchronisation list
- Confirmation (accept or synchronised) will indicate the data recipient's commitment to synchronise the data in its internal systems

- Filtering out rejected data is a source data pool responsibility

Subscription & Synchronisation List

Subscription: for every matching GTIN, independently from its level, all hierarchies will be returned

Synchronisation list:

- Includes every GTIN id (GTIN+GLN+TM) that needs to be synchronised
- Can be a result of the Confirmation process
 - o All GTIN's equal or lower in the hierarchy than the GTIN confirmed will be returned
 - o Only these GTIN's will be returned

Rejection at any level of a hierarchy will trigger the rejection of all GTIN's equal or higher in the hierarchy of the rejected GTIN

Relationship dependent data will only be communicated for GTIN's that are on the Synchronisation List

Synchronisation List is only synchronised between the involved source and recipient data pools for applicable data: synchronisation list is built based on confirmation received by a source data pool and nothing else.

The synchronisation list is a subset of the notification list maintained by the source data pool, keeping track of where data has been notified, independently from the received confirmations.

The data recipient needs to be notified if the synchronisation list is being modified by the data source.

That can only happen if a Catalogue Item is deleted or if publication of a given ItemHierarchy is stopped.

Subscription Matching Process

The subscription matching process takes place in the registry.

The objective is to compare subscription data with registry data to only distribute subscriptions to data pools matching the criteria.

!!! Watch Out !!!

This does not include synchronisation lists – these are only synchronised between the

Common Data

recipient and source data pool as they are the result of the synchronisation process.

A subscription can be maintained on any combination of 4 elements:

- GTIN
- GLN of Data Source a.k.a. Data Owner
- Target Market
- Lowest level EAN.UCC Classification

GTIN and Lowest level of EAN.UCC classification are mutually exclusive subscription criteria as the Classification is uniquely defined for a given GTIN, independently from the GLN and from the TM

These 4 elements are also stored in the registry, and are linked to the source data pool(s) where the data can be found.

For instance, if given a GTIN, the registry will be able to return all the data pools where data can be found on that GTIN, independently from the GLN of the data owner, the Target Market or the classification.

- The business cases for the registry matching process are organized in 2 axes :
- how to determine where the subscriptions have to be distributed – “where to”
 - when are subscriptions being distributed “ when”

“Where To” Business Cases

The following combinations of criteria can define the list of data pools where the subscription data needs to be sent.

GTIN	GLN Of Data Source	TM	Category	Relevant Source Data Pools	Example
X	X	X		0-1	GTIN1 by Kraft in UK0 : GTIN+GLN+TM does not exist in the registry 1 : source data pool for GTIN+Kraft+UK
X	X			0-N	GTIN1 by Kraft → Target Market(s) 0 : GTIN1+Kraft+** does not exist in the registry N : 1<=N<=X where X is the number of TM variants for GTIN1+Kraft
X		X		0-N	GTIN1 in UK → Data Sources (s) 0 : GTIN1 + *** + UK does not exist in the registry N : 1 <=N<= X where X is the number of GLN variants for GTIN1+UK
	X	X	X	0-N	Kraft in UK for Category “Snacks” → GTIN(s) 0 : ****+Kraft+UK, “Snacks” does not exist in the registry N : 1 <=N<=X where X is the number of GTIN variants for Kraft+UK with category “Snacks”
	X	X		0-N	Kraft in UK → GTIN(s) 0 : ****+Kraft+UK does not exist in the registry N : 1<=X<=N where X is the number of GTIN variants for Kraft+UK
	X		X	0-N	Kraft for Category “Snacks” → GTIN(s) per TM(s) 0 : ****+Kraft+**, Snacks does not exist in the registry N : 1<=N<=X where X is the number of GTIN+TM variants for Kraft, Snacks
		X	X	0-N	UK for Category “Snacks” → GTIN(s) per GLN(s) 0 : ****+***+UK, Snacks does not exist in the registry N : 1 <=N<=X where X is the number of GTIN+GLN variants for UK, Snacks
X				0-N	GTIN1 → GLN(s) per TM(s) 0 : GTIN1+****+** does not exist in the registry N : 1<=N<=X where X is the number of GLN+TM variants for GTIN1
	X			0-N	Kraft → GTIN(s) per TM(s) 0 : ****+Kraft+** does not exist in the registry N : 1<=N<=X where X is the number of GTIN+TM variants for Kraft

GTIN	GLN Of Data Source	TM	Category	Relevant Source Data Pools	Example
		X		0-N	UK → GTIN(s) per GLN(s) 0 : ****+***+UK does not exist in the registry N : 1<=N<=X where X is the number of GTIN+GLN variants for UK
			X	0-N	Snacks → GTIN(s) per GLN(s) per TM(s) 0 : ****+***+** does not exist in the registry for category "Snacks" N : 1<=N<=X where is the number of GTIN+GLN+TM with Category = "Snacks"

** - wildcard for TM
 *** - wildcard for GLN
 **** - wildcard for GTIN

"When" Business Cases

The distribution of subscriptions is either a scheduled event or is triggered by another event.

The events that can trigger the distribution of a subscription are:

- new/updated registration : check existing subscriptions, if new data pools are found : distribute subscriptions
- new subscription : check existing registrations, if new data pools are found, distribute subscriptions
- delete subscriptions : distribute "delete" to source data pools where subscription had been sent

Remark:

Subscriptions cannot be updated, they are created or deleted

This assumes subscriptions are stored in the recipient's data pool

Impact on Registry Requirements

- for every subscription, store to which data pool the data has been sent and when
- ability to identify new or updated registered Catalogue Items that match a subscription and forward the subscription to the source data pool
- match new subscriptions with registered Catalogue Items and forward the subscription to the source data pool

Create Publication

Maintaining a publication is granting visibility and access to data.

Publications are initiated by the data source in the source data pool, they do not need to be synchronised in the GDSN

The Target Market where product is available is communicated in the product key (GTIN+GLN+TM) – this can be different from the Target Market for publication.

Data is either published:

- to a Target Market : any GLN in the Target Market has access to the data (only applies to "public" Items)

- to specific GLN's : only these GLN's have access to the data (only applies to "private" Items)
The purpose of the public/private flag is to provide information to the parties involved on the status of the Catalogue Item.

Notification based on Publication/Subscription

Notification is the result of a successful matching process.

Events that can trigger a notification are :

- new or updated publication
- change of published data
- change of owner/rights
- subscription
- synchronisation list update
- request for notification

The matching process is owned and developed by each source data pool in order to trigger data distribution based on publication and subscription data. The implementation of a matching process is a pre-requisite for data pool certification.

The matching process can be triggered either by publication, subscription or as a scheduled event. It is valid for all subscription types (including synchronisation list) and all publication types.

For a given subscription :

- the matching process identifies Catalogue Items published to the GLN or TM of the subscription owner
- for each Catalogue Item, a notification is created including all dependent hierarchies.
- If the subscription is a synchronisation list, the hierarchy information included in the the notification, will be limited to the GTIN's maintained in the Synchronisation List.
- The notification is sent to the home data pool of the data recipient

For a given publication :

- the matching process identifies subscriptions with matching criteria (TM, GLN, category, GTIN...)
- for each matching subscription, a notification is created including all dependent hierarchies
- If the subscription is a synchronisation list, the hierarchy information included in the the notification, will be limited to the GTIN's maintained in the Synchronisation List.
- The notification is sent to the home data pool of the data recipient

Publication and Subscription Data

Publication

Who : Data Source = source GLN

What : Catalogue Item record, identified by GTIN+GLN+TM

Additional attributes : Category

Where : TM or GLN (= target GLN)

Subscription

Who : Data recipient = target GLN

What : Any combination of GTIN, GLN, TM and Category

Matching Process Scenarios

Subscription	Publication to TM <i>Notification if :</i>	Publication to GLN <i>Notification if :</i>
GTIN+GLN+TM <i>GTIN1 by Kraft in UK</i>	published Catalogue Item has same GTIN+ GLN+TM publication TM >= subscription TM	published Catalogue Item has same GTIN+ GLN+TM target GLN = subscriber's GLN
GTIN+GLN <i>GTIN1 by Kraft, all TM</i>	published Catalogue Item has same GTIN+ GLN, independently from the TM	published Catalogue Item has same GTIN+ GLN, independently from the TM target GLN = subscriber's GLN
GTIN+TM <i>GTIN1 in UK, all GLNs</i>	published Catalogue Item has same GTIN+TM, independently from the GLN publication TM >= subscription TM	published Catalogue Item has same GTIN+TM, independently from the GLN target GLN = subscriber's GLN
GLN+TM+Category <i>Kraft, UK, "Snacks", all GTINs</i>	published Catalogue Item has the same GLN+ TM+Category, independently from the GTIN publication TM >= subscription TM	published Catalogue Item has the same GLN+TM+Category, independently from the GTIN target GLN = subscriber's GLN
GLN+TM <i>Kraft, UK, all GTINs</i>	published Catalogue Item has the same GLN+ TM, independently from the GTIN publication TM >= subscription TM	published Catalogue Item has the same GLN+ TM, independently from the GTIN target GLN = subscriber's GLN
GLN+Category <i>Kraft, "Snacks", all TMs, all GTINs</i>	published Catalogue Item has the same GLN+ Category, independently from the GTIN or TM	published Catalogue Item has the same GLN+ Category, independently from the GTIN or TM target GLN = subscriber's GLN
TM+Category <i>UK, "Snacks", all GLNs, all GTINs</i>	published Catalogue Item has the same TM and Category, independently from the GTIN or GLN publication TM >= subscription TM	published Catalogue Item has the same TM and Category, independently from the GTIN or GLN target GLN = subscriber's GLN
GTIN <i>GTIN1, all TMs, all GLNs</i>	published Catalogue Item has the same GTIN, independently from the GLN or TM	published Catalogue Item has the same GTIN, independently from the GLN or TM target GLN = subscriber's GLN
GLN <i>Kraft, all GTINs, all TMs</i>	published Catalogue Item has the same GLN, independently from the GTIN or TM	published Catalogue Item has the same GLN, independently from the GTIN or TM target GLN = subscriber's GLN
TM <i>UK, all GTINs, all GLNs</i>	published Catalogue Item has the same TM, independently from the GTIN or GLN publication TM >= subscription TM	published Catalogue Item has the same TM, independently from the GTIN or GLN target GLN = subscriber's GLN
Category	published Catalogue Item has	published Catalogue Item has

"Snacks", all GTINs, all GLNs, all TMs	the same Category, independently from the GTIN, GLN or TM	the same Category, independently from the GTIN, GLN or TM target GLN = subscriber's GLN
--	---	--

Publication TM does not have to be equal to the GTIN TM.
I.e. I can have a product record defined for TM France, but publishing the data to Belgium only for information purposes.

Confirmation of Synchronisation

The final recipient communicates with the data source to indicate further action upon the Catalogue Item.

The confirmation process takes place in the data pool of the data recipient.

Confirmation is not mandatory and can provide 4 outcomes:

- Synchronised : data is integrated, in synch and added to the synchronisation list
- Accept : data is added to the synchronisation list and will be in synch
- Reject : data will no longer be synchronised or updates will no longer be provided
- Review : ask the data source to "review" the data, indicating the recipient cannot synchronise under current circumstances. If the data was previously synchronised, it would be removed from the synchronisation list. This is information about discrepant data between data recipient and data source.

If no confirmation is received, data updates will continue to be provided until the data recipient accepts, rejects or updates the subscription, or until the data owner changes the publication

The list of authorized values for the confirmation message does not imply a sequence in which the message has to be used.

I.e., possible responses for a new Catalogue Item introduction:

- synchronised
- accept + synchronised
- accept
- reject

The same "confirmation" message can be used to stop synchronizing a Catalogue Item. In that case, the "Reject" status will be used to remove the Catalogue Item from the synchronisation list.

"Synchronised" status is sent once – parties are assumed to be in synch unless a reject/review status is exchanged.

Note: rejection should not remove data previously authorized, for instance in a different hierarchy

Catalogue Items rejected by the recipient will not be re-transmitted by virtue of a new subscription or publication. Only by the request for notification.

All Catalogue Item messages are communicated by full hierarchy. In other words, all communication is done at the highest level of the hierarchy. This begins with publication messages, follows with all distribution messages and then all response messages.

For the confirmation process this implies:

- accept/reject confirmations are always communicated on the highest level of the hierarchy.
- The implementation of the confirmation process in the recipient's data pool or in the recipient's back end systems can be at any level as long as the confirmation messages used for communication in the GDSN only contain full, uniquely identified hierarchies

The synchronisation list will contain all Catalogue Items (GTIN+GLN+TM) where the recipient has responded with Accept, Synchronise or Review confirmation message. Specifically, it does not include Rejects.

The synchronisation list is a subset of a larger list kept by the data pools: the notification list.

The notification list will contain the confirmation status for every GTIN + GLN+TM notified to a given GLN.

That is :

- accepted
- synchronised
- review
- rejected
- unknown

Request for Notification

This is a one time subscription requesting for the data to be (re)sent.

The request for notification is not distributed and stored by the registry: the recipient data pool, where the request is created, looks up the source data pool where it needs to be sent in the registry and sends the request to the source data pool.

Request for notification is only executed once and then discarded by the source data pool.

For Catalogue Items that were previously synchronised (= in synchronisation list) or rejected, the request for notification resets the confirmation status : undo reject or remove from synchronisation list.

In summary, the confirmation status is reset to "unknown" in the notification list.

The notification resulting from a request for notification will carry the value of the Reload attribute maintained in the request for notification.

This attribute contains a Boolean value.

The value of this attribute will be passed along with the notification for the recipient to properly route the inbound message.

After executing the notification, the source data pool will change the stored value from True to False.

Ending Synchronisation

There are 2 ways of ending synchronisation (= remove references from the synchronisation list) :

- the data recipient can send a reject confirmation
- the data source can stop the publication

The notification triggered by an end of publication will carry the status of “unpublished”, indicating this is the last time the data is being notified and that the synch list will be cleaned up.

This applies to the synchronisation and notification lists and is effective immediately.

This does not tell anything about the status of the Catalogue Item in the supply chain (life cycle, availability) – it merely indicates the end of data synchronisation without indicating a reason.

Class Diagrams

Appendix

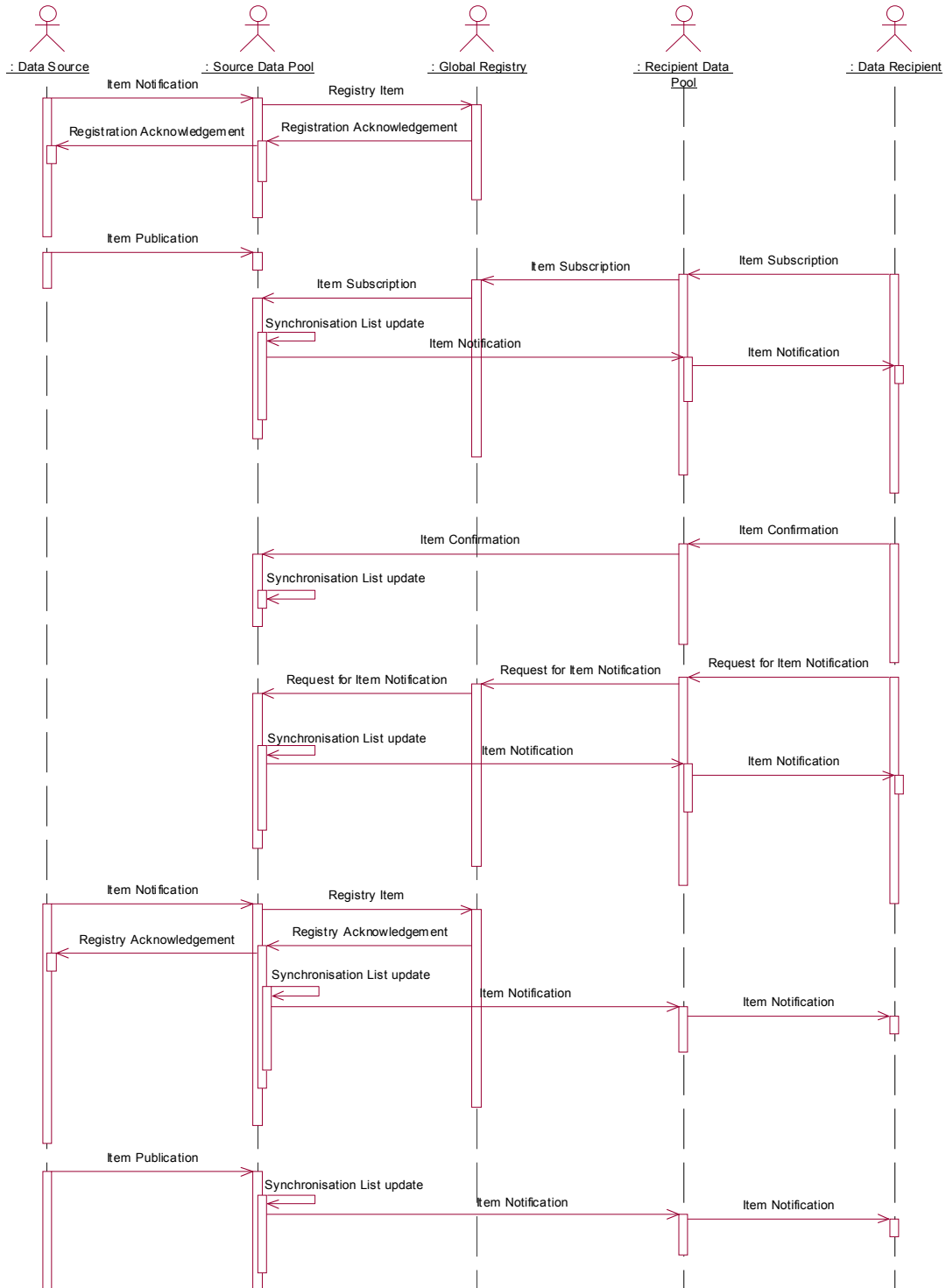


Figure 74 - Data Synchronisation Message Flow Sequence Diagram

Reading Class Diagrams

Class Diagram colour coding:

- Red is used to indicate the root class for these business requirements.
- Grey is used to indicate classes that are common to more than one class diagram, supporting the practice and benefits of class re-usability.
- Yellow is used to indicate classes that are specific at this time to Party.
- Teal is used to indicate notes.

Notation on Arrows (relationships) in Class Diagrams:

- No notation = Mandatory
- 1 = Mandatory
- 1..n = Mandatory and Repeatable
- 0..1 = Optional
- 0..n = Optional and Repeatable

Notation on Attributes in Classes:

- All attributes default to Mandatory unless otherwise noted.
- *Attribute*[0..1] = Optional
- *Attribute*[0..n] = Optional and Repeatable
- *Attribute*[1..n] = Mandatory and Repeatable

