

# **Business Message Standard (BMS)**

**for**

**Align, ITRG, Order & Plan  
/Application Receipt Acknowledge-  
ment**

**BRG: Align, ITRG, Order & Plan**

**BMS Release: 2.0**

**Document Version: 1.0.1**

**Release Date: 31.12.2004**



### Change Request Reference

<b>Refer to Change Request (CR) Number(s):</b>	02-000134 & 03-000175
<b>CR Submitter(s):</b>	Drummond Group & Singapore Article Number Council
<b>Date of CR Submission to GSMP:</b>	20020702 & 20031116

### Business Requirements Document (BRAD) Reference

<b>BRAD Title: BRD Application Receipt Acknowledgement – Business Requirements Document</b>
<b>BRAD Date: 6.12.2004</b>
<b>BRAD Version: 0.41.2</b>

### Document Summary

<b>Document Title:</b>	BMS for Align, ITRG, Order & Plan/Application Receipt Acknowledgement
<b>Document Version</b>	1.0.1
<b>Owner:</b>	Align, ITRG, Order and Plan BRGs
<b>Status:</b>	(Check one box) <input type="checkbox"/> DRAFT <input checked="" type="checkbox"/> Approved
<b>BMS Template Version:</b>	1.0
<b>Targeted BMS Publication Version</b>	2.0

### Document Change History

*Note: During development include revisions in history. Upon Approval, eliminate revisions and include only delta from previous version.*

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
31.12.2004	1.0.0	John Ryu	Initial Version in BMS/BSD template	Migration of BRD to standard BMS/BSD format	N/A
23.04.2007	1.0.1	Giovanni Biffi	Editorial Changes	Minor Editorial Changes to the Document	N/A

# Business Message Standard

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## Table of contents

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Chapter	Page
<b>1 Business Solution .....</b>	<b>1</b>
1.1 Business Domain View.....	1
1.1.1 Problem Statement / Business Need.....	1
1.1.2 Objective.....	1
1.1.3 Audience.....	1
1.1.4 Artefacts .....	2
1.1.5 References .....	3
1.1.6 Acknowledgements .....	4
1.1.6.1 BRG Members.....	4
1.1.6.2 Task/Project Group Participants ( <i>where applicable</i> ) .....	5
1.1.6.3 Design Team Members .....	6
1.2 Business Context .....	7
1.3 Additional Technical Requirements Analysis .....	7
1.3.1 Technical Requirements (optional).....	7
1.4 Business Transaction View .....	8
1.4.1 Business Transaction Use Case Diagram.....	8
1.4.2 Use Case Description.....	8
1.4.3 Business Transaction Activity Diagram(s).....	11
1.4.4 Business Transaction Sequence Diagram(s) (optional) .....	11
1.5 Information Model (including GDD Report) .....	12
1.5.1 Data Description: .....	12
1.5.2 GDD Report : .....	17
1.5.3 Class Diagrams .....	39
1.5.4 Code Lists.....	40
1.6 Business Document Example .....	44
1.7 Implementation Considerations.....	45
1.8 Testing.....	48
1.8.1 Pass / Fail Criteria .....	48
1.8.2 Test Data .....	49
1.9 Appendices.....	49
1.10 Summary of Changes.....	49
<b>2 XML Technical Solution ITRG Packet.....</b>	<b>50</b>

### 1 Business Solution

#### 1.1 Business Domain View

##### 1.1.1 Problem Statement / Business Need

To ensure a reliable flow of information between companies, Business Managers must be assured that their trading partners receive EAN.UCC Messages and are able to process them without error. The EAN.UCC Simple-eb specification calls for the full choreography of messages to support business processes.

For example, the Order process calls for an Initiator to create an Order document and a need to know it was received prior to back end processing by the Responder's business application. This is what we mean by The Responder will create an Application Receipt Acknowledgement And Or ErrorApplication Receipt Acknowledgement document for the Initiator to confirm that the Responder received the Order document. This BRD does not deal with the additional separate need for a business level Response (Acceptance, Modification, or Rejection) to an Order. So, for example, the Application Receipt Acknowledgement (ARA) for an Order would not indicate that the Responder plans to fulfill the order exactly as requested by the Initiator e.g. with respect to quantity, price, etc. Rather the ARA indicates receipt of the order document and optionally detection of errors or warnings.

This choreography or, conversation ensures that trading partners are aware that the process is progressing in a predictable fashion. A proper automated choreography allows trading partners to reduce expensive safeguards and manual checks, to recognize data receipt and errors quickly, and therefore smooth the flow of goods and services through the supply chain.

##### 1.1.2 Objective

To supply the detail design of the Application Acknowledgement Receipt Acknowledgement business transaction needed to meet the requirements of the referenced BRAD(s).

##### 1.1.3 Audience

**Initiator** – organization responsible for generating and sending an EAN.UCC Business Message.

**Responder** – organization that receives and processes an EAN.UCC Business Message. This organization is also responsible for creating an XML Application Receipt Acknowledgement And Or ErrorApplication Receipt Acknowledgement in reply to the received EAN.UCC Business Message when applicable. A Responder may out-source to an Agent to act on their behalf.

## Business Solution Design

### 1.1.4 Artefacts

(List of the artefacts that are used as either an input to the process or an output from the process, also indicating the different states that the artefact takes during the process.)

Artefact name	Artefact description
Scope Of Application Receipt Acknowledgement	This document resulted from a number of ecGIF, GDSN, and Order working sessions that focused on the scope and objectives of this project. This Word document may be found in the EAN.UCC eRoom (my eRooms > eCommerce Global Implementation Forum (ecGIF) > Sub - Teams > XML Error Response Message > Working Documents). The document's filename is <i>Application_Receipt_Acknowledgement_v40.doc</i> .
ASC X12 EDI 824 Application Advice	This document specifies a parallel standard for application responses in EDI X12. This PDF document may be found in the EAN.UCC eRoom (my eRooms > eCommerce Global Implementation Forum (ecGIF) > Sub - Teams > XML Error Response Message > Working Documents). The document's filename is <i>UCS824.pdf</i> .
EANCOM Version 001 98-07-01 APPLICATION ERROR AND ACKNOWLEDGEMENT MESSAGE (APERAK)	This document specifies a parallel standard for application responses in EANCOM EDI. This PDF document may be found in the EAN.UCC eRoom (my eRooms > eCommerce Global Implementation Forum (ecGIF) > Sub - Teams > XML Error Response Message > Working Documents). The document's filename is <i>EANCOM_APERAK.pdf</i> .
EAN.UCC Error Handling Presentation	This presentation describes the original change requests' objectives requirements that prompted this initiative. This PowerPoint document may be found in the EAN.UCC eRoom (my eRooms > eCommerce Global Implementation Forum (ecGIF) > Sub - Teams > XML Error Response Message > Working Documents). The document's filename is <i>Error Handling.ppt</i> .
Signals Architecture Documents	This collection of documents cover a similar work effort undertaken by