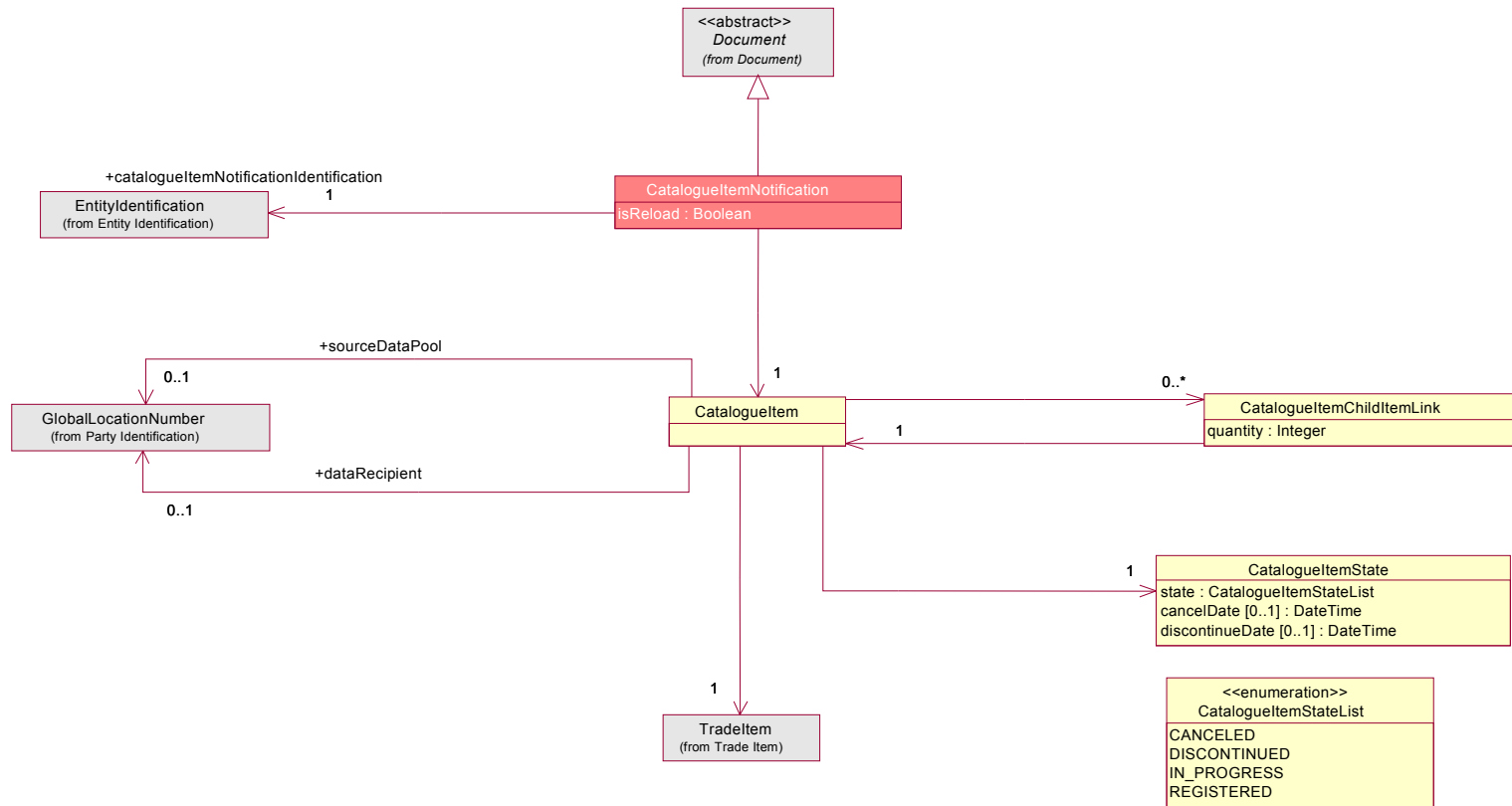


Figure 75 – Catalogue Item Notification Class Diagram

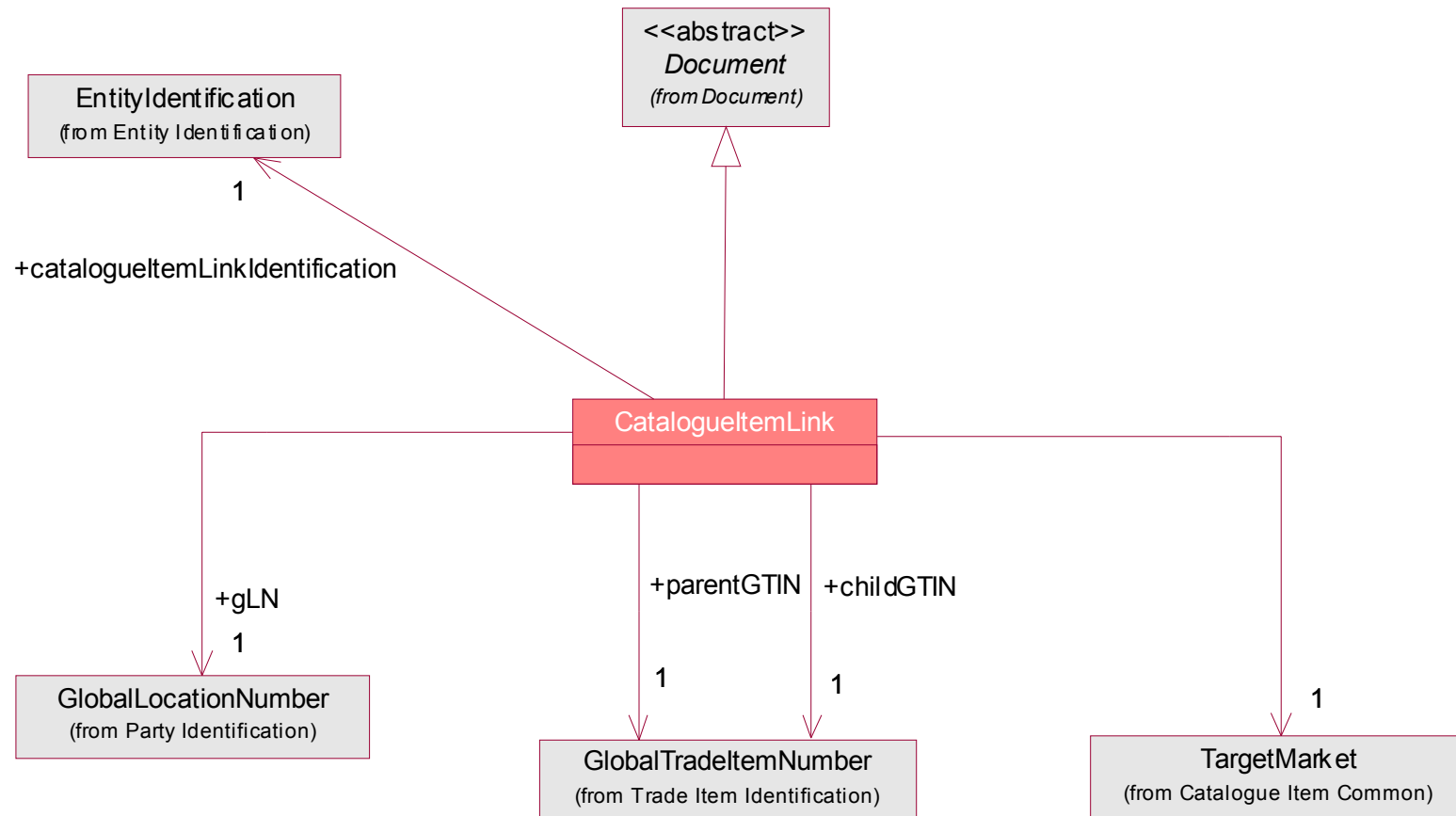


Figure 76 – Catalogue Item Link Class Diagram

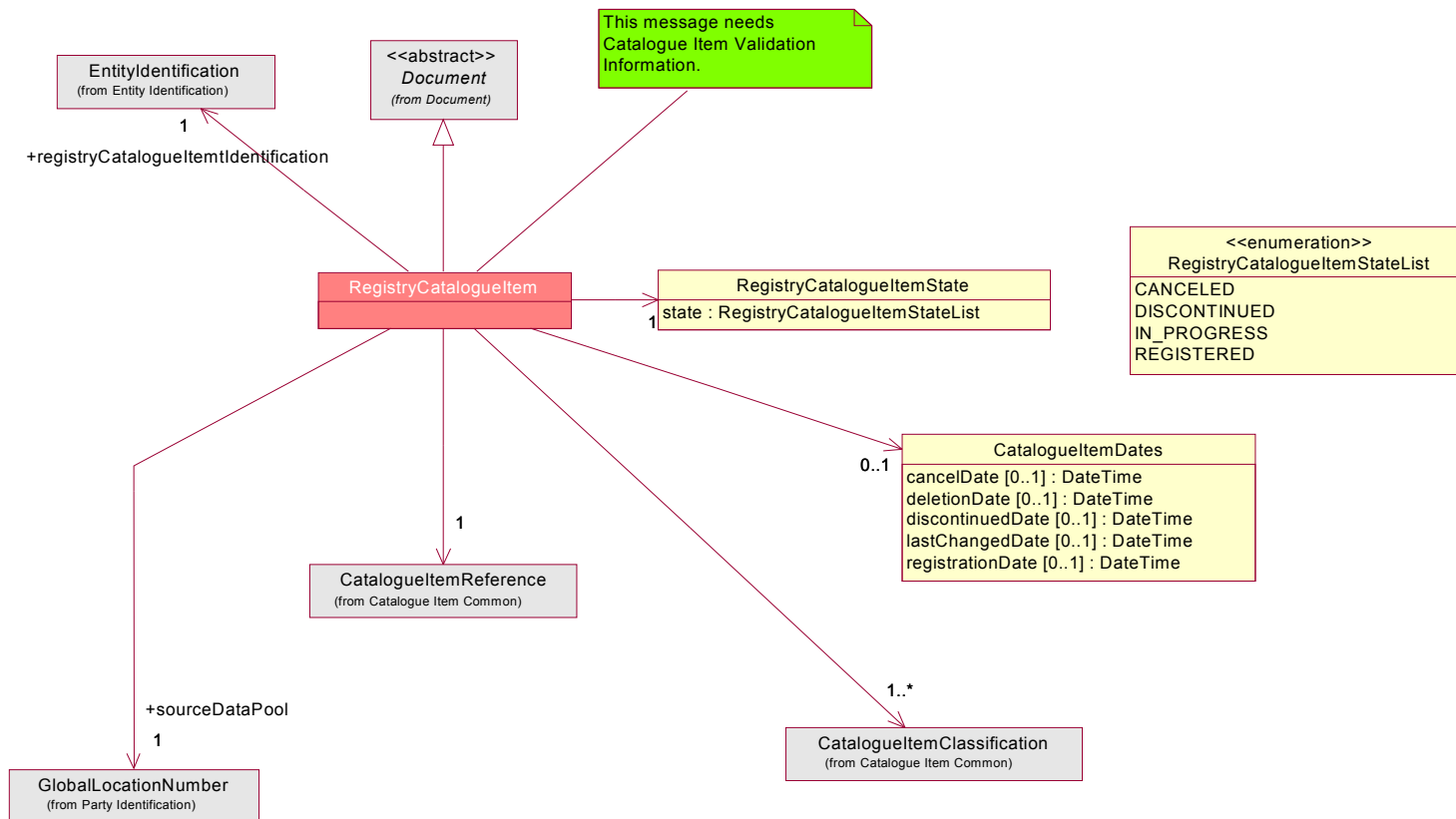


Figure 77 –Registry Catalogue Item Class Diagram

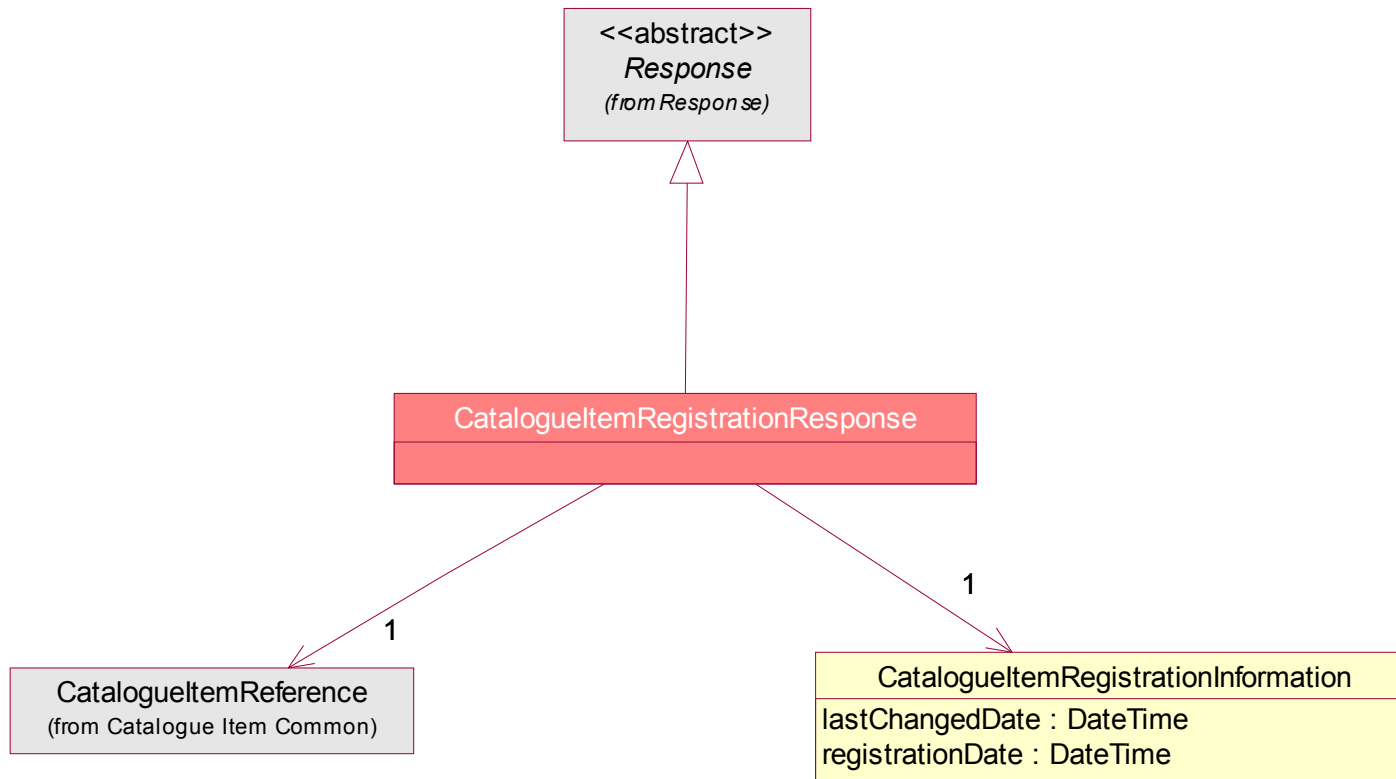


Figure 78 - Catalogue Item Registration Response Class Diagram

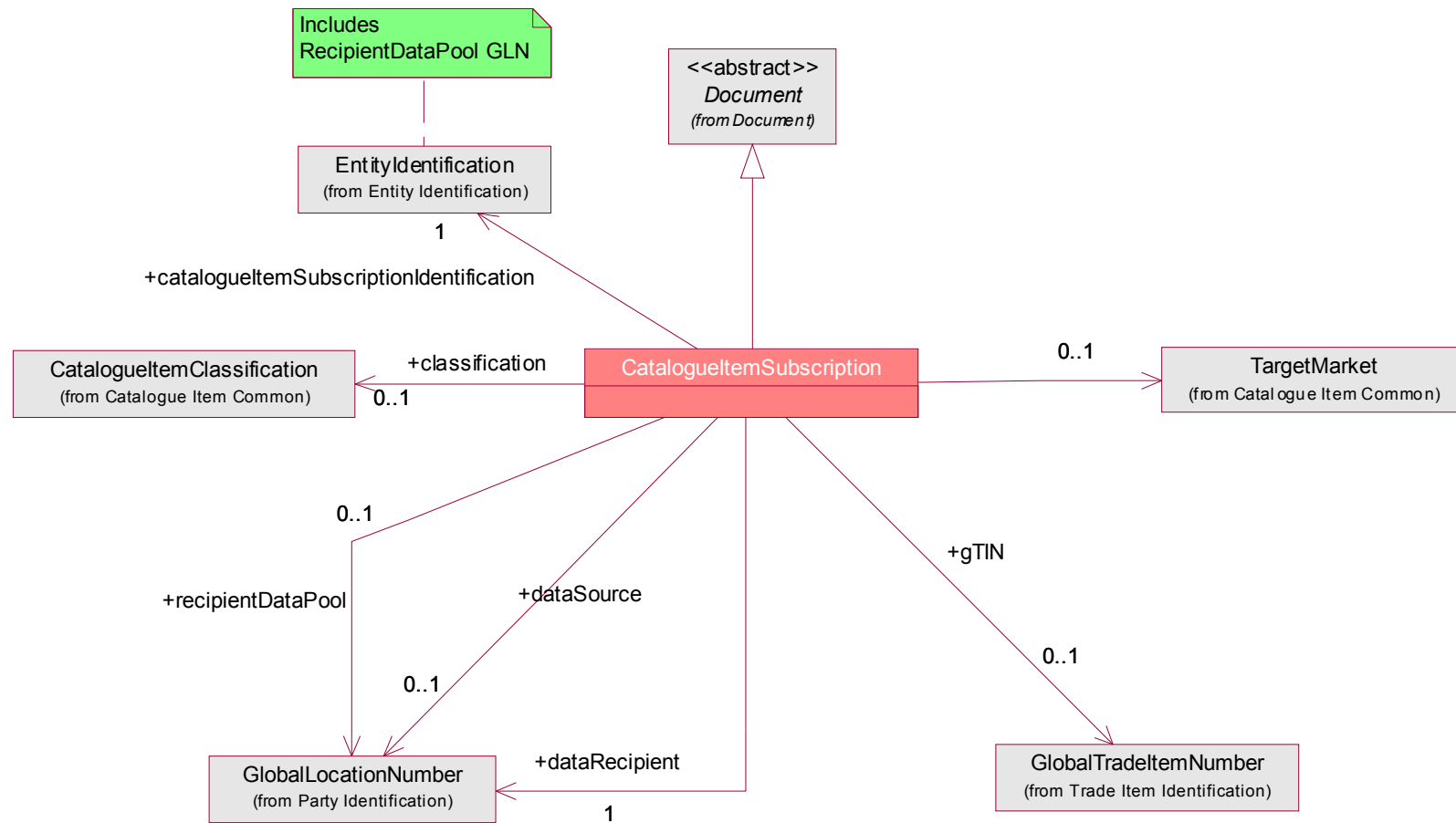


Figure 79 – Catalogue Item Subscription Class Diagram

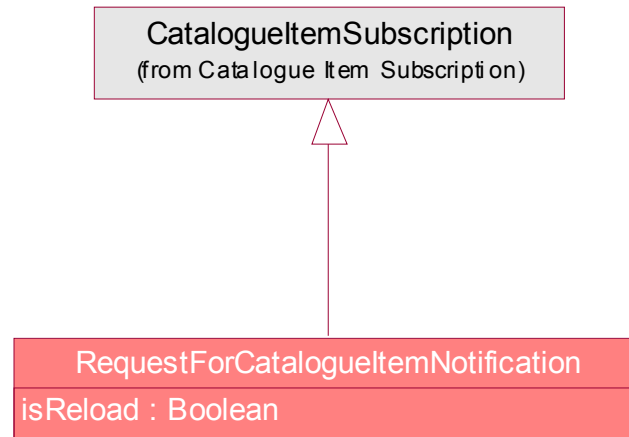


Figure 80 – Request For Catalogue Item Notification Class Diagram

Business Process: ALIGN: Data Synchronisation: Catalogue Item Synchronisation: Catalogue Item Publication

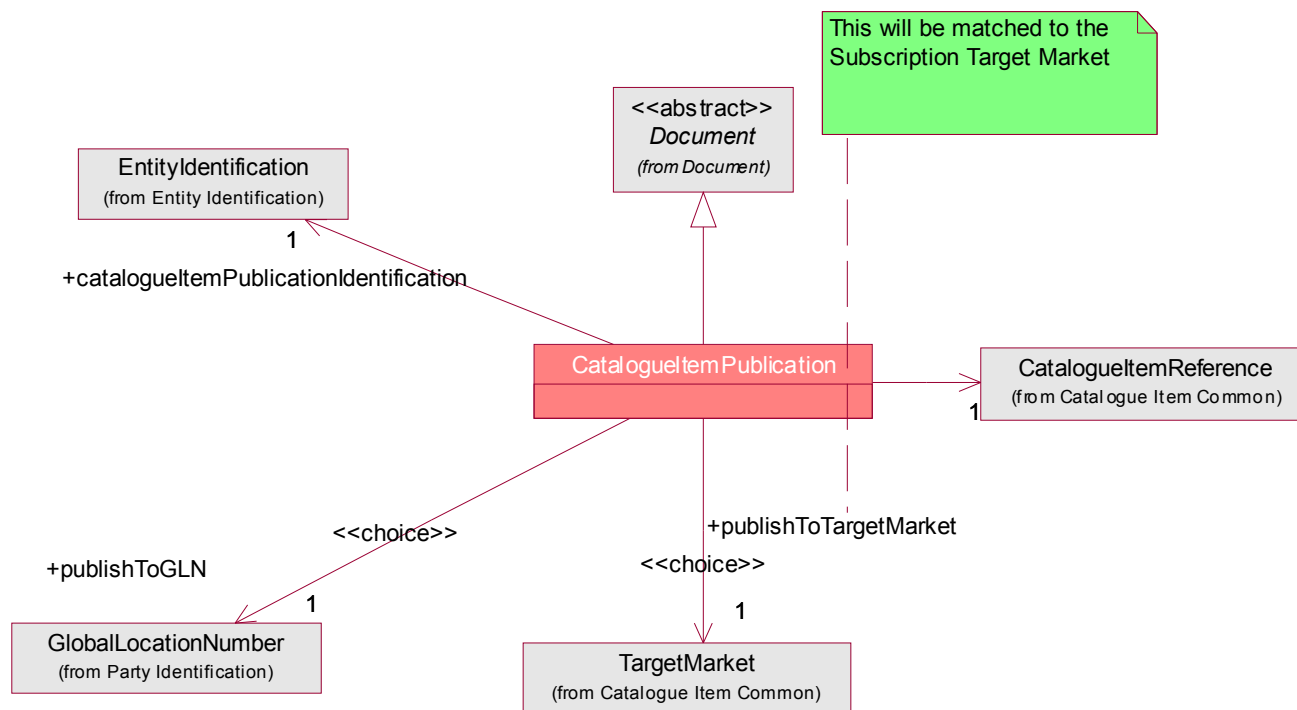


Figure 81 – Catalogue Item Publication Class Diagram

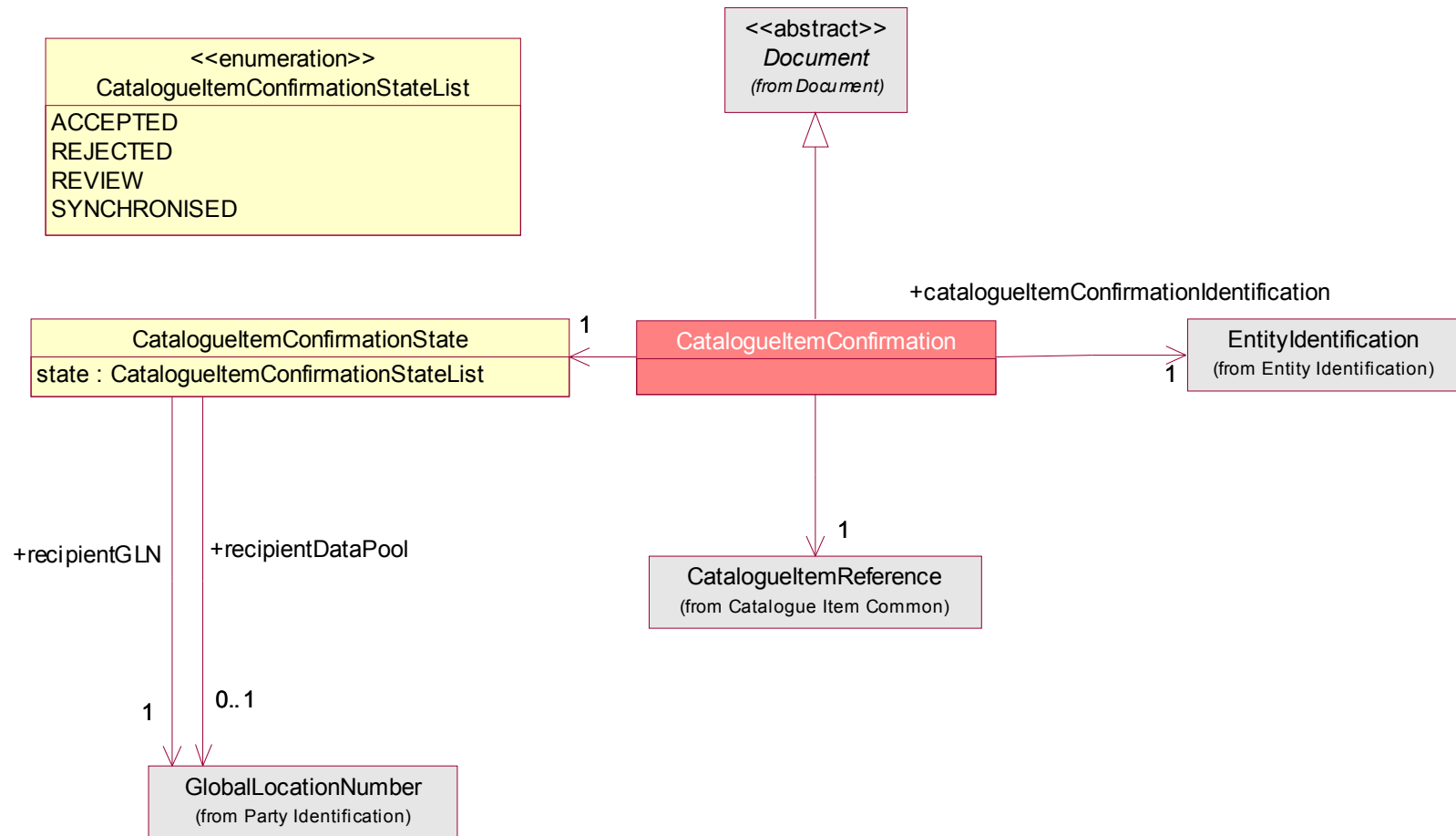


Figure 82 – Catalogue Item Confirmation Class Diagram

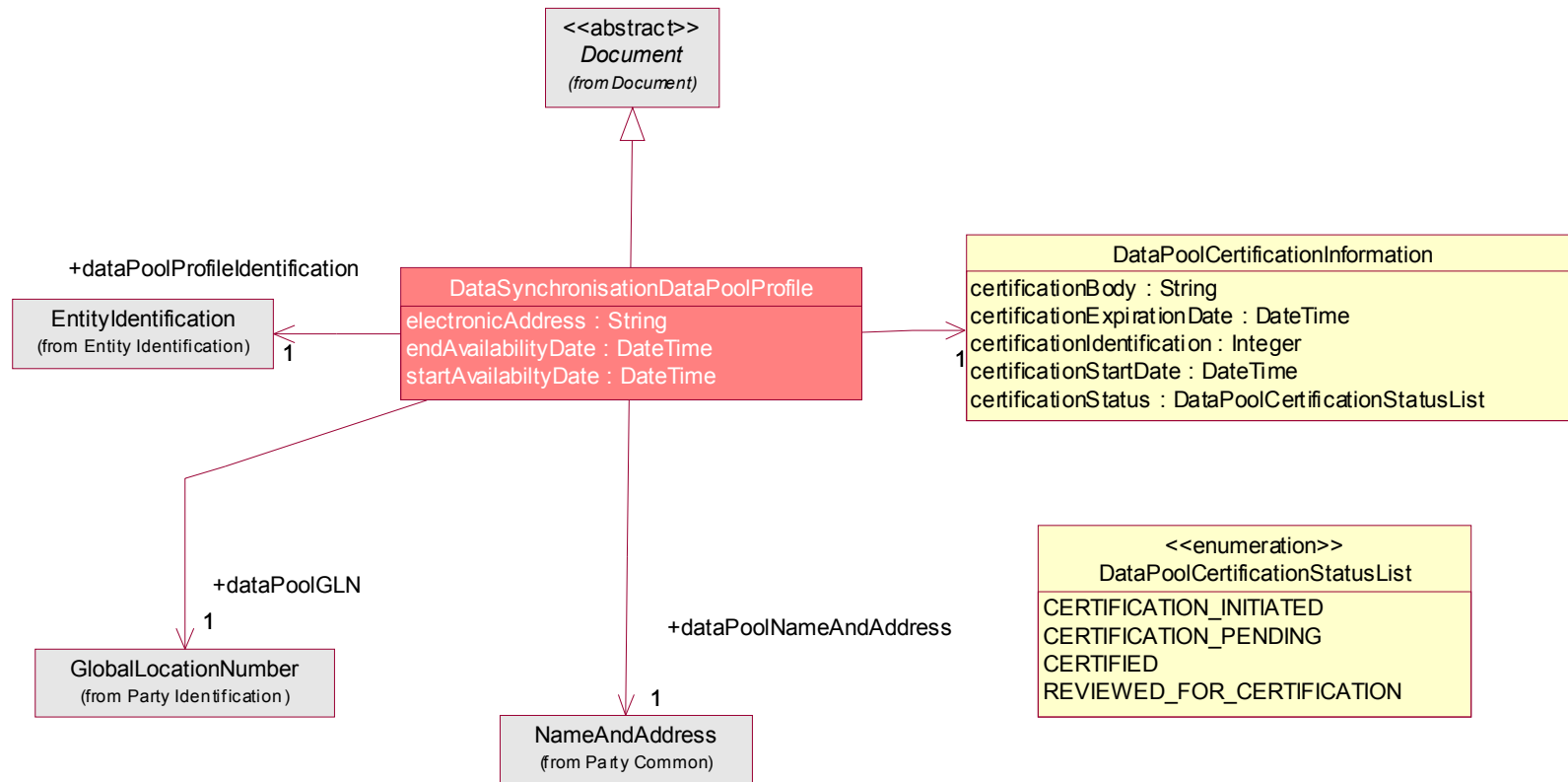


Figure 83 – Data Synchronisation Data Pool Profile Class Diagram

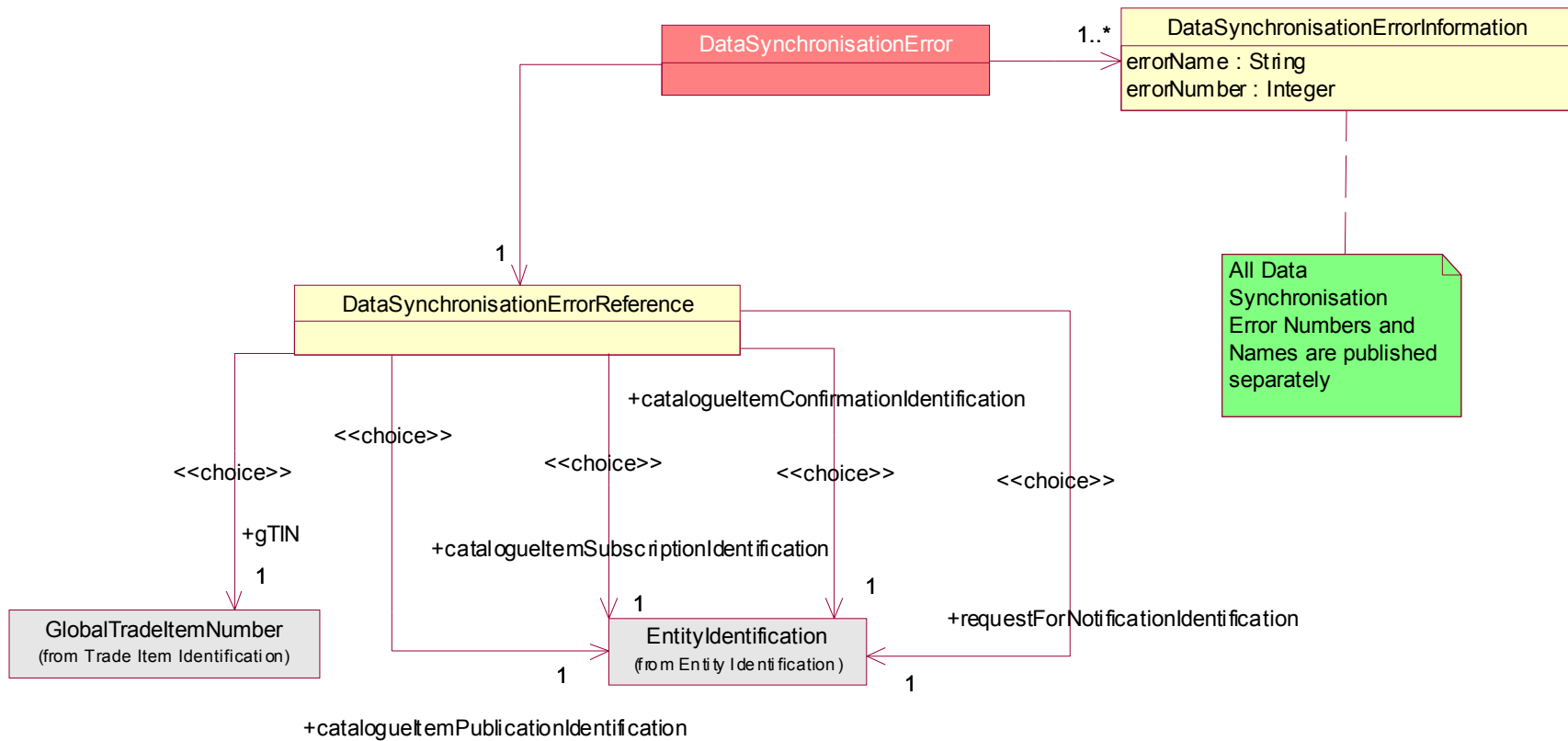


Figure 84 - Data Synchronisation Error Class Diagram

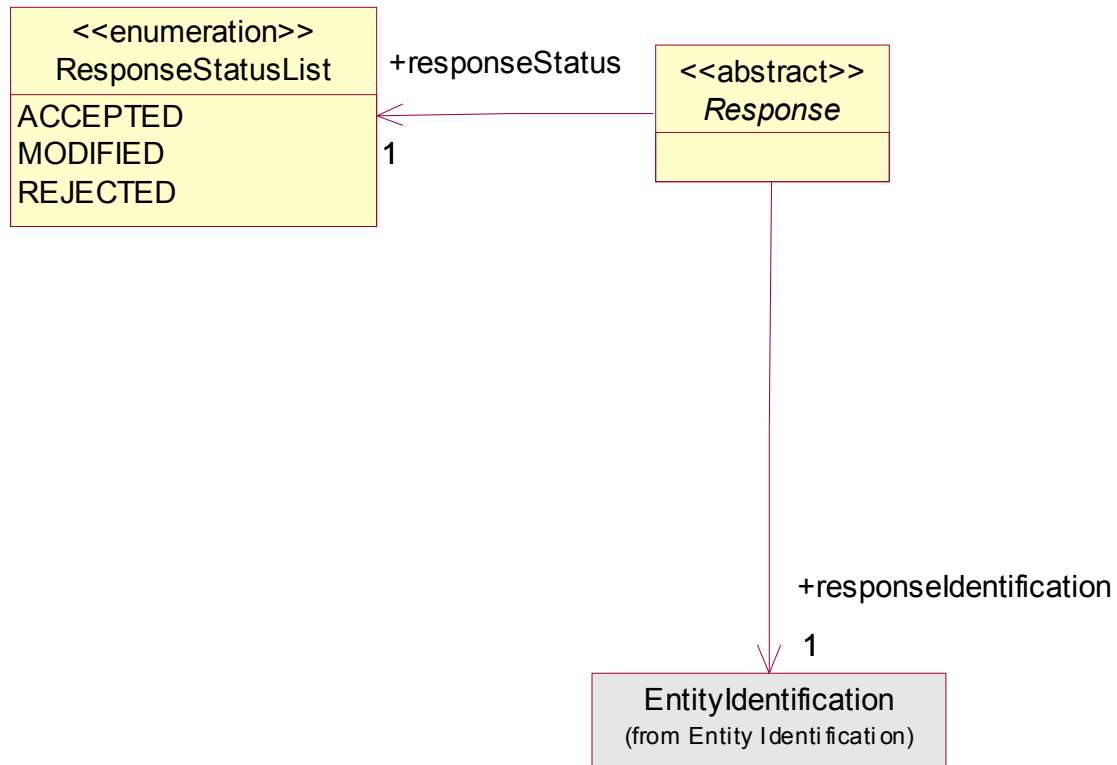


Figure 85 - EAN.UCC Response Class Diagram

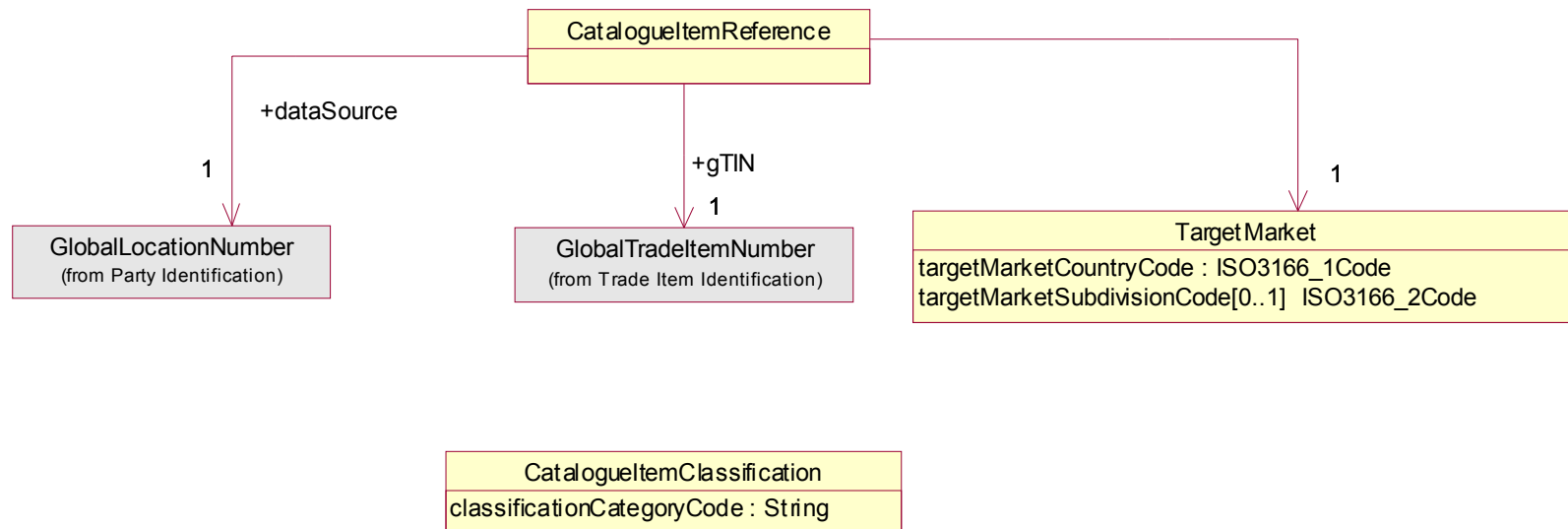


Figure 86 - Catalogue Item Common Class Diagram

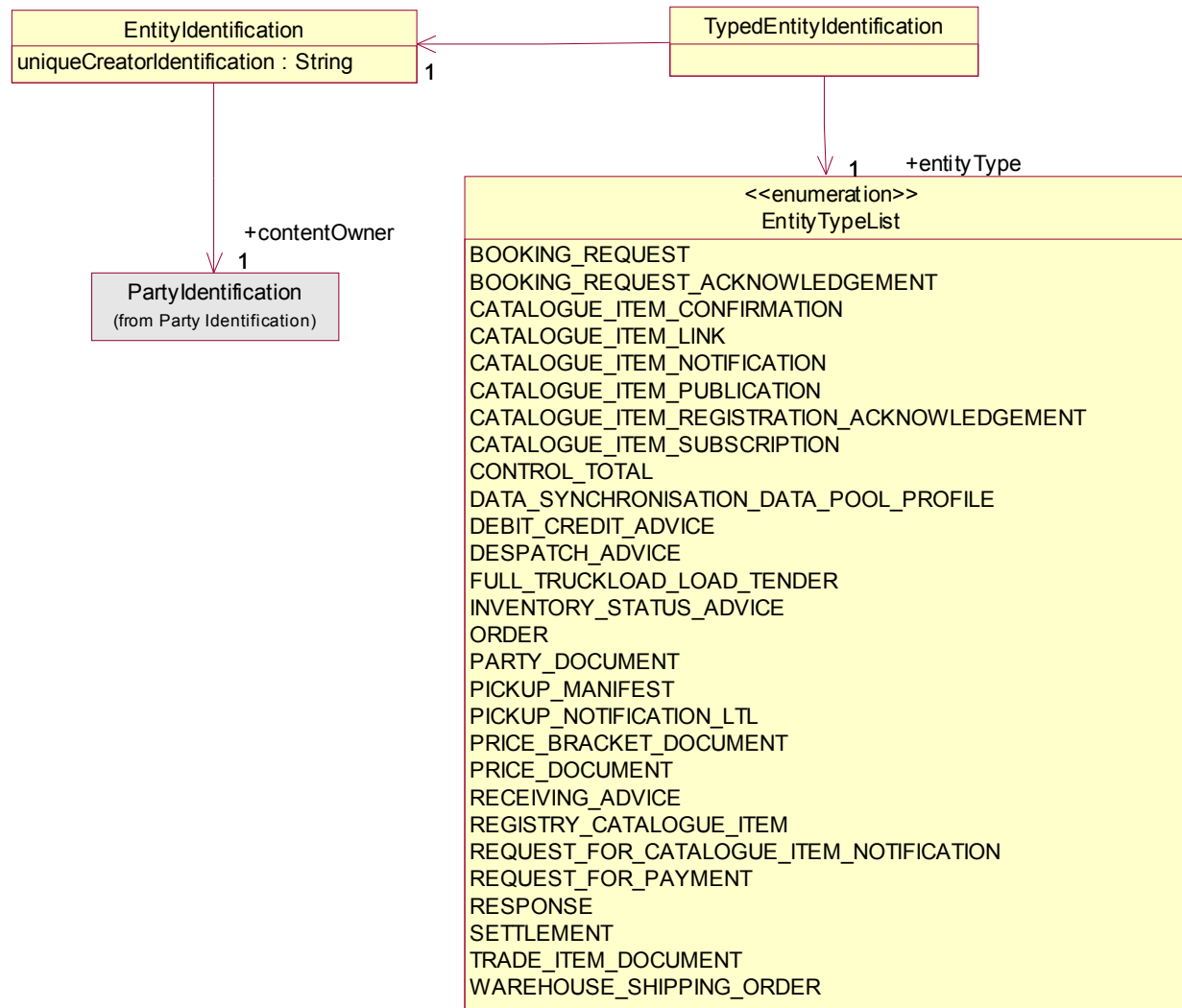


Figure 87 - EAN.UCC Common Identification, Typed Entity Identification Class Diagram

Actor Permissions

Use Case Name	Data Source	Source Data Pool	Global Registry	Recipient Data Pool	Data Recipient
Add Catalogue Item		X	X		
Add Catalogue Item Hierarchy	X	X			
Add Item Link		X	X		
Confirm Catalogue Item Data			X	X	X
Cancel Catalogue Item	X	X	X		
Change Catalogue Item		X	X		
Change Catalogue Item Hierarchy	X	X			
Change Item Link			X		
Change Registered Catalogue Item			X		
Correct Catalogue Item		X	X		
Correct Catalogue Item Hierarchy	X	X			
Correct Item Link			X		
Correct Registered Catalogue Item			X		
Create Synchronisation List		X			
Delete Catalogue Item		X	X		
Delete Catalogue Item Data in Source Data		X			
Delete Item Link		X	X		
Delete Registered Catalogue Item			X		
Discontinue Catalogue Item	X	X	X		
Distribute Confirmation Data		X	X	X	X
Distribute Data Recipient Requests for	X	X	X	X	X
Distribute Catalogue Item Data	X	X		X	X
Distribute Catalogue Item Data from RDP to				X	X
Distribute Catalogue Item Data from SDP to		X		X	
Distribute Request for Notification	X	X	X	X	X
Distribute Subscription Data	X	X	X	X	X
Filter Catalogue Item Data at RDP				X	
Filter Catalogue Item Data at SDP		X			
Global Search		X	X	X	
Load and Update Catalogue Item Data within	X	X			
Manage Data Pool Profile		X	X	X	
Manage Catalogue Item Data in Global			X		
Manage Catalogue Item Distribution Criteria	X	X	X	X	X
Publish Catalogue Item Data	X	X			
Register Catalogue Item		X	X		
Registry Validation			X		
Remove Catalogue Item Subscription		X	X	X	X
Send Catalogue Item Data to Data Recipient				X	X

Use Case Name	Data Source	Source Data Pool	Global Registry	Recipient Data Pool	Data Recipient
Send Catalogue Item Data to RDP		X		X	
Stop Publishing Catalogue Item Data	X	X	X		
Subscribe to Catalogue Item Data				X	X
Synchronise Catalogue Item Data		X	X	X	X
Validate Data Pool		X	X	X	
Validate Catalogue Item and Item Link		X	X	X	
Validate Catalogue Item Data for Registry			X		

Figure 88 - Actor Permissions

Glossary of Terms

Term	Definition
Acceptance Acknowledgement	A message sent by the receiving unit to the sending station or computer indicating that transmission has been processed successfully (syntax and content).
Acknowledgement	In the global data synchronization process, this is a response to a command returned to the originator of the command. Every command needs a response. In the inter-operable network, acknowledgement messages are standardized and may contain the following information: confirmation of message receipt (see receipt acknowledgement), success/failure of processing for syntax and content (see acceptance acknowledgement) or reason code for each type of failure (see Business error)
Add Catalog Item	The command to create a new catalog item record.
Align Data	The uniform definition of Electronic Commerce (EC) constructs to support defined business processes. This alignment is the exchange of basic business data such as the trading partners' names, addresses and agreements, item information, price lists, and locations. The process of alignment creates a common understanding between the trading parties and is fundamental to all trade activities.
Business Error	A message sent by the receiving unit to the sending station or computer indicating that transmission has errors (code type and text).
Cancel Date	Date assigned by data source and stored in the source data pool reflecting the date the catalog item was cancelled. This date will also be stored in the Registry.
Cancel Item	Global data synchronization term describing a maintenance function used to communicate that a catalog item was never manufactured. This allows reuse of the GTIN 12 months after cancellation.
Catalog Item	The item as it is stored in a catalog or data pool. This is uniquely

Term	Definition
	identified by (GTIN + GLN + Target Market).
Catalog Item Child Item Link	A class of information to identify the quantity of items within a packaging hierarchy level within the Global Data Synchronisation Network.
Catalog Item Classification	See classification
Catalog Item Confirmation	<p>This refers to electronic communication from the Data Recipient to the Data Source indicating what action has been taken on the item. The confirmation process occurs in the recipient's data pool. Confirmation is not mandatory. When used, it provides for the following outcomes:</p> <ol style="list-style-type: none"> 1. Synchronized: data is integrated, in synch and added to the synchronization list. 2. Accepted: data is added to the synchronization list and will be in synch. 3. Rejected: data will not longer be synchronized or updates will no longer be provided. 4. Review: a request to the data source to "review" their data because the data recipient has received discrepant data which they cannot synchronize. If the data was previously synchronized, it will be removed from the synchronization list.
Catalogue Item Confirmation State	The four states reflected by a Recipient Data Pool are: Accepted, Rejected, Review and Synchronised
Catalogue Item Dates	A class of information used to describe the dates of the action taken on the catalogue item record within the Global Data Synchronisation Network.
Catalogue Item Link	A business message used to identify the packaging hierarchy levels of trade items.
Catalogue Item Notification	A business message used to transmit trade item information from a data source or a data pool to a data recipient with the Global Data Synchronisation Network.
Catalogue Item Publication	A business message standard used to distribute trade item information within the Global Data Synchronisation Network.
Catalogue Item Reference	A class of information from the Catalogue Item Common library used to identify the key to the trade item information using the data source GLN, the GTIN, and the Target Market within the Global Data Synchronisation Network.
Catalogue Item Registration Information	A class of information used to identify the the dates of the action taken on the Global Registry item record within the Global Data Synchronisation Network.
Catalogue Item Registration Response	A business message used to notify a data pool of the status of the registration in the Global Registry for a trade item.
Catalog Item State	The four states are: Registered , Cancelled, In Progress and Discontinued .
Catalogue Item Subscription	A business message used to establish a request for the update of trade item information from an end recipient on a continuous basis.
Certification	The accreditation of organizations to perform activities that conform to established business processes, business models and rules such as: certification of other organizations, operation of the global registry, operation of data pools, validation, authentication, consultancy, etc.

Term	Definition
Certification Body	Organization that performs the certification process. (This is stored in the Registry).
Certification Expiration Date	Date on which the Data Pool certification is no longer valid. (This is stored in the Registry).
Certification Identification	Value that uniquely identifies a certified member of the Global Data Synchronization Network GDSN. (This is stored in the Registry).
Certification Start Date	Date on which the Data Pool obtains certification. (This is stored in the Registry).
Certification Status	Indicator of the stage of the certification process (This is stored in the Registry).
Change Catalog Item	The command to update an existing catalog item record.
Classification	A classification schema is an Industry accepted, standardized method to group like products together so that global searches can be enabled. Within Data Synchronization, a classification for the item is mandatory.
Compliance Check	The validation of specific data or data constructs to defined industry standards.
Construct	Data or data structure.
Content Provider	See Data Source
Context	<p>"Context is expressed as classifications drawn from various standards (business sub-process, industry, region and geography, product, legislative). The idea of Context is that the structure of a piece of business information is defined by the purpose which it serves within a business process, an industry, region, etc."</p> <p>Example: An item can be defined in context of Global for product type FMCG (Fast Moving Consumer Goods) or other verticals.</p>
Core Data	<p>Core is defined as "common, reusable elements across various business processes. They can be mandatory or optional. Core is a common denominator upon which extensions are built".</p> <p>Example: GTIN, Ship To, Date</p>
Core Extensions = Cross Industry Extensions	Data or data constructs specific to more than one process, industry or sector but not used across all.
Correct Item	Refers to a command that allows incorrect data to be altered in ways that would not normally be allowed by standard GTIN allocation rules. All other validations still apply. This process is intended to correct errors, not to circumvent the validation process.
Correct Item Link	Command that allows alteration of item links that were incorrectly entered provided that the integrity of the Item Hierarchy is not impacted. If the Item Hierarchy is impacted, the "correct item link" command must not be applied. Instead, the incorrect item link must be <u>deleted</u> and a new Item Link <u>added</u> .
Data Pool	A repository of Data where trading partners can obtain, maintain and exchange information on items and parties in a standard format through electronic means.
Data Pool Certification Information	A class of information used to describe the status of a data pool's certification within the Global Data Synchronisation Network.

Term	Definition
Data Pool Certification Status List	A class of information used to identify the certification status of a data pool within the Global Data Synchronisation Network. The values include: Certification initiated; Certification pending, Certified, and Reviewed for Certification.
Data Pool Profile	Information that allows data pools to interoperate with each other technically and from an operational business perspective. This information includes (but is not limited to): business, administration and technical contacts, capabilities, services, network addresses and transport protocols.
Data Recipient	Party, which is authorized to view, use, download a set of Master Data provided by a Data Source.
Data Source	Entity that provides the global data synchronization network with Master Data. The Data Source is officially recognized as the owner of this data. For a given Item or Party, the source of data is responsible for permanent updates of the information under its responsibility.
Data Synchronisation Data Pool Profile	A business message used to identify a data pool within the Global Data Synchronisation Network.
Data Synchronisation Error	A business message used to notify a member of the Global Data Synchronisation Network of an error that has occurred within the process.
Data Synchronisation Error Information	A class of information used to describe an error within the Global Data Synchronisation Network and its process.
Data Synchronisation Error Reference	A class of information used to describe the entity and the type of process identified as an error within the Global Data Synchronisation Network.
Delete Catalog Item	The command to flag the existing catalog item record for deletion (The objective is to enable the eventual removal of the catalog item record from the data pool.)
Delete Catalog Item Link	The command to flag the existing catalog item link record for deletion.
Deletion Date	Date assigned by data source and stored in the source data pool reflecting the date the catalog item was flagged for deletion. This date will also be stored in the Registry.
Discontinue Date	Date assigned by data source and stored in the source data pool reflecting the date the catalog item was discontinued. This date will also be stored in the Registry.
Discontinue Item – Permanent	Refers to permanent removal of an item in the supply chain. This involves maintaining a discontinuation date in the Registry. The discontinuation date is used to trigger and track the EAN.UCC retention period.
Discontinue Item - Temporary	Refers to removing an item temporarily from the supply chain. This is communicated via end availability date. When available again, updated start and end availability dates are provided. Temporary removals are not reflected in the Registry. They are a responsibility of relevant data pools who maintain the availability period.
Document	“Business data being exchanged in support of business processes. It is a named collection of core and extensions”. Any self-contained piece of work created with an application program and, if saved on disk, given a unique filename by which it can be retrieved. Documents are generally thought of as word-processed materials only. To a computer, however,

Term	Definition
	data is nothing more than a collection of characters, so a spreadsheet or a graphic is as much a document as is a letter or report.
Electronic Address	The Internet Protocol identification for a certified data pool within the GDSN.
End Availability Date	The date at which a trade item or a location will no longer exist.
Error Name	A brief, text description related to an error number.
Error Number	An identification code used to relate to an error name.
Extension	“Extensions to core represent defined business processes which go beyond core requirements. Optional core data may be used in an extension but are not required.” Example: US Grocery extension for Item, VAT
Full Hierarchy	A construct of data containing a set of GTINs and Links that make up a unique relationship from the highest level GTIN with no parent down to the lowest level GTIN with no children
GCI	Global Commerce Initiative
Global Data Dictionary (GDD)	The repository of definitions and attributes of all data elements used within the EAN•UCC Business Message Standards.
Global Data Synchronization Network (GDSN)	The Global Data Synchronization Network is a federation of interoperable certified Data Pools and a certified Global Registry that collectively provide for the synchronization of Master Data between trading partners on a global basis.
Global Location Number (GLN)	Unique location number mandatory within the Global Data Synchronization process to identify data owners/info providers, etc such as Distributors, brokers, manufacturers.
Global Registry	A directory for the registration of unique catalog items and parties. It contains a limited data set certified to be EAN.UCC compliant and acts as a pointer to source data pools where master data is housed.
Global Trade Item Number GTIN	A particular Global trade item Number, a numerical value used to uniquely identify a trade item. A trade item is any trade item (trade item or service) upon which there is a need to retrieve pre-defined information and that may be planned, priced, ordered, delivered and or invoiced at any point in any supply chain.
Governance	It is the management of the ongoing process for master data synchronization and consists of: controlling changes to scope, rules and standards, establishing and regulating the Global Registry, regulating the Certification of Organizations, and regulating the business model.
Information Provider	See Data Source
Inter-Operability	The ability to communicate master data in a standardized and transparent way throughout the global data synchronization network.
Item	An item is any product or service upon which there is a need to retrieve pre-defined information and that may be priced, ordered or invoiced at any point in any supply chain. An item is uniquely identified by a EAN/UCC Global Trade Item Number (GTIN).
Item Link Notification	A term used to advise data recipients of relationships among items. This notification always provides the entire item hierarchy. In case of an Item Link correction, the entire hierarchy will be indicated as corrected in the notification. The updated hierarchy always fully replaces the current hierarchy.
Is Reload?	The Boolean value within the request for notification process (True =

Term	Definition
	currently on the notification list and False = initial Load).
Last Change Date	Date assigned by system indicating last time the information was changed. This date is generic and will be stored where assigned and will accompany every message.
Manufacturer	The party that produces the item.
Market Group	A proprietary group of data recipients normally determined by the Information Provider, although it can also be created by buyers and third parties. The Market Group is a common term and should not be confused with the Target Market Codes. This group is developed and used by the Information Provider to control the publication of data to a specific group of customers.
Master Data	Within the context of Data synchronization, any data or constructs that are applicable across multiple business transactions. Master data describes each Item and Party involved in Supply Chain Processes. Each data set is uniquely identified by a Global Trade Item Number (GTIN) and a Global Location Number (GLN). Master Data can be divided into neutral and relationship dependent data. Typically Master data is static - not transactional.
Master Data Global / Local Status	<p>GLOBAL = (G): Indicates that the data element is required by all markets and contains the same information (e.g. GTIN)</p> <p>GLOBAL/LOCAL = (G/L): Indicates that the data element is required by all markets but that the actual value can be different for each one (i.e. language, tax indications etc.)</p> <p>LOCAL = (L): Indicates that the data element is required for a limited number of markets (i.e. Green point – Germany) Local requirements occur in response to national legislation, national standards or languages.</p>
Master Data Identification	A Data Synchronization term used to describe the unique identification of an item in a product catalogue (=key) in compliance with EAN.UCC standards. This is achieved by the combination of 3 attributes: GTIN, GLN of Information Provider, and Target Market. For product catalogue management purposes, a product cannot be uniquely identified by its GTIN alone as there are valid business cases for information provider and target market specific data.
Master Data Synchronization	The process of continuous harmonization of master data between all trading partners within the supply chain through use of EAN.UCC standards.
Matching Process	A critical step within the data synchronization process that is owned and developed by each source data pool in order to trigger data distribution based on publication and subscription data. The matching process can be triggered either by publication, subscription or as a scheduled event.
Neutral Data	Within the context of Data Synchronization, master data or constructs applicable across multiple business transactions and constant across all trading partners, such as item, party, standard terms, etc.
New Item Hierarchy	A new construct of data containing a set of GTINs and Links that make up a unique relationship from the highest level GTIN with no parent to the lowest level with no children. To create a new Item Hierarchy, the Information Provider (or data owner) enters Item and Item Link data into the Source Data Pool. The data pool verifies that the information loaded is "correct" and then sends the relevant Item data to the registry for

Term	Definition
	registration. Item link data is not sent to the Registry as links are not registered.
New Item Link	The connection of two GTINs. The description of the relationship of the two connected GTINs.
Notification	In the data synchronization process, the data source, through the source data pool, sends an electronic notice to a subscriber when a valid event occurs. This is based on the subscription profile. Events that can trigger notifications are: publication of new data, change of publication (visibility granted, deleted), change of published item, party, partner profile, change of owner, rights, subscription, authorization, non-authorization rejection and request for notification.
Party	A Party (or) Location is any legal, functional or physical entity involved at any point in any supply chain and upon which there is a need to retrieve pre-defined information. A Party is uniquely identified by a EAN/UCC Global Location Number (GLN).
Party Identification	The only valid party identification is the Global Location Number (See GLN)
Party Role	These are elements defining the roles and relationships of the party, such as buyer, seller, distribution center, store, etc. Examples of party roles are: bill to, buyer, corporate identity, delivery party, information provider, invoicee, issuer of invoice, payer, seller, ship from, ship to and supplier.
Publication	To prepare and issue data for distribution to one or a group of trading partners. A function within the Data Synchronization process whereby the Data Source grants visibility of item, party and partner profiles including party capabilities data to a given list of parties (identified by their GLNs) or to all parties in a given Market. It also will trigger the matching process that is the precursor to the distribution of data
Receipt Acknowledgement	A message sent by the receiving unit to the sending station or computer indicating that transmission has been received.
Recipient Data Pool	A data pool that supports the functionality of the Data Recipient (Subscription, Confirmation, Search, Request for Notification, etc.)
Registration	Registration is the process, which references all items and parties prior to publication by all EAN.UCC certified data pools and on which there is a need to synchronize information. Registering a Trade Item involves validation by the Registry for product uniqueness. The combination of attributes used to ensure unique records includes GTIN, GLN and Target Market.
Registration Date	Date assigned by the registry of successful registration.
Registry Catalogue Item	A business message used to register trade item information from a data pool to the Global Registry within the Global Data Synchronisation Network.
Registry Catalogue Item State	The 4 states reflected by a Source Data pool are: Canceled, Discontinued, New, Registered.
Registry Validation	Registry Validation is checking compliance against EAN.UCC standards in relation to GTIN, GLN and Target Market to ensure uniqueness of data being registered.
Relationship Dependant Data	Relationship Dependant Data is Master Data identifying all terms bilaterally agreed and communicated between trading partners such as a marketing conditions, prices, and discounts, logistics agreements, etc.
Removing an	Refers to canceling an item that was never manufactured (see Cancel

Term	Definition
Item from the Supply Chain	Item), temporarily discontinuing the item, or communicating that the item will be permanently discontinued.
Request for Catalogue Item Notification	A business message used to establish a subscription to trade item information for a data recipient within the Global Data Synchronisation Network.
Response	An abstract class of information in the Global Business Model used to define the status of a document within the EAN.UCC system.
Response Status	The 3 states are: Accepted, Modified, Rejected
Search	This function provides data visibility according to user's permissions and certain criteria such as Categories, GTIN, GLN, target market, etc. The Home Data Pool provides this visibility in the framework of the inter-operable network.
Simple_eb	"Simplified process in a B2B exchange of information that assumes data synchronization."
Source Data Pool	A data pool that supports the functionality required by a Data Source such as Data Loading, Publication, Notification, Registration, etc.
Start Availability Date	The date at which a trade item or location begins its existence.
Stop Publication Catalog Item	The process by which the Data Source stops the synchronization process by disallowing visibility of the catalog item. This will modify the notification list if the catalog item was previously notified; and the synchronization list if it has been synchronized, accepted or reviewed.
Subscribe	A data synchronization function that refers to the creation of a subscription that lists the criteria for receiving publications.
Subscription	GTIN, GLN of Information Provider, Target market and Product Classification or any combination of these can maintain subscriptions. When a subscription is established, a Data Recipient sets a profile to receive ongoing updates of the matching data. Subscriptions remain valid until they are deleted. Subscriptions are created by data recipients in their home data pool and sent to the registry. The Registry maintains a subscription list that is used to route relevant subscriptions to appropriate Source Data Pools.
Synchronizati on	The process of continuous harmonization of information between all trading partners within the supply chain through the use of Align Data standards as published by EAN.UCC.
Synchronizati on List	This is a subset of the Notification List maintained by the source data pool to keep track of where data has been notified - independent of the confirmations received. The list includes every Catalogue Item (GTIN+GLN+TM) that is synchronized.
Target Market	The Target Market is a geographical region based upon geographical boundaries sanctioned by the United Nations. There is one international system to describe geographical regions, the ISO-3166-code system.
Target Market Country Code	The country level or higher geographical definition in which the Information Provider will make the GTIN available to buyers. This does not in any way govern where the buyer may re-sell the GTIN to consumers. This code can be repeated as many times as needed. This code is represented by the 2-character ISO 3166-1 code. It is a mandatory attribute. Additionally, Target Market Subdivision Code indicates country subdivision where the trade item is intended to be sold. This code is represented by the 3-character ISO 3166-2 code.
Target Market	The Target Market Subdivision Code is the secondary code of the Target

Term	Definition
Subdivision Code	Market and must be a subdivision of a Target Market Country Code. The Target Market Subdivision Code describes the “geo-political subdivision of a country” where the trade item is intended for sale, as determined by the Information Provider (e.g. “State” in the US). Target Market Subdivision Codes must be used in conjunction with Target Market Country Codes. The Target Market subdivision code is represented by the three-character ISO 3166-2 code.
Trade Item Configuration	The number of complete layers contained in a trade item and number of trade items contained in a complete layer.
Trading Partners	One or more parties engaged in trade. In the context of EAN•UCC business models any combination of Buyer, Seller, or Third Party.
Transactional Data	Information necessary for the business process being executed. For example, item codes and ordered quantities are transactional as these are mandatory fields within a purchase order: and, may vary by purchase order.
UCC	Uniform Code Council.
Update Item	A function used to make changes to an Item, which exists in a data pool whether the Item has been registered, or not. All changes must comply with EAN.UCC validation rules. If the Item is registered, updates must be applied to the corresponding Global Registry data fields before the revised data can be propagated to data recipients.
Validation	The compliance checking of new or changed data against EAN.UCC Global Data Standards, principles, rules and models.

Error Messages

Error Type	Error ID	Error Message	Error Description
Certificate Validation	Err-8	Certificate Invalid	
	Err-9	No Certificate provided	
Global Registry Validation	Err-2	Registration failed due to Catalogue Item Data problem	
	Err-3	Registration Failed: Catalogue Item does not exist in Registry	
	Err-4	Registration Failed: Catalogue Item already exists in Registry	
	Err-14	Source Data Pool not certified	
	Err-15	I.P. address does not match profile	
	Err-16	Data Pool Profile Start Availability Date > Message Sent Date	
	Err-17	Data Pool Profile End Availability Date < Message Sent Date	
	Err-18	Data Pool Profile Certification Start Date > Message Sent Date	
	Err-19	Data Pool Profile Certification Expiration Date < Message Sent Date	
	Err-20	Data Pool Profile Certification Status not = "Certified"	
SDP Validation	Err-1	Catalogue Item Hierarchy did not pass validation	
	Err-5	Item Link data without associated Catalogue Item Data	
	Err-6	Can not link a Catalogue Item to itself	
	Err-7	Attempted link would result in a circular Hierarchy	
	Err-10	Catalogue Item Delete Failed, Catalogue Item does not exist	
	Err-11	Catalogue Item Add Failed: Catalogue Item already exists in Data Pool	
	Err-12	Catalogue Item Change Failed, Catalogue Item does not exist	
	Err-13	Catalogue Item Correction Failed, Catalogue Item does not exist	
	Err-21	Catalogue Item Cancellation Failed, Catalogue Item does not exist	

Error Message Usage

ID	Type	Error Message	Sending Actor	Receiving Actor	Use Case Name
Err-1	SDP Validation	Catalogue Item Hierarchy did not pass validation	Source Data Pool	Data Source	Load Catalogue Item Data to Source Data Pool
Err-1	SDP Validation	Catalogue Item Hierarchy did not pass validation	Source Data Pool	Data Source	Add Catalogue Item Hierarchy
Err-1	SDP Validation	Catalogue Item Hierarchy did not pass validation	Source Data Pool	Data Source	Change Catalogue Item Hierarchy
Err-1	SDP Validation	Catalogue Item Hierarchy did not pass validation	Source Data Pool	Data Source	Correct Catalogue Item Hierarchy
Err-1	SDP Validation	Catalogue Item Hierarchy did not pass validation	Source Data Pool	Data Source	Add Catalogue Item Hierarchy
Err-1	SDP Validation	Catalogue Item Hierarchy did not pass validation	Source Data Pool	Data Source	Cancel Catalogue Item
Err-1	SDP Validation	Catalogue Item Hierarchy did not pass validation	Source Data Pool	Data Source	Delete Catalogue Item Hierarchy
Err-1	SDP Validation	Catalogue Item Hierarchy did not pass validation	Source Data Pool	Data Source	Change Catalogue Item Hierarchy
Err-1	SDP Validation	Catalogue Item Hierarchy did not pass validation	Source Data Pool	Data Source	Add Catalogue Item Hierarchy
Err-2	Global Registry Validation	Registration failed due to Catalogue Item Data problem	Source Data Pool	Data Source	Cancel Catalogue Item
Err-2	Global Registry Validation	Registration failed due to Catalogue Item Data problem	Source Data Pool	Data Source	Change Catalogue Item Hierarchy
Err-2	Global Registry Validation	Registration failed due to Catalogue Item Data problem	Source Data Pool	Data Source	Add Catalogue Item Hierarchy
Err-2	Global Registry Validation	Registration failed due to Catalogue Item Data problem	Source Data Pool	Data Source	Correct Catalogue Item Hierarchy
Err-2	Global Registry Validation	Registration failed due to Catalogue Item Data problem	Source Data Pool	Data Source	Delete Catalogue Item Hierarchy
Err-3	Global Registry Validation	Registration Failed: Catalogue Item does not exist in Registry	Source Data Pool	Data Source	Change Catalogue Item Hierarchy
Err-3	Global Registry Validation	Registration Failed: Catalogue Item does not exist in Registry	Source Data Pool	Data Source	Delete Catalogue Item Hierarchy
Err-3	Global Registry Validation	Registration Failed: Catalogue Item does not exist in Registry	Global Registry	Source Data Pool	Change Catalogue Item Hierarchy
Err-3	Global Registry Validation	Registration Failed: Catalogue Item does not exist in Registry	Global Registry	Source Data Pool	Correct Catalogue Item

					Hierarchy
Err-3	Global Registry Validation	Registration Failed: Catalogue Item does not exist in Registry	Global Registry	Source Data Pool	Delete Catalogue Item Hierarchy
Err-3	Global Registry Validation	Registration Failed: Catalogue Item does not exist in Registry	Source Data Pool	Data Source	Correct Catalogue Item Hierarchy
Err-4	Global Registry Validation	Registration Failed: Catalogue Item already exists in Registry	Global Registry	Source Data Pool	Register Catalogue Item
Err-4	Global Registry Validation	Registration Failed: Catalogue Item already exists in Registry	Source Data Pool	Data Source	Add Catalogue Item Hierarchy
Err-4	Global Registry Validation	Registration Failed: Catalogue Item already exists in Registry	Global Registry	Source Data Pool	Add Catalogue Item Hierarchy
Err-5	SDP Validation	Item Link data without associated Catalogue Item Data	Source Data Pool	Data Source	Correct Catalogue Item Hierarchy
Err-5	SDP Validation	Item Link data without associated Catalogue Item Data	Source Data Pool	Data Source	Change Catalogue Item Hierarchy
Err-5	SDP Validation	Item Link data without associated Catalogue Item Data	Source Data Pool	Data Source	Add Catalogue Item Hierarchy
Err-6	SDP Validation	Can not link a Catalogue Item to itself	Source Data Pool	Data Source	Change Catalogue Item Hierarchy
Err-6	SDP Validation	Can not link a Catalogue Item to itself	Source Data Pool	Data Source	Add Catalogue Item Hierarchy
Err-6	SDP Validation	Can not link a Catalogue Item to itself	Source Data Pool	Data Source	Load Catalogue Item Data to Source Data Pool
Err-7	SDP Validation	Attempted link would result in a circular Hierarchy	Source Data Pool	Data Source	Load Catalogue Item Data to Source Data Pool
Err-7	SDP Validation	Attempted link would result in a circular Hierarchy	Source Data Pool	Data Source	Change Catalogue Item Hierarchy
Err-7	SDP Validation	Attempted link would result in a circular Hierarchy	Source Data Pool	Data Source	Correct Catalogue Item Hierarchy
Err-7	SDP Validation	Attempted link would result in a circular Hierarchy	Source Data Pool	Data Source	Add Catalogue Item Hierarchy
Err-8	Certificate Validation	Certificate Invalid	Global Registry	Recipient Data Pool	Delete Subscription
Err-8	Certificate Validation	Certificate Invalid	Global Registry	Source Data Pool	Register Catalogue Item
Err-8	Certificate Validation	Certificate Invalid	Global Registry	Source Data Pool	Registry Validation
Err-8	Certificate Validation	Certificate Invalid	Global Registry	Recipient Data Pool	Subscribe to Catalogue Item Data
Err-8	Certificate Validation	Certificate Invalid	Global Registry	Recipient Data Pool	Add Subscription

Err-8	Certificate Validation	Certificate Invalid	Global Registry	Source Data Pool	Change Registered Catalogue Item
Err-8	Certificate Validation	Certificate Invalid	Global Registry	Source Data Pool	Publish Catalogue Item Data
Err-8	Certificate Validation	Certificate Invalid	Global Registry	Source Data Pool	Cancel Registered Catalogue Item
Err-8	Certificate Validation	Certificate Invalid	Global Registry	Source Data Pool	Delete Registered Catalogue Item
Err-8	Certificate Validation	Certificate Invalid	Global Registry	Source Data Pool	Correct Registered Catalogue Item
Err-8	Certificate Validation	Certificate Invalid	Global Registry	Recipient Data Pool	Confirm Catalogue Item Data
Err-9	Certificate Validation	No Certificate provided	Global Registry	Source Data Pool	Delete Registered Catalogue Item
Err-9	Certificate Validation	No Certificate provided	Global Registry	Recipient Data Pool	Add Subscription
Err-9	Certificate Validation	No Certificate provided	Global Registry	Recipient Data Pool	Confirm Catalogue Item Data
Err-9	Certificate Validation	No Certificate provided	Global Registry	Recipient Data Pool	Delete Subscription
Err-9	Certificate Validation	No Certificate provided	Global Registry	Source Data Pool	Registry Validation
Err-9	Certificate Validation	No Certificate provided	Global Registry	Source Data Pool	Register Catalogue Item
Err-9	Certificate Validation	No Certificate provided	Global Registry	Source Data Pool	Change Registered Catalogue Item
Err-9	Certificate Validation	No Certificate provided	Global Registry	Source Data Pool	Correct Registered Catalogue Item
Err-9	Certificate Validation	No Certificate provided	Global Registry	Source Data Pool	Publish Catalogue Item Data
Err-9	Certificate Validation	No Certificate provided	Global Registry	Source Data Pool	Cancel Registered Catalogue Item
Err-9	Certificate Validation	No Certificate provided	Global Registry	Recipient Data Pool	Subscribe to Catalogue Item Data
Err-10	SDP Validation	Catalogue Item Delete Failed, Catalogue Item does not exist	Source Data Pool	Data Source	Delete Catalogue Item Hierarchy
Err-11	SDP Validation	Catalogue Item Add Failed: Catalogue Item already exists in Data Pool	Source Data Pool	Data Source	Add Catalogue Item Hierarchy
Err-12	SDP Validation	Catalogue Item Change Failed, Catalogue Item does not exist	Source Data Pool	Data Source	Change Catalogue Item Hierarchy
Err-13	SDP Validation	Catalogue Item Correction Failed, Catalogue Item does not exist	Source Data Pool	Data Source	Correct Catalogue Item

					Hierarchy
Err-14	Global Registry Validation	Source Data Pool not certified	Global Registry	Source Data Pool	Delete Registered Catalogue Item
Err-14	Global Registry Validation	Source Data Pool not certified	Global Registry	Source Data Pool	Cancel Registered Catalogue Item
Err-14	Global Registry Validation	Source Data Pool not certified	Global Registry	Recipient Data Pool	Subscribe to Catalogue Item Data
Err-14	Global Registry Validation	Source Data Pool not certified	Global Registry	Recipient Data Pool	Confirm Catalogue Item Data
Err-14	Global Registry Validation	Source Data Pool not certified	Global Registry	Recipient Data Pool	Add Subscription
Err-14	Global Registry Validation	Source Data Pool not certified	Global Registry	Source Data Pool	Change Registered Catalogue Item
Err-14	Global Registry Validation	Source Data Pool not certified	Global Registry	Recipient Data Pool	Delete Subscription
Err-14	Global Registry Validation	Source Data Pool not certified	Global Registry	Source Data Pool	Publish Catalogue Item Data
Err-14	Global Registry Validation	Source Data Pool not certified	Global Registry	Source Data Pool	Correct Registered Catalogue Item
Err-14	Global Registry Validation	Source Data Pool not certified	Global Registry	Source Data Pool	Register Catalogue Item
Err-14	Global Registry Validation	Source Data Pool not certified	Global Registry	Source Data Pool	Registry Validation
Err-15	Global Registry Validation	I.P. address does not match profile	Global Registry	Source Data Pool	Cancel Registered Catalogue Item
Err-15	Global Registry Validation	I.P. address does not match profile	Global Registry	Recipient Data Pool	Add Subscription
Err-15	Global Registry Validation	I.P. address does not match profile	Global Registry	Recipient Data Pool	Confirm Catalogue Item Data
Err-15	Global Registry Validation	I.P. address does not match profile	Global Registry	Recipient Data Pool	Subscribe to Catalogue Item Data
Err-15	Global Registry Validation	I.P. address does not match profile	Global Registry	Source Data Pool	Registry Validation
Err-15	Global Registry Validation	I.P. address does not match profile	Global Registry	Source Data Pool	Change Registered Catalogue Item
Err-15	Global Registry Validation	I.P. address does not match profile	Global Registry	Source Data Pool	Delete Registered Catalogue Item
Err-15	Global Registry Validation	I.P. address does not match profile	Global Registry	Source Data Pool	Register Catalogue Item
Err-15	Global Registry Validation	I.P. address does not match profile	Global Registry	Recipient Data Pool	Delete Subscription
Err-15	Global Registry Validation	I.P. address does not match profile	Global Registry	Source Data Pool	Publish Catalogue Item

					Data
Err-15	Global Registry Validation	I.P. address does not match profile	Global Registry	Source Data Pool	Correct Registered Catalogue Item
Err-16	Global Registry Validation	Data Pool Profile Start Availability Date > Message Sent Date	Global Registry	Recipient Data Pool	Confirm Catalogue Item Data
Err-16	Global Registry Validation	Data Pool Profile Start Availability Date > Message Sent Date	Global Registry	Recipient Data Pool	Subscribe to Catalogue Item Data
Err-16	Global Registry Validation	Data Pool Profile Start Availability Date > Message Sent Date	Global Registry	Source Data Pool	Register Catalogue Item
Err-16	Global Registry Validation	Data Pool Profile Start Availability Date > Message Sent Date	Global Registry	Recipient Data Pool	Add Subscription
Err-16	Global Registry Validation	Data Pool Profile Start Availability Date > Message Sent Date	Global Registry	Source Data Pool	Publish Catalogue Item Data
Err-16	Global Registry Validation	Data Pool Profile Start Availability Date > Message Sent Date	Global Registry	Source Data Pool	Cancel Registered Catalogue Item
Err-16	Global Registry Validation	Data Pool Profile Start Availability Date > Message Sent Date	Global Registry	Source Data Pool	Delete Registered Catalogue Item
Err-16	Global Registry Validation	Data Pool Profile Start Availability Date > Message Sent Date	Global Registry	Source Data Pool	Change Registered Catalogue Item
Err-16	Global Registry Validation	Data Pool Profile Start Availability Date > Message Sent Date	Global Registry	Source Data Pool	Registry Validation
Err-16	Global Registry Validation	Data Pool Profile Start Availability Date > Message Sent Date	Global Registry	Recipient Data Pool	Delete Subscription
Err-16	Global Registry Validation	Data Pool Profile Start Availability Date > Message Sent Date	Global Registry	Source Data Pool	Correct Registered Catalogue Item
Err-17	Global Registry Validation	Data Pool Profile End Availability Date < Message Sent Date	Global Registry	Source Data Pool	Register Catalogue Item
Err-17	Global Registry Validation	Data Pool Profile End Availability Date < Message Sent Date	Global Registry	Source Data Pool	Registry Validation
Err-17	Global Registry Validation	Data Pool Profile End Availability Date < Message Sent Date	Global Registry	Recipient Data Pool	Delete Subscription
Err-17	Global Registry Validation	Data Pool Profile End Availability Date < Message Sent Date	Global Registry	Recipient Data Pool	Add Subscription
Err-17	Global Registry Validation	Data Pool Profile End Availability Date < Message Sent Date	Global Registry	Recipient Data Pool	Confirm Catalogue Item Data
Err-17	Global Registry Validation	Data Pool Profile End Availability Date < Message Sent Date	Global Registry	Recipient Data Pool	Subscribe to Catalogue Item Data
Err-17	Global Registry Validation	Data Pool Profile End Availability Date < Message Sent Date	Global Registry	Source Data Pool	Publish Catalogue Item Data
Err-17	Global Registry Validation	Data Pool Profile End Availability Date < Message Sent Date	Global Registry	Source Data Pool	Cancel Registered Catalogue Item
Err-17	Global Registry Validation	Data Pool Profile End Availability Date < Message Sent Date	Global Registry	Source Data Pool	Delete Registered

					Catalogue Item
Err-17	Global Registry Validation	Data Pool Profile End Availability Date < Message Sent Date	Global Registry	Source Data Pool	Change Registered Catalogue Item
Err-17	Global Registry Validation	Data Pool Profile End Availability Date < Message Sent Date	Global Registry	Source Data Pool	Correct Registered Catalogue Item
Err-18	Global Registry Validation	Data Pool Profile Certification Start Date > Message Sent Date	Global Registry	Recipient Data Pool	Delete Subscription
Err-18	Global Registry Validation	Data Pool Profile Certification Start Date > Message Sent Date	Global Registry	Source Data Pool	Change Registered Catalogue Item
Err-18	Global Registry Validation	Data Pool Profile Certification Start Date > Message Sent Date	Global Registry	Source Data Pool	Registry Validation
Err-18	Global Registry Validation	Data Pool Profile Certification Start Date > Message Sent Date	Global Registry	Source Data Pool	Register Catalogue Item
Err-18	Global Registry Validation	Data Pool Profile Certification Start Date > Message Sent Date	Global Registry	Recipient Data Pool	Subscribe to Catalogue Item Data
Err-18	Global Registry Validation	Data Pool Profile Certification Start Date > Message Sent Date	Global Registry	Recipient Data Pool	Confirm Catalogue Item Data
Err-18	Global Registry Validation	Data Pool Profile Certification Start Date > Message Sent Date	Global Registry	Recipient Data Pool	Add Subscription
Err-18	Global Registry Validation	Data Pool Profile Certification Start Date > Message Sent Date	Global Registry	Source Data Pool	Publish Catalogue Item Data
Err-18	Global Registry Validation	Data Pool Profile Certification Start Date > Message Sent Date	Global Registry	Source Data Pool	Cancel Registered Catalogue Item
Err-18	Global Registry Validation	Data Pool Profile Certification Start Date > Message Sent Date	Global Registry	Source Data Pool	Delete Registered Catalogue Item
Err-18	Global Registry Validation	Data Pool Profile Certification Start Date > Message Sent Date	Global Registry	Source Data Pool	Correct Registered Catalogue Item
Err-19	Global Registry Validation	Data Pool Profile Certification Expiration Date < Message Sent Date	Global Registry	Source Data Pool	Publish Catalogue Item Data
Err-19	Global Registry Validation	Data Pool Profile Certification Expiration Date < Message Sent Date	Global Registry	Source Data Pool	Correct Registered Catalogue Item
Err-19	Global Registry Validation	Data Pool Profile Certification Expiration Date < Message Sent Date	Global Registry	Source Data Pool	Change Registered Catalogue Item
Err-19	Global Registry Validation	Data Pool Profile Certification Expiration Date < Message Sent Date	Global Registry	Source Data Pool	Register Catalogue Item
Err-19	Global Registry Validation	Data Pool Profile Certification Expiration Date < Message Sent Date	Global Registry	Recipient Data Pool	Delete Subscription
Err-19	Global Registry Validation	Data Pool Profile Certification Expiration Date < Message Sent Date	Global Registry	Recipient Data Pool	Add Subscription
Err-19	Global Registry Validation	Data Pool Profile Certification Expiration Date < Message Sent Date	Global Registry	Source Data Pool	Delete Registered Catalogue Item

Err-19	Global Registry Validation	Data Pool Profile Certification Expiration Date < Message Sent Date	Global Registry	Source Data Pool	Cancel Registered Catalogue Item
Err-19	Global Registry Validation	Data Pool Profile Certification Expiration Date < Message Sent Date	Global Registry	Source Data Pool	Registry Validation
Err-19	Global Registry Validation	Data Pool Profile Certification Expiration Date < Message Sent Date	Global Registry	Recipient Data Pool	Confirm Catalogue Item Data
Err-19	Global Registry Validation	Data Pool Profile Certification Expiration Date < Message Sent Date	Global Registry	Recipient Data Pool	Subscribe to Catalogue Item Data
Err-20	Global Registry Validation	Data Pool Profile Certification Status not = "Certified"	Global Registry	Recipient Data Pool	Subscribe to Catalogue Item Data
Err-20	Global Registry Validation	Data Pool Profile Certification Status not = "Certified"	Global Registry	Source Data Pool	Registry Validation
Err-20	Global Registry Validation	Data Pool Profile Certification Status not = "Certified"	Global Registry	Source Data Pool	Register Catalogue Item
Err-20	Global Registry Validation	Data Pool Profile Certification Status not = "Certified"	Global Registry	Source Data Pool	Change Registered Catalogue Item
Err-20	Global Registry Validation	Data Pool Profile Certification Status not = "Certified"	Global Registry	Recipient Data Pool	Delete Subscription
Err-20	Global Registry Validation	Data Pool Profile Certification Status not = "Certified"	Global Registry	Recipient Data Pool	Confirm Catalogue Item Data
Err-20	Global Registry Validation	Data Pool Profile Certification Status not = "Certified"	Global Registry	Source Data Pool	Correct Registered Catalogue Item
Err-20	Global Registry Validation	Data Pool Profile Certification Status not = "Certified"	Global Registry	Source Data Pool	Delete Registered Catalogue Item
Err-20	Global Registry Validation	Data Pool Profile Certification Status not = "Certified"	Global Registry	Source Data Pool	Cancel Registered Catalogue Item
Err-20	Global Registry Validation	Data Pool Profile Certification Status not = "Certified"	Global Registry	Source Data Pool	Publish Catalogue Item Data
Err-20	Global Registry Validation	Data Pool Profile Certification Status not = "Certified"	Global Registry	Recipient Data Pool	Add Subscription
Err-21	SDP Validation	Catalogue Item Cancellation Failed, Catalogue Item does not exist	Source Data Pool	Data Source	Cancel Catalogue Item

Style Sheet

Description

This HTML has been created using a Style Sheet, it is a visual representation of the data. It is not an actual Style Sheet, but an example of what a Style Sheet may look like.

HTML Example

Catalogue Item Notification - Style Sheet

Message MSG-123			
Creation Date	August 02, 2001 12:00:00	Representing Party	0012345000065
Msg From Party	0614141000012	Msg To Party	0012345000065

Transaction	Creator ID = OJGROWER-TRANS-12345	Content Owner = 0614141000012
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Command ADD	Creator ID = OJGROWER-ITEM-12345	Content Owner = 0614141000012
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Catalogue Item Notification	Creator ID = CIN-12345	Content Owner = 0012345000003
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Document Information			
Creation Date	March 21, 2003 09:30:47-05:00	Last Update Date	March 21, 2003
Content Version	1.0	Doc Structure Version	1.3
Status	ORIGINAL	Is Reload?	no

Catalogue Item Information

Data Recipient

Source Data Pool 0712345000002

Catalogue Item State

Discontinue Date

Cancel Date

State IN_PROGRESS

Trade Item

Identification 61414100000012

Unit Descriptor CASE

Replaced
Identification 00123456555334

Next Lower Level Trade Item Information

Quantity of
Children 2Total Quantity of
Next Lower Level
Trade Items 10

Child Trade Item(s)

Quantity	Identification
5	00123456556331
5	00123456556997

Allowance or Charge

Allowance or Charge 1

Allowance or Charge	ALLOWANCE	Type	ALLOWANCE_GLOBAL
Settlement Type	CHARGE_TO_BE_PAID_BY_CUSTOMER	Effective Date	EFFECTIVE_DATE
Price Bracket List	TOP		
Description	(EN) Qt. of Yummy Cola		
Base Amount	20 USD	Monetary Amounts/Pcts	20 USD

Information Provider

Identification 0012345000065

Name ACME Drinks

Payment Terms

Payment Terms 1

Type BASIC_(NET)

Event ANTICIPATED_DELIVERY_DATE

Net Payment 30 DAYS

Installment Due 3.14 % , 30 DAYS

Proximo Cut Off Day 30

Discounts

Type	Description	Time Period
PRE	(EN) Discounted to preferred customers.	30 DAYS

Target Markets

Country Code	Subdivision Code	Description
123	ABCDEFGF	(EN) France, Auvergne

Classification Category Code

Code 1000222

Name Juice Drinks (perishable)

Definition Includes any products that can be non-perishable, carbonated beverages that has etc...

EAN/UCC Trade Item Classifications

Name	Code	Definition	Value	Code	Name
Carbonated non alcoholic beverage	20000345	Includes any product that can be described as non-perishable, carbonated beverages that has etc...	155		Drinks

Trade Item Description

Brand Name	Yummy-Cola
Short Description	(EN) Liters
Functional Name	(EN) Drink
Description	(EN) Yummy-Cola Classic Diet
Additional Description	(EN) Yummy-Cola Lemon scented big size
Invoice Name	(EN) Yummy-Cola Classic Diet
Product Range	Waist Watchers
Sub-Brand	Classic
Group Identification Codes	033200011101
Group Identification Descriptions	Yummy-Cola Classic
Form Descriptions	Liquid
Variant 1	(EN) Lemon

Unit Indicator

Base Unit?	yes	Consumer Unit?	yes
Despatch Unit?	no	Invoice Unit?	no
Orderable Unit?	no	Variable Unit?	no

Bar Code Types

Bar Code Types	RSS_14_STACKED_OMNIDIRECTIONAL
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Brand Owner

Identification	0012345000065	Name	ACME Drinks
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Manufacturers

Identification	Name
0012345000065	ACME Drinks

Material Safety Data

Data Sheet Number	ag34784
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Organic Trade Item Characteristics

Organic Claim Agencies	XYX Agency	Organic Trade Item Code	05
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Packaging Marking

Marked as Recyclable?	yes	Marked Returnable?	no
Marked with Expiration Date?	yes	Marked with Green Dot?	yes
Marked with Ingredients?	yes		

Packaging Material

Code	Code Maintenance Agency	Composition Quantity	Description	Terms & Condition
GL	String	15 g	(EN) Glass	707

Packaging Type

Code	Description
123	Bottle

Price on Trade Item

Price	36 EUR
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Color Descriptions

Code List Agency	Code Value	Description
PTO	PMS	(EN) Dark burgandy

Countries of Origin

Country
CA

Coupon

Coupon Family Code	513
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Date Information

Effective Date	2003-01-10	Last Change Date/Time	2002-11-20T12:00:00
Publication Date	2003-01-10	Start Availability Date/Time	2003-01-15T12:00:00
Canceled Date	2002-10-05	Consumer Availability Date/Time	2001-12-17T09:30:47-05:00
Discontinued Date	2003-12-18	End Availability Date/Time	2003-12-15T12:00:00

Handling Information

Instructions Code	DFN	Min Lifespan from Time of Arrival	35
Stacking Factor	2	Stacking Weight Maximum	500 kg

Hierarchy

Complete Layers contained in a Trade Item	3	Layers per Pallet	5
Trade Items Contained in a Complete Layer	20	Trade Items per Pallet	100
Trade Items per Pallet Layer	20	Inner Pack	2
Next Level Trade Item within Inner Pack	6		

Marking

Has Batch Number?	yes	Is Non Sold Returnable?	yes
Is Marked as Recyclable?	yes		

Measurements

Depth	10.2 cm	Gross Weight	800 lb
Height	25 cm	Net Content Decl. Indicated?	no
Width	18 cm	Diameter	50.6 cm
Drained Weight	225 g	Generic Ingredient	Paracetamol
Generic Ingredient Strength	15 mg	Ingredient Strength	15 mg
Net Content		Net Weight	300 lb
Peg Horizontal	17 cm	Peg Vertical	15 cm

Order Information

Ordering Lead Time	3 d	Quantity Maximum	5000
Quantity Multiple	100	Quantity Minimum	2500
Sizing Factor	15 cm		

Pallet Information

Pallet Type Code	201	Terms and Conditions	7E
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Catalogue Price Information

Effective Start Date	2002-11-15	Effective End Date	2003-06-15
Value	350 EUR		

Suggested Retail Price Information

Effective Start Date	2002-11-15	Effective End Date	2003-06-15
Value	280 USD		

Size Descriptions

Code List Agency	Code Value	Description
EDI	36X	(EN) Maxi

Tax Information

Amount	Agency Code	Agency Tax Type Code	Agency Description
6 USD	X1	21233403910392	VAT

Temperature Information

Delivery to Distrib. Center Min.	54 FAH	Delivery to Distrib. Center Max.	60 FAH
Delivery to Market Min.	54 FAH	Delivery to Market Max.	60 FAH
Storage Handling Min.	54 FAH	Storage Handling Max.	60 FAH

Catalogue Item Link – Instance File

Message MSG-123

Creation Date	August 02, 2001 12:00:00	Representing Party	0012345000065
Msg From Party	0614141000012	Msg To Party	0012345000065

Transaction	Creator ID = OJGROWER-TRANS-12345	Content Owner = 0614141000012
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Command ADD	Creator ID = OJGROWER-ITEM-12345	Content Owner = 0614141000012
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Catalogue Item Link	Creator ID = CIL-12345	Content Owner = 0012345000003
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Document Information

Creation Date	March 21, 2003 09:30:47-05:25	Last Update Date	March 21, 2003
Content Version	1.0	Doc Structure Version	1.3
Status	ORIGINAL		

Catalogue Item Link Information

Target Market Country	US	Target Market Subdivision	US-PA
Child GTIN	00614141000029	Parent GTIN	00614141000012
Global Location Number	0012345000003		

Registry Catalogue Item - Style Sheet**Message MSG-123**

Creation Date	August 02, 2001 12:00:00	Representing Party	0012345000065
Msg From Party	0614141000012	Msg To Party	0012345000065

Transaction**Creator ID = OJGROWER-TRANS-12345****Content Owner = 0614141000012****Command ADD****Creator ID = OJGROWER-ITEM-12345****Content Owner = 0614141000012****Registry Catalogue Item****Creator ID = RCI-12345****Content Owner = 0712345000002****Document Information**

Creation Date	March 21, 2003 09:30:47-05:00	Last Update Date	March 21, 2003
Content Version	1.0	Doc Structure Version	1.3
Status	ORIGINAL		

Registry Catalogue Item Information**State** IN_PROGRESS**Catalogue Item Classification****Classification Code(s)** 02.0010.0046**Catalogue Item Reference**

GTIN	00614141000012	Data Source	0012345000003
Target Market Country	123	Target Market Subdivision	ABCDEFG

Source Data Pool**Source Data Pool** 0712345000002

Catalogue Item Registration Response – Style Sheet

Message MSG-123

Creation Date	August 02, 2001 12:00:00	Representing Party	0012345000065
Msg From Party	0614141000012	Msg To Party	0012345000065

Catalogue Item Registration Response**Creator ID = CIRR-12345****Content Owner = 0061414181000****Response Information**

Response Status	ACCEPTED
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Catalogue Item Registration Information

Registration Date	March 21, 2003 09:30:47-05:15	Last Changed Date	March 21, 2003 09:30:47-05:15
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Catalogue Item Reference

GTIN	00614141000012	Data Source	0012345000003
Target Market Country	US	Target Market Subdivision	US-PA

Catalogue Item Subscription - Style Sheet

Message MSG-123

Creation Date	August 02, 2001 12:00:00	Representing Party	0012345000065
Msg From Party	0614141000012	Msg To Party	0012345000065

Transaction	Creator ID = OJGROWER-TRANS-12345	Content Owner = 0614141000012
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Command ADD	Creator ID = OJGROWER-ITEM-12345	Content Owner = 0614141000012
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Catalogue Item Subscription	Creator ID = CIS-12345	Content Owner = 0814141000009
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Document Information

Creation Date	March 22, 2003 08:30:47-05:00	Last Update Date	March 22, 2003
Content Version	1.0	Doc Structure Version	1.3
Status	ORIGINAL		

Subscription Information

Target Market Country	US	Target Market Subdivision	US-PA
GTIN	00614141000012	Data Recipient	0814141000009
Data Source	0012345000003	Recipient Data Pool	0812345000009
Classification Code	0200100046		

Request for Catalogue Item Notification - Style Sheet

Message MSG-123**Creation Date** August 02, 2001 12:00:00**Representing
Party**

0012345000065

Msg From Party 0614141000012**Msg To Party**

0012345000065

Transaction**Creator ID = OJGROWER-
TRANS-12345****Content Owner =
0614141000012****Command ADD****Creator ID = OJGROWER-
ITEM-12345****Content Owner =
0614141000012****Request for Catalogue Item
Notification****Creator ID = RFCIN-12345****Content Owner =
0814141000009****Document Information**

Creation Date	March 22, 2003 08:30:47-05:00	Last Update Date	March 22, 2003
Content Version	1.0	Doc Structure Version	1.3
Status	ORIGINAL	Is Reload?	no

Subscription Information

Target Market Country	US	Target Market Subdivision	US-PA
GTIN	00614141000012	Data Recipient	0814141000009
Data Source	0012345000003	Recipient Data Pool	0812345000009
Classification Code	0200100046		

Catalogue Item Publication – Style Sheet

Message MSG-123

Creation Date	August 02, 2001 12:00:00	Representing Party	0012345000065
Msg From Party	0614141000012	Msg To Party	0012345000065

Transaction	Creator ID = OJGROWER-TRANS-12345	Content Owner = 0614141000012
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Command ADD	Creator ID = OJGROWER-ITEM-12345	Content Owner = 0614141000012
--------------------	---	--------------------------------------

Catalogue Item Publication	Creator ID = CIP-12345	Content Owner = 0012345000003
-----------------------------------	-------------------------------	--------------------------------------

Document Information

Creation Date	March 22, 2003 09:30:47-05:00	Last Update Date	March 22, 2003
Content Version	1.0	Doc Structure Version	1.3
Status	ORIGINAL		

Catalogue Item Reference

GTIN	00614141000012	Data Source	0012345000003
Target Market Country	US	Target Market Subdivision	US-PA

Publish To

Target Market Country	US	Target Market Subdivision	US-SC
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Catalogue Item Confirmation – Style Sheet

Message MSG-123

Creation Date	August 02, 2001 12:00:00	Representing Party	0012345000065
Msg From Party	0614141000012	Msg To Party	0012345000065

Transaction	Creator ID = OJGROWER-TRANS-12345	Content Owner = 0614141000012
--------------------	--	--------------------------------------

Command ADD	Creator ID = OJGROWER-ITEM-12345	Content Owner = 0614141000012
--------------------	---	--------------------------------------

Catalogue Item Confirmation	Creator ID = CIC-12345	Content Owner = 0814141000009
------------------------------------	-------------------------------	--------------------------------------

Document Information

Creation Date	March 22, 2003 09:30:47-05:00	Last Update Date	March 22, 2003
Content Version	1.0	Doc Structure Version	1.3
Status	ORIGINAL		

Catalogue Item Reference

GTIN	00614141000012	Data Source	0012345000003
Target Market Country	US	Target Market Subdivision	US-PA

Catalogue Item Confirmation State

Recipient Data Pool	0812345000009	Recipient GLN	0814141000009
State	ACCEPTED		

Data Synchronisation Data Pool Profile – Style Sheet

Message MSG-123			
Creation Date	August 02, 2001 12:00:00	Representing Party	0012345000065
Msg From Party	0614141000012	Msg To Party	0012345000065

Transaction	Creator ID = OJGROWER-TRANS-12345	Content Owner = 0614141000012
--------------------	--	--------------------------------------

Command ADD	Creator ID = OJGROWER-ITEM-12345	Content Owner = 0614141000012
--------------------	---	--------------------------------------

Data Synchronisation Data Pool Profile	Creator ID = DSDPP-12345	Content Owner = 0712345000002
---	---------------------------------	--------------------------------------

Document Information

Creation Date	March 21, 2002 07:30:47-05:00	Last Update Date	March 21, 2002
Content Version	1.0	Doc Structure Version	1.3
Status	ORIGINAL		

Data Pool Profile Information

Start Availability Date	March 22, 2003 09:30:47-05:00	End Availability Date	March 22, 2004 09:30:47-05:00
Electronic Address	www.datapool.com	Data Pool GLN	0712345000002

Certification Information

Start Date	March 22, 2003 09:30:47-05:00	Expiration Date	March 22, 2004 09:30:47-05:00
Status	CERTIFIED	Identification	0000001
Body	eBusinessReady		

**Name
and
Address**

Name VERY FIRST DATA POOL

Language EN

Currency USD

Address 123 Main St.
Apt 5
Virtual City, MI 49684 US

Data Synchronisation Error - Style Sheet

Message MSG-123

Creation Date August 02, 2001 12:00:00

**Representing
Party**

0012345000065

Msg From Party 0614141000012

Msg To Party

0012345000065

Data Synchronisation Error

Error Information

Number	Name
401	GTIN ALREADY REGISTERED

Error Reference

GTIN	00614141000012
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GLOBAL DATA DICTIONARY

1.0 Catalogue Item Synchronization Class Data Descriptions v1.3

Catalogue Item Notification

Class Name	Role Name	Enumeration Value for List Class	Attribute Name	Description	Min/Max Size	M/O	EAN.UCC.xsd
CatalogueItem				This class provides the link to Trade Item, Catalogue Item Child Item Link, Catalogue Item State, and the Global Location Number of the Source Data Pool and/or the Data Recipient.		M	Catalogue Item Notification.xsd
CatalogueItemChildItemLink				A class of information used to identify the quantity of items within a packaging hierarchy level within the GDSN.		O	Catalogue Item Notification.xsd
			quantity	A numeric value expressing quantity.	1/10		
CatalogueItemNotification				The root class of the Catalogue Item Notification message.		M	Catalogue Item Notification.xsd
			isReload	The Boolean value within the request for notification process (True = currently on the notification list and False = initial Load).	1/10	M	Catalogue Item Notification.xsd
CatalogueItemState				A class of information used to describe the state of the trade item within the GDSN.		M	Catalogue Item Notification.xsd
			canceldate	Date assigned by data source and stored in the source data pool reflecting the date the catalog item was cancelled. This date will also be stored in the registry.	1/15	O	Catalogue Item Notification.xsd
			discontinuedDate	The date on which the catalogue item is no longer to be manufactured. Allows the reuse of the GTIN after 48 months with the explicit exception of Apparel, being 30 months and the implicit	1/15	O	Catalogue Item Notification.xsd

				exception for specialty products (e.g., steel beams).			
			state	Identification of the status of the catalogue item within the GDSN.	1/80	M	Catalogue Item Notification.xsd
CatalogueItemStateList				Values that describe the state of the catalogue item.			
		CANCELED		A term describing a maintenance function used to communicate that a catalogue item was never manufactured, allowing for reuse of the GTIN 12 months after cancellation.			
		DISCONTINUED		A term describing a maintenance function used to communicate the permanent removal of a catalogue item from the supply chain, beginning the trigger to track the EAN.UCC retention period for GTIN reuse.			
		IN_PROCESS		A term describing a maintenance function used to communicate the intent of registering a catalogue item to the Global Registry.			
		REGISTERED		A term describing a maintenance function used to communicate that a catalogue item has met the validation requirements for acceptance to the Global Registry.			
Document				The class Document is used to specify the basic information about the content of the message.		M	Identification.xsd
EntityIdentification	catalogueItemNotificationIdentification			The class Entity Identification is used to uniquely identify an instance document, GTIN, or GLN. This class contains the attribute Unique Creator Identification (a string of text description determined by the creator of the instance document, the GTIN, or the GLN).		M	Identification.xsd

GlobalLocationNumber	sourceDataPool			The Global Location Number (GLN) is a structured Identification of a physical location, legal or functional entity within an enterprise.	O	Identification.xsd
	dataRecipient					
TradeItem				The class Trade Item represents the definition of information used to describe a trade item or service.	M	Identification.xsd

Catalogue Item Link

Class Name	Role Name	Enumeration Value for List Class	Attribute Name	Long Description	Min/Max Size	M/O	EAN.UCC.xsd
CatalogueItemLink				The root class of the Catalogue Item Link message		M	CatalogueItemLink.xsd
Document				The class Document is used to specify the basic information about the content of the message.		M	Components.xsd
EntityIdentification	catalogueItemLinkIdentification			The class Entity Identification is used to uniquely identify an instance document, GTIN, or GLN. This class contains the attribute Unique Creator Identification (a string of text description determined by the creator of the instance document, the GTIN, or the GLN).		M	Identification.xsd
GlobalLocationNumber	gLN			The Global Location Number (GLN) is a structured Identification of a physical location, legal or functional entity within an enterprise.		M	Identification.xsd
GlobalTradeItemNumber	parentGTIN			A particular Global trade item Number, a numerical value used to uniquely identify a trade item. A trade item is any trade item (product or service) upon which there is a need to retrieve pre-defined information and that may be planned, priced, ordered, delivered and or invoiced at any point in any supply chain.		M	Identification.xsd
	childGTIN					M	Identification.xsd
TargetMarket				The target market information indicates the geographical definition in which the information provider will make the GTIN available to buyers, identified with the ISO 3166 code		M	CatalogueItemComponents.xsd

				table.			
			targetMarketCountryCode	The highest geographical definition in which the Information Provider will make the GTIN available to buyers, represented by the ISO 3166-1 code.	1/3	M	CatalogueItemComponents.xsd
			targetMarketSubdivisionCode	Describes the "geo-political subdivision of a country" where the trade item is intended for sale, as determined by the Information Provider, identified with the ISO 3166-2 code.	1/7	O	CatalogueItemComponents.xsd

Registry Catalogue Item

Class Name	Role Name	Enumeration Value for List Class	Attribute Name	Description	Min/Max Size	M/O	EAN.UCC.xsd
CatalogueItemClassification				A class of information used to identify a global classification of trade items according to pre-defined categories.		M	CatalogueItemComponents.xsd
CatalogueItemDates				A class of information used to describe the dates of the action taken on the catalogue item record within the GDSN.		O	RegistryCatalogueItem.xsd
			cancelDate	Date assigned by data source and stored in the source data pool reflecting the date the catalog item was cancelled. This date will also be stored in the registry.	1/15	O	RegistryCatalogueItem.xsd
			deletionDate	Date assigned by data source and stored in the source data pool reflecting the date the catalogue item record will be deleted from the database. This date will also be stored in the registry.	1/15	O	RegistryCatalogueItem.xsd

			discontinuedDate	Communicate the date on which the trade item is no longer to be manufactured. Allows the reuse of the GTIN after 48 months with the explicit exception of Apparel, being 30 months and the implicit exception for specialty products (e.g., steel beams).	1/15	O	RegistryCatalogueItem.xsd
			lastChangedDate	Date assigned by system indicating last time the information was changed. This date is generic and will be stored where assigned and will accompany every message.	1/15	O	RegistryCatalogueItem.xsd
			registrationDate	Date assigned by the registry of successful registration.	1/15	O	RegistryCatalogueItem.xsd
CatalogueItemReference				A class of information used to identify the key to the trade item information using the data source GLN, the GTIN, and the Target Market.		M	CatalogueItemComponents.xsd
Document				The class Document is used to specify the basic information about the content of the message.		M	Identification.xsd
Registry Catalogue Item continued							
EntityIdentification	registryCatalogueItemIdentification			The class Entity Identification is used to uniquely identify an instance document, GTIN, or GLN. This class contains the attribute Unique Creator Identification (a string of text description determined by the creator of the instance document, the GTIN, or the GLN).		M	Identification.xsd
GlobalLocationNumber	sourceDataPool			The Global Location Number (GLN) is a structured Identification of a physical location, legal or functional entity within an enterprise.			Identification.xsd
RegistryCatalogueItem				The root class of the Registry		M	RegistryCatalogueItem.xsd

				Catalogue Item message.			
RegistryCatalogueItemState			state	A class of information used to describe the state of the trade item within the Global Registry.	1/80	M	RegistryCatalogueItem.xsd
RegistryCatalogueItemList				Values that describe the state of the catalogue item in the Global Registry.		M	RegistryCatalogueItem.xsd
		CANCELED		A term describing a maintenance function used to communicate that a catalogue item was never manufactured, allowing for reuse of the GTIN 12 months after cancellation.			RegistryCatalogueItem.xsd
		DISCONTINUED		A term describing a maintenance function used to communicate the permanent removal of a catalogue item from the supply chain, beginning the trigger to track the EAN.UCC retention period for GTIN reuse.			RegistryCatalogueItem.xsd
		IN_PROGRESS		A term describing a maintenance function used to communicate the intent of registering a catalogue item to the Global Registry.			RegistryCatalogueItem.xsd
		REGISTERED		A term describing a maintenance function used to communicate that a catalogue item has met the validation requirements for acceptance to the Global Registry.			RegistryCatalogueItem.xsd

Catalogue Registration Response

Class Name	Role Name	Enumeration Value for List Class	Attribute Name	Description	Min/Max Size	M/O	EAN.UCC.xsd
CatalogueItemReference				A class of information used to identify the key to the trade item information using the data source GLN, the GTIN, and the Target Market.		M	CatalogueItemComponents.xsd
CatalogueItemRegistrationInformation				A class of information used to identify the dates of the action taken on the Global Registry item record.		M	CatalogueItemRegistrationResponse.xsd
			lastChangedDate	Date assigned by system indicating last time the information was changed. This date is generic and will be stored where assigned and will accompany every message.	1/15	M	CatalogueItemRegistrationResponse.xsd
			registrationDate	Date assigned by the registry of successful registration.	1/15	M	CatalogueItemRegistrationResponse.xsd
CatalogueItemRegistrationResponse				The root class of CatalogueItemRegistrationResponse message.		M	CatalogueItemRegistrationResponse.xsd
Response				An abstract class of information in the Global Business Model used to define the status of a document within the EAN.UCC System.		M	Components.xsd

Catalogue Item Subscription

Class Name	Role Name	Enumeration Value for List Class	Attribute Name	Description	Min/Max Size	M/O	EAN.UCC.xsd
CatalogueItem Classification	classification			A class of information used to identify a global classification of trade items according to pre-defined industry standards.		O	CatalogueItemComponents.xsd
			classificationCategoryCode	A unique identification of an industry defined method to group like products together to enable Global Search.	1/80	M	CatalogueItemComponents.xsd
CatalogueItem Subscription				The root class of the Catalogue Item Subscription message.		M	CatalogueItemSubscription.xsd
Document				The class Document is used to specify the basic information about the content of the message.		M	Identification.xsd
EntityIdentification	catalogueItemSubscriptionIdentification			The class Entity Identification is used to uniquely identify an instance document, GTIN, or GLN. This class contains the attribute Unique Creator Identification (a string of text description determined by the creator of the instance document, the GTIN, or the GLN).		M	Identification.xsd
GlobalLocation Number	dataRecipient			The Global Location Number (GLN) is a structured Identification of a physical location, legal or functional entity within an enterprise.		M	Identification.xsd
	dataSource					O	Identification.xsd
	recipientDataPool					O	Identification.xsd

GlobalTradeItemNumber	gTIN			A particular Global trade item Number, a numerical value used to uniquely identify a trade item. A trade item is any trade item (product or service) upon which there is a need to retrieve pre-defined information and that may be planned, priced, ordered, delivered and or invoiced at any point in any supply chain.		O	Identification.xsd
TargetMarket				The target market information indicates the geographical definition in which the information provider will make the GTIN available to buyers, identified with the ISO 3166 code table.		O	CatalogueItemComponents.xsd
			targetMarketCountryCode	The highest geographical definition in which the Information Provider will make the GTIN available to buyers, represented by the ISO 3166-1 code.	1/3	M	CatalogueItemComponents.xsd
			targetMarketSubdivisionCode	Describes the "geo-political subdivision of a country" where the trade item is intended for sale, as determined by the Information Provider, identified with the ISO 3166-2 code.	1/7	M	CatalogueItemComponents.xsd

Request for Catalogue Item Notification

Class Name	Role Name	Enumeration Value for List Class	Attribute Name	Description	Min/Max Size	M/O	EAN.UCC.xsd
CatalogueItemSubscription				A class of information used to establish a request from an end recipient for the update of trade item information on a continuous basis.		M	CatalogueItemSubscription.xsd
RequestForCatalogueItemNotification				The root class for RequestForCatalogueItem Notification message		M	CatalogueItemSubscription.xsd
			isReload	The Boolean value within the request for notification process (True = currently on the notification list and False = initial Load).	1/10	M	CatalogueItemSubscription.xsd

Catalogue Item Publication

Class Name	Role Name	Enumeration Value for List Class	Attribute Name	Long Description	Min/Max Size	M/O	EAN.UCC.xsd
CatalogueItemPublication				The root class of the Catalogue Item Publication message.		M	CatalogueItemPublication.xsd
CatalogueItemReference				A class of information used to identify the key to the trade item information using the data source GLN, the GTIN, and the Target Market.		M	CatalogueItemComponents.xsd
Document				The class Document is used to specify the basic information about the content of the message.		M	Identification.xsd
EntityIdentification	catalogueItemPublicationIdentification			The class Entity Identification is used to uniquely identify an instance document, GTIN, or GLN. This class contains the attribute Unique Creator Identification (a string of text description determined by the creator of the instance document, the GTIN, or the GLN).		M	Identification.xsd
GlobalLocationNumber	publishToGLN			The Global Location Number (GLN) is a structured Identification of a physical location, legal or functional entity within an enterprise.		M	Identification.xsd
TargetMarket	publishToTargetMarket			The target market information indicates the geographical definition in which the information provider will make the GTIN available to buyers, identified with the ISO 3166 code table.		M	CatalogueItemComponents.xsd

			targetMarketCountryCode	The highest geographical definition in which the Information Provider will make the GTIN available to buyers, represented by the ISO 3166-1 code.	1/3	M	CatalogueItemComponents.xsd
			targetMarketSubdivisionCode	Describes the "geo-political subdivision of a country" where the trade item is intended for sale, as determined by the Information Provider, identified with the ISO 3166-2 code.	1/7	M	CatalogueItemComponents.xsd

Catalogue Item Confirmation

Class Name	Role Name	Enumeration Value for List Class	Attribute Name	Description	Min/Max Size	M/O	EAN.UCC.xsd
CatalogueItemConfirmation				The root class of the Catalog Item Confirmation message.		M	CatalogueItemConfirmation.xsd
CatalogueItemConfirmationState				A class of information indicating what action has been taken on the Catalogue Item Notification.			
			state	Identification of the status of the catalogue item within the GDSN.	1/80	M	CatalogueItemConfirmation.xsd
CatalogueItemConfirmationStateList				Values that describe the state of the catalogue item confirmation.			
		ACCEPTED		Data is added to the synchronization list and will be in synch.		M	CatalogueItemConfirmation.xsd
		REJECTED		Data will not be synchronized or updates will no longer be required		M	CatalogueItemConfirmation.xsd
		REVIEW		A request to the data source to "review" their data because the data recipient has received discrepant data which they cannot synchronize. If the data was synchronized, it will be removed from the synchronization list.		M	CatalogueItemConfirmation.xsd
		SYNCHRONISED		Data is integrated, in synch and added to the synchronization list.		M	CatalogueItemConfirmation.xsd
CatalogueItemReference				A class of information used to identify the key to the trade item information using the data source GLN, the GTIN, and the Target Market.		M	CatalogueItemComponents.xsd
Document				The class Document is used to specify the basic information about the content of the message.		M	Components.xsd
EntityIdentification	catalogueItemConfirmationIdentification			The class Entity Identification is used to uniquely identify an instance document, GTIN, or GLN. This class contains the attribute Unique Creator Identification (a string of text description determined by the creator of the instance document, the GTIN, or the GLN).			Identification.xsd

GlobalLocationNumber	recipientGLN			The Global Location Number (GLN) is a structured Identification of a physical location, legal or functional entity within an enterprise.	M	Identification.xsd
	recipientDataPool				O	Identification.xsd

Data Synchronisation Data Pool Profile

Class Name	Role Name	ENUMERATION VALUE FOR LIST CLASS	Attribute Name	Description	Min/ Max Size	M/O	EAN.UCC.xsd
DataPoolCertificationInformation				A class of information used to describe the status of a data pool's certification with the Global Data Synchronisation Network.		M	DataSynchronisationDataPoolProfile.xsd
			certificationBody	Organization that performs the certification process.		M	DataSynchronisationDataPoolProfile.xsd
			certificationExpirationDate	Date on which the Data Pool certification is no longer valid.	1/15	M	DataSynchronisationDataPoolProfile.xsd
			certificationIdentification	Value that uniquely identifies a certified member of the Global Data Synchronization Network (GDSN).	1/80	M	DataSynchronisationDataPoolProfile.xsd
			certificationStartDate	Date on which the Data Pool obtains certification.	1/15	M	DataSynchronisationDataPoolProfile.xsd
			certificationStatus	Indicator of the stage of the certification process. A choice of one of the values in the Status List is required.	1/80	M	DataSynchronisationDataPoolProfile.xsd
DataPoolCertificationStatusList		CERTIFICATION_INITIATED		A term used to indicate that the Data Pool certification process has begun.			DataSynchronisationDataPoolProfile.xsd
		CERTIFICATION_PENDING		A term used to indicate that the Data Pool certification process is in progress			DataSynchronisationDataPoolProfile.xsd
		CERTIFIED		A term used to indicate that the Data Pool has			DataSynchronisationDataPoolProfile.xsd

				that the Data Pool has met the certification requirements.			ofile.xsd
		REVIEWED_FOR_CERTIFICATION		A term used to indicate that the Data Pool certification is being reviewed.			DataSynchronisationDataPoolProfile.xsd
DataSynchronisationDataPoolProfile				The root class of the Data Synchronisation Data Pool Profile message.		M	DataSynchronisationDataPoolProfile.xsd
			electronicAddress	The internet protocol identification for a certified data pool within the GDSN.	1/80	M	DataSynchronisationDataPoolProfile.xsd
			endAvailabilityDate	The date at which a trade item or a location will no longer exist.	1/15	M	DataSynchronisationDataPoolProfile.xsd
			startAvailabilityDate	The date at which a trade item or location begins its existence.	1/15	M	DataSynchronisationDataPoolProfile.xsd
Document				The class Document is used to specify the basic information about the content of the message.		M	Identification.xsd
EntityIdentification	DataPoolProfileIdentification			The class Entity Identification is used to uniquely identify an instance document, GTIN, or GLN. This class contains the attribute Unique Creator Identification (a string of text description determined by the creator of the instance document, the GTIN, or the GLN).		M	Identification.xsd
GlobalLocationNumber	dataPoolGLN			The Global Location Number (GLN) is a structured Identification of		M	Identification.xsd

				a physical location, legal or functional entity within an enterprise.			
NameAndAddress	dataPoolNameAndAddress			A class of information used to describe the name and address.		M	Identification.xsd

Data Synchronisation Error

Class Name	Role Name	ENUMERATION VALUE FOR LIST CLASS	Attribute Name	Description	Min/Max Size	M/O	EAN.UCC.xsd
DataSynchronisationError				The root class for the Data Synchronisation Error message		M	DataSynchronisationError.xsd
DataSynchronisationErrorInformation				A class of information used to describe an error within the Global Data Synchronisation Network and its process.		M	DataSynchronisationError.xsd
			errorName	A brief, text description related to an error number.	1/80	M	DataSynchronisationError.xsd
			errorNumber	An identification code used to relate to an error name.	1/80	M	DataSynchronisationError.xsd
DataSynchronisationErrorReference				A class of information used to describe the entity and the type of process identified as an error within the GDSN>		M	DataSynchronisationError.xsd
EntityIdentification	catalogueItemConfirmationIdentification			The class Entity Identification is used to uniquely identify an instance document, GTIN, or GLN. This class contains the attribute Unique Creator Identification (a string of text description determined by the creator of the instance document, the GTIN, or the GLN).		M	Identification.xsd

	catalogueItemPublicationIdentification						Identification.xsd
	catalogueItemSubscriptionIdentification						Identification.xsd
	requestForNotificationIdentification						Identification.xsd
GlobalTradeItemNumber	GTIN			A particular Global trade item Number, a numerical value used to uniquely identify a trade item. A trade item is any trade item (product or service) upon which there is a need to retrieve pre-defined information and that may be planned, priced, ordered, delivered and or invoiced at any point in any supply chain.		M	Identification.xsd

Instance File

Description

The Instance File is an example of what the schema may look like when it includes live data. This can be used as comparison to a completed schema and can serve as a point of reference for development.

Instance File Example

CATALOGUE ITEM SYNCHRONISATION

Catalogue Item Notification

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="../../4_XSL/Main.xsl"?>
<!-- This is a sample file-->
<eanucc:envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:eanucc="http://www.ean-ucc.org/schemas/1.3/eanucc"
xsi:schemaLocation="http://www.ean-ucc.org/schemas/1.3/eanucc
../2_XSD_PROXY/CatalogueItemNotificationProxy.xsd" communicationVersion="1.3">
  <messageHeader creationDate="2001-08-02T12:00:00">
    <userId>OJGROWER-12345</userId>
    <password>SECRET</password>
    <messageIdentifier>MSG-123</messageIdentifier>
    <to>
      <gln>0012345000065</gln>
    </to>
    <from>
      <gln>0614141000012</gln>
    </from>
    <representingParty>
      <gln>0012345000065</gln>
    </representingParty>
  </messageHeader>
  <body>
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      <entityIdentification>
        <uniqueCreatorIdentification>OJGROWER-TRANS-
12345</uniqueCreatorIdentification>
        <contentOwner>
          <gln>0614141000012</gln>
        </contentOwner>
      </entityIdentification>
      <command>
```

```
<eanucc:documentCommand>
  <documentCommandHeader type="ADD">
    <entityIdentification>
      <uniqueCreatorIdentification>OJGROWER-ITEM-
12345</uniqueCreatorIdentification>
      <contentOwner>
        <gln>0614141000012</gln>
      </contentOwner>
    </entityIdentification>
  </documentCommandHeader>
  <documentCommandOperand>
    <eanucc:catalogueItemNotification contentVersion="1.0"
documentStructureVersion="1.3" lastUpdateDate="2003-03-21" creationDate="2003-03-
21T09:30:47-05:00" documentStatus="ORIGINAL" isReload="false">
      <catalogueItem>
        <catalogueItemState state="IN_PROGRESS"/>
        <tradeItem>
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          </tradeItemIdentification>
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<totalQuantityOfNextLowerLevelTradeItem>10</totalQuantityOfNextLowerLevelTradeItem>

          <childTradeItem>

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            </tradeItemIdentification>
          </childTradeItem>
          <childTradeItem>

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            <tradeItemIdentification>
              <gtin>00123456556997</gtin>
            </tradeItemIdentification>
          </childTradeItem>
          </nextLowerLevelTradeItemInformation>
          <tradeItemInformation>
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sequenceNumber="1" allowanceOrChargeType="ALLOWANCE"
settlementType="CHARGE_TO_BE_PAID_BY_CUSTOMER"
effectiveDateType="EFFECTIVE_DATE">
              <allowanceChargePriceBracket>
                <bracketIdentifier>TOP</bracketIdentifier>
              </allowanceChargePriceBracket>
              <monetaryAmountOrPercentage>
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              </monetaryAmountOrPercentage>
              <baseAmount>
```

```
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</baseAmount>
<description>
  <description language="EN">
    <text>Qt. of Yummy Cola</text>
  </description>
</description>
</allowanceCharge >
<informationProviderOfTradeItem>
  <informationProvider>
    <gln>0012345000065</gln>
  </informationProvider>
  <nameOfInformationProvider>ACME Drinks</nameOfInformationProvider>
</informationProviderOfTradeItem>
<paymentTerms paymentTermsType="BASIC_(NET)"
paymentTermsEvent="ANTICIPATED_DELIVERY_DATE">
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      </paymentTimePeriod>
    </netPayment>
    <installmentDue>
      <percentageOfPaymentDue>3.14</percentageOfPaymentDue>
      <paymentTimePeriod>
        <timePeriodDue
timePeriod="DAYS"><value>30</value></timePeriodDue>
        </paymentTimePeriod>
      </installmentDue>
      <discountPayment discountType="PRE">
        <discountDescription>
          <description language="EN">
            <text>Discounted to preferred customers.</text>
          </description>
        </discountDescription>
        <paymentTimePeriod>
          <timePeriodDue
timePeriod="DAYS"><value>30</value></timePeriodDue>
          </paymentTimePeriod>
        </discountPayment>
        <proximoCutOffDay>
          <value>30</value>
        </proximoCutOffDay>
      </paymentTerms >
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  <targetMarketCountryCode>123</targetMarketCountryCode>
  <targetMarketDescription language="EN">
    <text>France, Auvergne</text>
  </targetMarketDescription>

<targetMarketSubdivisionCode>ABCDEFG</targetMarketSubdivisionCode>
</targetMarketInformation>
<classificationCategoryCode>
  <classificationCategoryCode>1000222</classificationCategoryCode>
  <classificationCategoryDefinition>Includes any products that can be non-
perishable, carbonated beverages that has etc...</classificationCategoryDefinition>
```

```

        <classificationCategoryName>Juice Drinks
(perishable)</classificationCategoryName>
        <eANUCCTradeItemClassification>

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        <eANUCCClassificationAttributeTypeName>Carbonated non alcoholic
beverage</eANUCCClassificationAttributeTypeName>
        <eANUCCClassificationAttributeTypeDefinition>Includes any product that
can be described as non-perishable, carbonated beverages that has
etc...</eANUCCClassificationAttributeTypeDefinition>
        <eANUCCTradeItemClassificationValue>

<eANUCCClassificationAttributeValueCode>155</eANUCCClassificationAttributeValueC
ode>

<eANUCCClassificationAttributeValueName>Drinks</eANUCCClassificationAttributeValu
eName>
        </eANUCCTradeItemClassificationValue>
</eANUCCTradeItemClassification>
</classificationCategoryCode>
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  <descriptionShort>
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      <text>Liters</text>
    </description>
  </descriptionShort>
  <functionalName>
    <description language="EN">
      <text>Drink</text>
    </description>
  </functionalName>
  <tradeItemDescription>
    <longDescription language="EN">
      <longText>Yummy-Cola Classic Diet</longText>
    </longDescription>
  </tradeItemDescription>
  <additionalTradeItemDescription>
    <longDescription language="EN">
      <longText>Yummy-Cola Lemon scented big size</longText>
    </longDescription>
  </additionalTradeItemDescription>
  <invoiceName>
    <description language="EN">
      <text>Yummy-Cola Classic Diet</text>
    </description>
  </invoiceName>
  <productRange>Waist Watchers</productRange>
  <subBrand>Classic</subBrand>

<tradeItemGroupIdentificationCode>033200011101</tradeItemGroupIdentificationCode>
  <tradeItemGroupIdentificationDescription>
    <description language="EN">
      <text>Yummy-Cola Classic</text>
    </description>

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```

        </tradeItemGroupIdentificationDescription>
        <tradeItemFormDescription>Liquid</tradeItemFormDescription>
        <variant>
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          </description>
        </variant>
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      <tradingPartnerNeutralTradeItemInformation>
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          <isTradeItemAConsumerUnit>1</isTradeItemAConsumerUnit>
          <isTradeItemADespatchUnit>0</isTradeItemADespatchUnit>
          <isTradeItemAnInvoiceUnit>0</isTradeItemAnInvoiceUnit>
          <isTradeItemAnOrderableUnit>0</isTradeItemAnOrderableUnit>
          <isTradeItemAVariableUnit>0</isTradeItemAVariableUnit>
        </tradeItemUnitIndicator>

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        <brandOwner>
          <gln>0012345000065</gln>
        </brandOwner>
        <nameOfBrandOwner>ACME Drinks</nameOfBrandOwner>
      </brandOwnerOfTradeItem>
      <manufacturerOfTradeItem>
        <manufacturer>
          <gln>0012345000065</gln>
        </manufacturer>
        <nameOfManufacturer>ACME Drinks</nameOfManufacturer>
      </manufacturerOfTradeItem>
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      <materialSafetyDataSheetNumber>ag34784</materialSafetyDataSheetNumber>
      </materialSafetyData>
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        <organicTradeItemCode>05</organicTradeItemCode>
      </organicTradeItemCharacteristics>
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        <isPackagingMarkedReturnable>0</isPackagingMarkedReturnable>

      <isPackagingMarkedWithExpirationDate>1</isPackagingMarkedWithExpirationDate>

      <isPackagingMarkedWithGreenDot>1</isPackagingMarkedWithGreenDot>

      <isPackagingMarkedWithIngredients>1</isPackagingMarkedWithIngredients>
      </packagingMarking>
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</packagingMaterial>
<packagingType>
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  <packagingTypeDescription>Bottle</packagingTypeDescription>
</packagingType>
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  <retailPriceOnTradeItem
currencyISOCode="EUR">36</retailPriceOnTradeItem>
</priceOnTradeItem>
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  <colorCodeValue>PMS</colorCodeValue>
  <colorDescription>
    <description language="EN">
      <text>Dark burgandy</text>
    </description>
  </colorDescription>
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</tradeItemCountryOfOrigin>
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</tradeItemCoupon>
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  <publicationDate>2003-01-10</publicationDate>
  <startAvailabilityDateTime>2003-01-
15T12:00:00</startAvailabilityDateTime>
  <canceledDate>2002-10-05</canceledDate>
  <consumerAvailabilityDateTime>2001-12-17T09:30:47-
05:00</consumerAvailabilityDateTime>
  <discontinuedDate>2003-12-18</discontinuedDate>
  <endAvailabilityDateTime>2003-12-
15T12:00:00</endAvailabilityDateTime>
</tradeItemDateInformation>
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  <handlingInstructionsCode>
    <description language="EN">
      <text>DFN</text>
    </description>
  </handlingInstructionsCode>

<minimumTradeItemLifespanFromTimeOfArrival>35</minimumTradeItemLifespanFromTi
meOfArrival>
  <stackingFactor>2</stackingFactor>
  <stackingWeightMaximum>
    <measurementValue unitOfMeasure="kg">500</measurementValue>
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        </stackingWeightMaximum>
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        <tradeItemHierarchy>

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        <quantityOfLayersPerPallet>5</quantityOfLayersPerPallet>

        <quantityOfTradeItemsContainedInACompleteLayer>20</quantityOfTradeItemsContainedInACompleteLayer>
        <quantityOfTradeItemsPerPallet>100</quantityOfTradeItemsPerPallet>

        <quantityOfTradeItemsPerPalletLayer>20</quantityOfTradeItemsPerPalletLayer>
        <quantityOfInnerPack>2</quantityOfInnerPack>

        <quantityOfNextLevelTradeItemWithinInnerPack>6</quantityOfNextLevelTradeItemWithinInnerPack>
        </tradeItemHierarchy>
        <tradeItemMarking>
        <hasBatchNumber>1</hasBatchNumber>
        <isNonSoldTradeItemReturnable>1</isNonSoldTradeItemReturnable>
        <isTradeItemMarkedAsRecyclable>1</isTradeItemMarkedAsRecyclable>
        </tradeItemMarking>
        <tradeItemMeasurements>
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        </depth>
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        </grossWeight>
        <height>
        <measurementValue unitOfMeasure="cm">25</measurementValue>
        </height>

        <isNetContentDeclarationIndicated>0</isNetContentDeclarationIndicated>
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        </width>
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        </diameter>
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        <measurementValue unitOfMeasure="g">225</measurementValue>
        </drainedWeight>
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        <measurementValue unitOfMeasure="mg">15</measurementValue>
        </genericIngredientStrength>
        <ingredientStrength>15 mg</ingredientStrength>
        <netWeight>
        <measurementValue unitOfMeasure="lb">300</measurementValue>
        </netWeight>
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        <measurementValue unitOfMeasure="cm">17</measurementValue>
        </pegHorizontal>
        <pegVertical>

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<measurementValue unitOfMeasure="cm">15</measurementValue>
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  <orderQuantityMinimum>2500</orderQuantityMinimum>
  <orderQuantityMultiple>100</orderQuantityMultiple>
  <orderSizingFactor>
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  </orderSizingFactor>
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  <palletTermsAndConditions>7E</palletTermsAndConditions>
</tradeItemPalletInformation>
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  <effectiveStartDate>2002-11-15</effectiveStartDate>
  <value currencyISOCode="EUR">350</value>
  <effectiveEndDate>2003-06-15</effectiveEndDate>
</cataloguePrice>
<suggestedRetailPrice>
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  <value currencyISOCode="USD">280</value>
  <effectiveEndDate>2003-06-15</effectiveEndDate>
</suggestedRetailPrice>
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  <sizeCodeValue>36X</sizeCodeValue>
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  </descriptiveSize>
</tradeItemSizeDescription>
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    <taxAmount currencyISOCode="USD">6</taxAmount>
    <taxAgency>
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      <taxTypeCode>21233403910392</taxTypeCode>
      <taxTypeDescription>VAT</taxTypeDescription>
    </taxAgency>
  </tradeItemTaxAmount>
</tradeItemTaxInformation>
<tradeItemTemperatureInformation>
  <deliveryToDistributionCenterTemperatureMaximum>
    <measurementValue unitOfMeasure="FAH">60</measurementValue>
  </deliveryToDistributionCenterTemperatureMaximum>
  <deliveryToDistributionCenterTemperatureMinimum>
    <measurementValue unitOfMeasure="FAH">54</measurementValue>
  </deliveryToDistributionCenterTemperatureMinimum>
  <deliveryToMarketTemperatureMaximum>
    <measurementValue unitOfMeasure="FAH">60</measurementValue>
  </deliveryToMarketTemperatureMaximum>
  <deliveryToMarketTemperatureMinimum>
    <measurementValue unitOfMeasure="FAH">54</measurementValue>
  </deliveryToMarketTemperatureMinimum>
</tradeItemTemperatureInformation>
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    <storageHandlingTemperatureMaximum>
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    </storageHandlingTemperatureMaximum>
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      <measurementValue unitOfMeasure="FAH">54</measurementValue>
    </storageHandlingTemperatureMinimum>
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</tradingPartnerNeutralTradeItemInformation>
</tradeItemInformation>
</tradeItem>
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</catalogueItem>
<catalogueItemNotificationIdentification>
  <uniqueCreatorIdentification>CIN-12345</uniqueCreatorIdentification>
  <contentOwner>
    <gln>0012345000003</gln>
  </contentOwner>
</catalogueItemNotificationIdentification>
</eanucc:catalogueItemNotification>
</documentCommandOperand>
</eanucc:documentCommand>
</command>
</eanucc:transaction>
</body>
</eanucc:envelope>
```

Catalogue Item Link

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="../../4_XSL/Main.xsl"?>
<!-- This is a sample file-->
<eanucc:envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:eanucc="http://www.ean-ucc.org/schemas/1.3/eanucc"
xsi:schemaLocation="http://www.ean-ucc.org/schemas/1.3/eanucc
../2_XSD_PROXY/CatalogueItemLinkProxy.xsd" communicationVersion="1.3">
  <messageHeader creationDate="2001-08-02T12:00:00">
    <userId>OJGROWER-12345</userId>
    <password>SECRET</password>
    <messageIdentifier>MSG-123</messageIdentifier>
    <to>
      <gln>0012345000065</gln>
    </to>
    <from>
      <gln>0614141000012</gln>
    </from>
    <representingParty>
      <gln>0012345000065</gln>
    </representingParty>
  </messageHeader>
  <body>
    <eanucc:transaction>
      <entityIdentification>
        <uniqueCreatorIdentification>OJGROWER-TRANS-
12345</uniqueCreatorIdentification>
        <contentOwner>
          <gln>0614141000012</gln>
        </contentOwner>
      </entityIdentification>
      <command>
        <eanucc:documentCommand>
          <documentCommandHeader type="ADD">
            <entityIdentification>
              <uniqueCreatorIdentification>OJGROWER-ITEM-
12345</uniqueCreatorIdentification>
              <contentOwner>
                <gln>0614141000012</gln>
              </contentOwner>
            </entityIdentification>
          </documentCommandHeader>
          <documentCommandOperand>
            <eanucc:catalogueItemLink contentVersion="1.0" documentStructureVersion="1.3"
lastUpdateDate="2003-03-21" creationDate="2003-03-21T09:30:47-05:25"
documentStatus="ORIGINAL">
              <targetMarket>
                <targetMarketCountryCode>123</targetMarketCountryCode>
                <targetMarketSubdivisionCode>ABCDEFG</targetMarketSubdivisionCode>
              </targetMarket>
              <childGTIN>00614141000029</childGTIN>
              <parentGTIN>00614141000012</parentGTIN>
              <gln>0012345000003</gln>
            </eanucc:catalogueItemLinkIdentification>
          </documentCommandOperand>
        </eanucc:documentCommand>
      </command>
    </eanucc:transaction>
  </body>
</eanucc:envelope>
```

```
<uniqueCreatorIdentification>CIL-12345</uniqueCreatorIdentification>
<contentOwner>
  <gln>0012345000003</gln>
</contentOwner>
</catalogueItemLinkIdentification>
</eanucc:catalogueItemLink>
</documentCommandOperand>
</eanucc:documentCommand>
</command>
</eanucc:transaction>
</body>
</eanucc:envelope>
```

Registry Catalog Item

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="../../4_XSL/Main.xsl"?>
<!-- This is a sample file-->
<eanucc:envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:eanucc="http://www.ean-ucc.org/schemas/1.3/eanucc"
xsi:schemaLocation="http://www.ean-ucc.org/schemas/1.3/eanucc
../2_XSD_PROXY/RequestForCatalogueItemNotificationProxy.xsd"
communicationVersion="1.3">
  <messageHeader creationDate="2001-08-02T12:00:00">
    <userId>OJGROWER-12345</userId>
    <password>SECRET</password>
    <messageIdentifier>MSG-123</messageIdentifier>
    <to>
      <gln>0012345000065</gln>
    </to>
    <from>
      <gln>0614141000012</gln>
    </from>
    <representingParty>
      <gln>0012345000065</gln>
    </representingParty>
  </messageHeader>
  <body>
    <eanucc:transaction>
      <entityIdentification>
        <uniqueCreatorIdentification>OJGROWER-TRANS-
12345</uniqueCreatorIdentification>
        <contentOwner>
          <gln>0614141000012</gln>
        </contentOwner>
      </entityIdentification>
      <command>
        <eanucc:documentCommand>
          <documentCommandHeader type="ADD">
            <entityIdentification>
              <uniqueCreatorIdentification>OJGROWER-ITEM-
12345</uniqueCreatorIdentification>
              <contentOwner>
                <gln>0614141000012</gln>
              </contentOwner>
            </entityIdentification>
          </documentCommandHeader>
          <documentCommandOperand>
            <eanucc:requestForCatalogueItemNotification contentVersion="1.0"
documentStructureVersion="1.3" lastUpdateDate="2003-03-22" creationDate="2003-03-
22T08:30:47-05:00" documentStatus="ORIGINAL" isReload="false">
              <targetMarket>
                <targetMarketCountryCode>123</targetMarketCountryCode>
                <targetMarketSubdivisionCode>ABCDEF</targetMarketSubdivisionCode>
              </targetMarket>
              <gTIN>00614141000012</gTIN>
              <dataRecipient>0814141000009</dataRecipient>
            </eanucc:requestForCatalogueItemNotification>
          </documentCommandOperand>
        </eanucc:documentCommand>
      </command>
    </eanucc:transaction>
  </body>
</eanucc:envelope>
```

```
<dataSource>0012345000003</dataSource>
<recipientDataPool>0812345000009</recipientDataPool>
<!-- <classification classificationCategoryCode="02.0010.0046"/> -->
<classification classificationCategoryCode="0200100046"/>
<catalogueItemSubscriptionIdentification>
  <uniqueCreatorIdentification>RFCIN-12345</uniqueCreatorIdentification>
  <contentOwner>
    <gln>0814141000009</gln>
  </contentOwner>
</catalogueItemSubscriptionIdentification>
</eanucc:requestForCatalogueItemNotification>
</documentCommandOperand>
</eanucc:documentCommand>
</command>
</eanucc:transaction>
</body>
</eanucc:envelope>
```

Catalogue Item Registration Response

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="../../4_XSL/Main.xsl"?>
<!-- This is a sample file-->
<eanucc:envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:eanucc="http://www.ean-ucc.org/schemas/1.3/eanucc"
xsi:schemaLocation="http://www.ean-ucc.org/schemas/1.3/eanucc
../2_XSD_PROXY/CatalogueItemRegistrationResponseProxy.xsd"
communicationVersion="1.3">
  <messageHeader creationDate="2001-08-02T12:00:00">
    <userId>OJGROWER-12345</userId>
    <password>SECRET</password>
    <messageIdentifier>MSG-123</messageIdentifier>
    <to>
      <gln>0012345000065</gln>
    </to>
    <from>
      <gln>0614141000012</gln>
    </from>
    <representingParty>
      <gln>0012345000065</gln>
    </representingParty>
  </messageHeader>
  <body>
    <eanucc:catalogueItemRegistrationResponse responseStatus="ACCEPTED">
      <responseIdentification>
        <uniqueCreatorIdentification>CIRR-12345</uniqueCreatorIdentification>
        <contentOwner>
          <gln>0061414181000</gln>
        </contentOwner>
      </responseIdentification>
      <catalogueItemRegistrationInformation registrationDate="2003-03-21T09:30:47-05:15"
lastChangedDate="2003-03-21T09:30:47-05:15"/>
      <catalogueItemReference>
        <gtin>00614141000012</gtin>
        <dataSource>0012345000003</dataSource>
        <targetMarket>
          <targetMarketCountryCode>123</targetMarketCountryCode>
          <targetMarketSubdivisionCode>ABCDEFGF</targetMarketSubdivisionCode>
        </targetMarket>
      </catalogueItemReference>
    </eanucc:catalogueItemRegistrationResponse>
  </body>
</eanucc:envelope>
```

Catalogue Item Subscription

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="../../4_XSL/Main.xsl"?>
<!-- This is a sample file-->
<eanucc:envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:eanucc="http://www.ean-ucc.org/schemas/1.3/eanucc"
xsi:schemaLocation="http://www.ean-ucc.org/schemas/1.3/eanucc
../2_XSD_PROXY/CatalogueItemSubscriptionProxy.xsd" communicationVersion="1.3">
  <messageHeader creationDate="2001-08-02T12:00:00">
    <userId>OJGROWER-12345</userId>
    <password>SECRET</password>
    <messageIdentifier>MSG-123</messageIdentifier>
    <to>
      <gln>0012345000065</gln>
    </to>
    <from>
      <gln>0614141000012</gln>
    </from>
    <representingParty>
      <gln>0012345000065</gln>
    </representingParty>
  </messageHeader>
  <body>
    <eanucc:transaction>
      <entityIdentification>
        <uniqueCreatorIdentification>OJGROWER-TRANS-
12345</uniqueCreatorIdentification>
        <contentOwner>
          <gln>0614141000012</gln>
        </contentOwner>
      </entityIdentification>
      <command>
        <eanucc:documentCommand>
          <documentCommandHeader type="ADD">
            <entityIdentification>
              <uniqueCreatorIdentification>OJGROWER-ITEM-
12345</uniqueCreatorIdentification>
              <contentOwner>
                <gln>0614141000012</gln>
              </contentOwner>
            </entityIdentification>
          </documentCommandHeader>
          <documentCommandOperand>
            <eanucc:catalogueItemSubscription contentVersion="1.0"
documentStructureVersion="1.3" lastUpdateDate="2003-03-22" creationDate="2003-03-
22T08:30:47-05:00" documentStatus="ORIGINAL">
              <targetMarket>
                <targetMarketCountryCode>123</targetMarketCountryCode>
                <targetMarketSubdivisionCode>ABCDEFG</targetMarketSubdivisionCode>
              </targetMarket>
              <gTIN>00614141000012</gTIN>
              <dataRecipient>0814141000009</dataRecipient>
              <dataSource>0012345000003</dataSource>
            </eanucc:catalogueItemSubscription>
          </documentCommandOperand>
        </eanucc:documentCommand>
      </command>
    </eanucc:transaction>
  </body>
</eanucc:envelope>
```



```
<recipientDataPool>0812345000009</recipientDataPool>
<classification classificationCategoryCode="02.0010.0046"/>
<catalogueItemSubscriptionIdentification>
  <uniqueCreatorIdentification>CIS-12345</uniqueCreatorIdentification>
  <contentOwner>
    <gln>0814141000009</gln>
  </contentOwner>
</catalogueItemSubscriptionIdentification>
</eanucc:catalogueItemSubscription>
  </documentCommandOperand>
</eanucc:documentCommand>
</command>
</eanucc:transaction>
</body>
</eanucc:envelope>
```

Request for Catalogue Item Notification

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="../../4_XSL/Main.xsl"?>
<!-- This is a sample file-->
<eanucc:envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:eanucc="http://www.ean-ucc.org/schemas/1.3/eanucc"
xsi:schemaLocation="http://www.ean-ucc.org/schemas/1.3/eanucc
../2_XSD_PROXY/CatalogueItemNotificationProxy.xsd" communicationVersion="1.3">
  <messageHeader creationDate="2001-08-02T12:00:00">
    <userId>OJGROWER-12345</userId>
    <password>SECRET</password>
    <messageIdentifier>MSG-123</messageIdentifier>
    <to>
      <gln>0012345000065</gln>
    </to>
    <from>
      <gln>0614141000012</gln>
    </from>
    <representingParty>
      <gln>0012345000065</gln>
    </representingParty>
  </messageHeader>
  <body>
    <eanucc:transaction>
      <entityIdentification>
        <uniqueCreatorIdentification>OJGROWER-TRANS-
12345</uniqueCreatorIdentification>
        <contentOwner>
          <gln>0614141000012</gln>
        </contentOwner>
      </entityIdentification>
      <command>
        <eanucc:documentCommand>
          <documentCommandHeader type="ADD">
            <entityIdentification>
              <uniqueCreatorIdentification>OJGROWER-ITEM-
12345</uniqueCreatorIdentification>
              <contentOwner>
                <gln>0614141000012</gln>
              </contentOwner>
            </entityIdentification>
          </documentCommandHeader>
          <documentCommandOperand>
            <eanucc:catalogueItemNotification contentVersion="1.0"
documentStructureVersion="1.3" lastUpdateDate="2003-03-21" creationDate="2003-03-
21T09:30:47-05:00" documentStatus="ORIGINAL" isReload="false">
              <catalogueItem>
                <catalogueItemState state="IN_PROGRESS"/>
                <tradeItem>
                  <tradeItemUnitDescriptor>CASE</tradeItemUnitDescriptor>
                  <tradeItemIdentification>
                    <gtin>61414100000012</gtin>
                  </tradeItemIdentification>
                  <replacedTradeItemIdentification>
```



```

        <installmentDue>
        <percentageOfPaymentDue>3.14</percentageOfPaymentDue>
        <paymentTimePeriod>
        <timePeriodDue
timePeriod="DAYS"><value>30</value></timePeriodDue>
        </paymentTimePeriod>
        </installmentDue>
        <discountPayment discountType="PRE">
        <discountDescription>
        <description language="EN">
        <text>Discounted to preferred customers.</text>
        </description>
        </discountDescription>
        <paymentTimePeriod>
        <timePeriodDue
timePeriod="DAYS"><value>30</value></timePeriodDue>
        </paymentTimePeriod>
        </discountPayment>
        <proximoCutOffDay>
        <value>30</value>
        </proximoCutOffDay>
        </paymentTerms >
        <targetMarketInformation>
        <targetMarketCountryCode>123</targetMarketCountryCode>
        <targetMarketDescription language="EN">
        <text>France, Auvergne</text>
        </targetMarketDescription>

        <targetMarketSubdivisionCode>ABCDEFG</targetMarketSubdivisionCode>
        </targetMarketInformation>
        <classificationCategoryCode>
        <classificationCategoryCode>1000222</classificationCategoryCode>
        <classificationCategoryDefinition>Includes any products that can be non-
perishable, carbonated beverages that has etc...</classificationCategoryDefinition>
        <classificationCategoryName>Juice Drinks
(perishable)</classificationCategoryName>
        <eANUCCTradeItemClassification>

        <eANUCCClassificationAttributeTypeCode>20000345</eANUCCClassificationAttributeT
ypeCode>
        <eANUCCClassificationAttributeTypeName>Carbonated non alcoholic
beverage</eANUCCClassificationAttributeTypeName>
        <eANUCCClassificationAttributeTypeDefinition>Includes any product that
can be described as non-perishable, carbonated beverages that has
etc...</eANUCCClassificationAttributeTypeDefinition>
        <eANUCCTradeItemClassificationValue>

        <eANUCCClassificationAttributeValueCode>155</eANUCCClassificationAttributeValueC
ode>

        <eANUCCClassificationAttributeValueName>Drinks</eANUCCClassificationAttributeValu
eName>
        </eANUCCTradeItemClassificationValue>
        </eANUCCTradeItemClassification>
        </classificationCategoryCode>
        <tradeItemDescriptionInformation>

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<brandName>Yummy-Cola</brandName>
<descriptionShort>
  <description language="EN">
    <text>Liters</text>
  </description>
</descriptionShort>
<functionalName>
  <description language="EN">
    <text>Drink</text>
  </description>
</functionalName>
<tradelItemDescription>
  <longDescription language="EN">
    <longText>Yummy-Cola Classic Diet</longText>
  </longDescription>
</tradelItemDescription>
<additionalTradelItemDescription>
  <longDescription language="EN">
    <longText>Yummy-Cola Lemon scented big size</longText>
  </longDescription>
</additionalTradelItemDescription>
<invoiceName>
  <description language="EN">
    <text>Yummy-Cola Classic Diet</text>
  </description>
</invoiceName>
<productRange>Waist Watchers</productRange>
<subBrand>Classic</subBrand>

<tradelItemGroupIdentificationCode>033200011101</tradelItemGroupIdentificationCode>
<tradelItemGroupIdentificationDescription>
  <description language="EN">
    <text>Yummy-Cola Classic</text>
  </description>
</tradelItemGroupIdentificationDescription>
<tradelItemFormDescription>Liquid</tradelItemFormDescription>
<variant>
  <description language="EN">
    <text>Lemon</text>
  </description>
</variant>
</tradelItemDescriptionInformation>
<tradingPartnerNeutralTradelItemInformation>
<tradelItemUnitIndicator>
  <isTradelItemABaseUnit>1</isTradelItemABaseUnit>
  <isTradelItemAConsumerUnit>1</isTradelItemAConsumerUnit>
  <isTradelItemADespatchUnit>0</isTradelItemADespatchUnit>
  <isTradelItemAnInvoiceUnit>0</isTradelItemAnInvoiceUnit>
  <isTradelItemAnOrderableUnit>0</isTradelItemAnOrderableUnit>
  <isTradelItemAVariableUnit>0</isTradelItemAVariableUnit>
</tradelItemUnitIndicator>

<barCodeType>RSS_14_STACKED_OMNIDIRECTIONAL</barCodeType>
<brandOwnerOfTradelItem>
  <brandOwner>
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```

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        </brandOwner>
        <nameOfBrandOwner>ACME Drinks</nameOfBrandOwner>
    </brandOwnerOfTradeItem>
    <manufacturerOfTradeItem>
        <manufacturer>
            <gln>0012345000065</gln>
        </manufacturer>
        <nameOfManufacturer>ACME Drinks</nameOfManufacturer>
    </manufacturerOfTradeItem>
    <materialSafetyData>

    <materialSafetyDataSheetNumber>ag34784</materialSafetyDataSheetNumber>
    </materialSafetyData>
    <organicTradeItemCharacteristics>
        <organicClaimAgency>XYX Agency</organicClaimAgency>
        <organicTradeItemCode>05</organicTradeItemCode>
    </organicTradeItemCharacteristics>
    <packagingMarking>
        <isPackagingMarkedAsRecyclable>1</isPackagingMarkedAsRecyclable>
        <isPackagingMarkedReturnable>0</isPackagingMarkedReturnable>

    <isPackagingMarkedWithExpirationDate>1</isPackagingMarkedWithExpirationDate>

    <isPackagingMarkedWithGreenDot>1</isPackagingMarkedWithGreenDot>

    <isPackagingMarkedWithIngredients>1</isPackagingMarkedWithIngredients>
    </packagingMarking>
    <packagingMaterial>
        <packagingMaterialCode>GL</packagingMaterialCode>

    <packagingMaterialCodeListMaintenanceAgency>String</packagingMaterialCodeListMai
ntenanceAgency>
        <packagingMaterialCompositionQuantity>
            <measurementValue unitOfMeasure="g">15</measurementValue>
        </packagingMaterialCompositionQuantity>
        <packagingMaterialDescription>
            <description language="EN">
                <text>Glass</text>
            </description>
        </packagingMaterialDescription>
        <packagingTermsAndCondition>707</packagingTermsAndCondition>
    </packagingMaterial>
    <packagingType>
        <packagingTypeCode>123</packagingTypeCode>
        <packagingTypeDescription>Bottle</packagingTypeDescription>
    </packagingType>
    <priceOnTradeItem>
        <retailPriceOnTradeItem
currencyISOCode="EUR">36</retailPriceOnTradeItem>
    </priceOnTradeItem>
    <tradeItemColorDescription>
        <colorCodeListAgency>PTO</colorCodeListAgency>
        <colorCodeValue>PMS</colorCodeValue>
        <colorDescription>
            <description language="EN">
                <text>Dark burgandy</text>

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</description>
</colorDescription>
</tradeItemColorDescription>
<tradeItemCountryOfOrigin>
  <countryOfOrigin>CA</countryOfOrigin>
</tradeItemCountryOfOrigin>
<tradeItemCoupon>
  <couponFamilyCode>513</couponFamilyCode>
</tradeItemCoupon>
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  <lastChangeDateTime>2002-11-20T12:00:00</lastChangeDateTime>
  <publicationDate>2003-01-10</publicationDate>
  <startAvailabilityDateTime>2003-01-
15T12:00:00</startAvailabilityDateTime>
  <canceledDate>2002-10-05</canceledDate>
  <consumerAvailabilityDateTime>2001-12-17T09:30:47-
05:00</consumerAvailabilityDateTime>
  <discontinuedDate>2003-12-18</discontinuedDate>
  <endAvailabilityDateTime>2003-12-
15T12:00:00</endAvailabilityDateTime>
</tradeItemDateInformation>
<tradeItemHandlingInformation>
  <handlingInstructionsCode>
    <description language="EN">
      <text>DFN</text>
    </description>
  </handlingInstructionsCode>

<minimumTradeItemLifespanFromTimeOfArrival>35</minimumTradeItemLifespanFromTi
meOfArrival>
  <stackingFactor>2</stackingFactor>
  <stackingWeightMaximum>
    <measurementValue unitOfMeasure="kg">500</measurementValue>
  </stackingWeightMaximum>
</tradeItemHandlingInformation>
<tradeItemHierarchy>

<quantityOfCompleteLayersContainedInATradeItem>3</quantityOfCompleteLayersConta
inedInATradeItem>
  <quantityOfLayersPerPallet>5</quantityOfLayersPerPallet>

<quantityOfTradeItemsContainedInACompleteLayer>20</quantityOfTradeItemsContaine
dInACompleteLayer>
  <quantityOfTradeItemsPerPallet>100</quantityOfTradeItemsPerPallet>

<quantityOfTradeItemsPerPalletLayer>20</quantityOfTradeItemsPerPalletLayer>
  <quantityOfInnerPack>2</quantityOfInnerPack>

<quantityOfNextLevelTradeItemWithinInnerPack>6</quantityOfNextLevelTradeItemWithi
nInnerPack>
  </tradeItemHierarchy>
<tradeItemMarking>
  <hasBatchNumber>1</hasBatchNumber>
  <isNonSoldTradeItemReturnable>1</isNonSoldTradeItemReturnable>
  <isTradeItemMarkedAsRecyclable>1</isTradeItemMarkedAsRecyclable>
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</tradeItemMarking>
<tradeItemMeasurements>
  <depth>
    <measurementValue unitOfMeasure="cm">10.2</measurementValue>
  </depth>
  <grossWeight>
    <measurementValue unitOfMeasure="lb">800</measurementValue>
  </grossWeight>
  <height>
    <measurementValue unitOfMeasure="cm">25</measurementValue>
  </height>
</tradeItemMeasurements>
<isNetContentDeclarationIndicated>0</isNetContentDeclarationIndicated>
<width>
  <measurementValue unitOfMeasure="cm">18</measurementValue>
</width>
<diameter>
  <measurementValue unitOfMeasure="cm">50.6</measurementValue>
</diameter>
<drainedWeight>
  <measurementValue unitOfMeasure="g">225</measurementValue>
</drainedWeight>
<genericIngredient>Paracetamol</genericIngredient>
<genericIngredientStrength>
  <measurementValue unitOfMeasure="mg">15</measurementValue>
</genericIngredientStrength>
<ingredientStrength>15 mg</ingredientStrength>
<netWeight>
  <measurementValue unitOfMeasure="lb">300</measurementValue>
</netWeight>
<pegHorizontal>
  <measurementValue unitOfMeasure="cm">17</measurementValue>
</pegHorizontal>
<pegVertical>
  <measurementValue unitOfMeasure="cm">15</measurementValue>
</pegVertical>
</tradeItemMeasurements>
<tradeItemOrderInformation>
  <orderingLeadTime unitOfMeasure="d">3</orderingLeadTime>
  <orderQuantityMaximum>5000</orderQuantityMaximum>
  <orderQuantityMinimum>2500</orderQuantityMinimum>
  <orderQuantityMultiple>100</orderQuantityMultiple>
  <orderSizingFactor>
    <measurementValue unitOfMeasure="cm">15</measurementValue>
  </orderSizingFactor>
</tradeItemOrderInformation>
<tradeItemPalletInformation>
  <palletTypeCode>201</palletTypeCode>
  <palletTermsAndConditions>7E</palletTermsAndConditions>
</tradeItemPalletInformation>
<cataloguePrice>
  <effectiveStartDate>2002-11-15</effectiveStartDate>
  <value currencyISOCode="EUR">350</value>
  <effectiveEndDate>2003-06-15</effectiveEndDate>
</cataloguePrice>
<suggestedRetailPrice>
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<effectiveStartDate>2002-11-15</effectiveStartDate>
<value currencyISOCode="USD">280</value>
<effectiveEndDate>2003-06-15</effectiveEndDate>
</suggestedRetailPrice>
<tradeItemSizeDescription>
  <sizeCodeListAgency>EDI</sizeCodeListAgency>
  <sizeCodeValue>36X</sizeCodeValue>
  <descriptiveSize language="EN">
    <text>Maxi</text>
  </descriptiveSize>
</tradeItemSizeDescription>
<tradeItemTaxInformation>
  <tradeItemTaxAmount>
    <taxAmount currencyISOCode="USD">6</taxAmount>
    <taxAgency>
      <taxAgencyCode>X1</taxAgencyCode>
      <taxTypeCode>21233403910392</taxTypeCode>
      <taxTypeDescription>VAT</taxTypeDescription>
    </taxAgency>
  </tradeItemTaxAmount>
</tradeItemTaxInformation>
<tradeItemTemperatureInformation>
  <deliveryToDistributionCenterTemperatureMaximum>
    <measurementValue unitOfMeasure="FAH">60</measurementValue>
  </deliveryToDistributionCenterTemperatureMaximum>
  <deliveryToDistributionCenterTemperatureMinimum>
    <measurementValue unitOfMeasure="FAH">54</measurementValue>
  </deliveryToDistributionCenterTemperatureMinimum>
  <deliveryToMarketTemperatureMaximum>
    <measurementValue unitOfMeasure="FAH">60</measurementValue>
  </deliveryToMarketTemperatureMaximum>
  <deliveryToMarketTemperatureMinimum>
    <measurementValue unitOfMeasure="FAH">54</measurementValue>
  </deliveryToMarketTemperatureMinimum>
  <storageHandlingTemperatureMaximum>
    <measurementValue unitOfMeasure="FAH">60</measurementValue>
  </storageHandlingTemperatureMaximum>
  <storageHandlingTemperatureMinimum>
    <measurementValue unitOfMeasure="FAH">54</measurementValue>
  </storageHandlingTemperatureMinimum>
</tradeItemTemperatureInformation>
</tradingPartnerNeutralTradeItemInformation>
</tradeItemInformation>
</tradeItem>
<sourceDataPool>0712345000002</sourceDataPool>
</catalogueItem>
<catalogueItemNotificationIdentification>
  <uniqueCreatorIdentification>CIN-12345</uniqueCreatorIdentification>
  <contentOwner>
    <gln>0012345000003</gln>
  </contentOwner>
</catalogueItemNotificationIdentification>
</eanucc:catalogueItemNotification>
</documentCommandOperand>
</eanucc:documentCommand>
</command>
```

```
</eanucc:transaction>  
</body>  
</eanucc:envelope>
```

Catalogue Item Publication

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="../../4_XSL/Main.xsl"?>
<!-- This is a sample file-->
<eanucc:envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:eanucc="http://www.ean-ucc.org/schemas/1.3/eanucc"
xsi:schemaLocation="http://www.ean-ucc.org/schemas/1.3/eanucc
../2_XSD_PROXY/CatalogueItemPublicationProxy.xsd" communicationVersion="1.3">
  <messageHeader creationDate="2001-08-02T12:00:00">
    <userId>OJGROWER-12345</userId>
    <password>SECRET</password>
    <messageIdentifier>MSG-123</messageIdentifier>
    <to>
      <gln>0012345000065</gln>
    </to>
    <from>
      <gln>0614141000012</gln>
    </from>
    <representingParty>
      <gln>0012345000065</gln>
    </representingParty>
  </messageHeader>
  <body>
    <eanucc:transaction>
      <entityIdentification>
        <uniqueCreatorIdentification>OJGROWER-TRANS-
12345</uniqueCreatorIdentification>
        <contentOwner>
          <gln>0614141000012</gln>
        </contentOwner>
      </entityIdentification>
      <command>
        <eanucc:documentCommand>
          <documentCommandHeader type="ADD">
            <entityIdentification>
              <uniqueCreatorIdentification>OJGROWER-ITEM-
12345</uniqueCreatorIdentification>
              <contentOwner>
                <gln>0614141000012</gln>
              </contentOwner>
            </entityIdentification>
          </documentCommandHeader>
          <documentCommandOperand>
            <eanucc:catalogueItemPublication contentVersion="1.0"
documentStructureVersion="1.3" lastUpdateDate="2003-03-22" creationDate="2003-03-
22T09:30:47-05:00" documentStatus="ORIGINAL">
              <catalogueItemReference>
                <gtin>00614141000012</gtin>
                <dataSource>0012345000003</dataSource>
                <targetMarket>
                  <targetMarketCountryCode>123</targetMarketCountryCode>
                  <targetMarketSubdivisionCode>ABCDEF</targetMarketSubdivisionCode>
                </targetMarket>
              </catalogueItemReference>
            </documentCommandOperand>
          </eanucc:documentCommand>
        </command>
      </entityIdentification>
    </transaction>
  </body>
</eanucc:envelope>
```

```
</catalogueItemReference>
<catalogueItemPublicationIdentification>
  <uniqueCreatorIdentification>CIP-12345</uniqueCreatorIdentification>
  <contentOwner>
    <gln>0012345000003</gln>
  </contentOwner>
</catalogueItemPublicationIdentification>
<publishToTargetMarket>
  <targetMarketCountryCode>123</targetMarketCountryCode>
  <targetMarketSubdivisionCode>ABCDEFG</targetMarketSubdivisionCode>
</publishToTargetMarket>
</eanucc:catalogueItemPublication>
</documentCommandOperand>
</eanucc:documentCommand>
</command>
</eanucc:transaction>
</body>
</eanucc:envelope>
```

Catalogue Item Confirmation

```

<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="../../4_XSL/Main.xsl"?>
<!-- This is a sample file-->
<eanucc:envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:eanucc="http://www.ean-ucc.org/schemas/1.3/eanucc"
xsi:schemaLocation="http://www.ean-ucc.org/schemas/1.3/eanucc
../2_XSD_PROXY/CatalogueItemConfirmationProxy.xsd" communicationVersion="1.3">
  <messageHeader creationDate="2001-08-02T12:00:00">
    <userId>OJGROWER-12345</userId>
    <password>SECRET</password>
    <messageIdentifier>MSG-123</messageIdentifier>
    <to>
      <gln>0012345000065</gln>
    </to>
    <from>
      <gln>0614141000012</gln>
    </from>
    <representingParty>
      <gln>0012345000065</gln>
    </representingParty>
  </messageHeader>
  <body>
    <eanucc:transaction>
      <entityIdentification>
        <uniqueCreatorIdentification>OJGROWER-TRANS-
12345</uniqueCreatorIdentification>
        <contentOwner>
          <gln>0614141000012</gln>
        </contentOwner>
      </entityIdentification>
      <command>
        <eanucc:documentCommand>
          <documentCommandHeader type="ADD">
            <entityIdentification>
              <uniqueCreatorIdentification>OJGROWER-ITEM-
12345</uniqueCreatorIdentification>
              <contentOwner>
                <gln>0614141000012</gln>
              </contentOwner>
            </entityIdentification>
          </documentCommandHeader>
          <documentCommandOperand>
            <eanucc:catalogueItemConfirmation contentVersion="1.0"
documentStructureVersion="1.3" lastUpdateDate="2003-03-22" creationDate="2003-03-
22T09:30:47-05:00" documentStatus="ORIGINAL">
              <catalogueItemConfirmationIdentification>
                <uniqueCreatorIdentification>CIC-12345</uniqueCreatorIdentification>
                <contentOwner>
                  <gln>0814141000009</gln>
                </contentOwner>
              </catalogueItemConfirmationIdentification>
              <catalogueItemReference>
                <gtin>00614141000012</gtin>
                <dataSource>0012345000003</dataSource>

```

```
<targetMarket>
  <targetMarketCountryCode>123</targetMarketCountryCode>
  <targetMarketSubdivisionCode>ABCDEFG</targetMarketSubdivisionCode>
</targetMarket>
</catalogueItemReference>
<catalogueItemConfirmationState state="ACCEPTED">
  <recipientDataPool>0812345000009</recipientDataPool>
  <recipientGLN>0814141000009</recipientGLN>
</catalogueItemConfirmationState>
</eanucc:catalogueItemConfirmation>
</documentCommandOperand>
</eanucc:documentCommand>
</command>
</eanucc:transaction>
</body>
</eanucc:envelope>
```

Data Synchronisation Data Pool Profile

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="../../4_XSL/Main.xsl"?>
<!-- This is a sample file-->
<eanucc:envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:eanucc="http://www.ean-ucc.org/schemas/1.3/eanucc" xsi:schemaLocation="http://www.ean-ucc.org/schemas/1.3/eanucc ../2_XSD_PROXY/DataSynchronisationDataPoolProfileProxy.xsd"
  communicationVersion="1.3">
  <messageHeader creationDate="2001-08-02T12:00:00">
    <userId>OJGROWER-12345</userId>
    <password>SECRET</password>
    <messageIdentifier>MSG-123</messageIdentifier>
    <to>
      <gln>0012345000065</gln>
    </to>
    <from>
      <gln>0614141000012</gln>
    </from>
    <representingParty>
      <gln>0012345000065</gln>
    </representingParty>
  </messageHeader>
  <body>
    <eanucc:transaction>
      <entityIdentification>
        <uniqueCreatorIdentification>OJGROWER-TRANS-12345</uniqueCreatorIdentification>
        <contentOwner>
          <gln>0614141000012</gln>
        </contentOwner>
      </entityIdentification>
      <command>
        <eanucc:documentCommand>
          <documentCommandHeader type="ADD">
            <entityIdentification>
              <uniqueCreatorIdentification>OJGROWER-ITEM-12345</uniqueCreatorIdentification>
              <contentOwner>
                <gln>0614141000012</gln>
              </contentOwner>
            </entityIdentification>
          </documentCommandHeader>
          <documentCommandOperand>
            <eanucc:dataSynchronisationDataPoolProfile contentVersion="1.0"
              documentStructureVersion="1.3" lastUpdateDate="2002-03-21" creationDate="2002-03-21T07:30:47-05:00"
              documentStatus="ORIGINAL" startAvailabilityDate="2003-03-22T09:30:47-05:00"
              endAvailabilityDate="2004-03-22T09:30:47-05:00" electronicAddress="www.datapool.com">
                <dataPoolCertificationInformation certificationStartDate="2003-03-22T09:30:47-05:00"
                  certificationExpirationDate="2004-03-22T09:30:47-05:00" certificationStatus="CERTIFIED"
                  certificationIdentification="0000001" certificationBody="eBusinessReady"/>
                <dataPoolNameAndAddress>
                  <city>Virtual City</city>
                  <countryISOCode>US</countryISOCode>
                  <languageOfTheParty>EN</languageOfTheParty>
                  <name>VERY FIRST DATA POOL</name>
                  <currency>USD</currency>
                  <postalCode>49684</postalCode>
                  <state>MI</state>
                  <streetAddressOne>123 Main St.</streetAddressOne>
                  <streetAddressTwo>Apt 5</streetAddressTwo>
                </dataPoolNameAndAddress>
                <dataPoolGLN>0712345000002</dataPoolGLN>
                <dataPoolProfileIdentification>
                  <uniqueCreatorIdentification>DSDPP-12345</uniqueCreatorIdentification>
                  <contentOwner>
```

```
<gln>0712345000002</gln>
</contentOwner>
</dataPoolProfileIdentification>
</eanucc:dataSynchronisationDataPoolProfile>
</documentCommandOperand>
</eanucc:documentCommand>
</command>
</eanucc:transaction>
</body>
</eanucc:envelope>
```


Data Synchronisation Error

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="../../4_XSL/Main.xsl"?>
<!-- This is a sample file-->
<eanucc:envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:eanucc="http://www.ean-ucc.org/schemas/1.3/eanucc" xsi:schemaLocation="http://www.ean-ucc.org/schemas/1.3/eanucc ../2_XSD_PROXY/DataSynchronisationErrorProxy.xsd"
  communicationVersion="1.3">
  <messageHeader creationDate="2001-08-02T12:00:00">
    <userId>OJGROWER-12345</userId>
    <password>SECRET</password>
    <messageIdentifier>MSG-123</messageIdentifier>
    <to>
      <gln>0012345000065</gln>
    </to>
    <from>
      <gln>0614141000012</gln>
    </from>
    <representingParty>
      <gln>0012345000065</gln>
    </representingParty>
  </messageHeader>
  <body>
    <eanucc:dataSynchronisationError>
      <dataSynchronisationErrorInformation errorNumber="401" errorName="GTIN ALREADY
REGISTERED"/>
      <dataSynchronisationErrorReference>
        <gTIN>00614141000012</gTIN>
      </dataSynchronisationErrorReference>
    </eanucc:dataSynchronisationError>
  </body>
</eanucc:envelope>
```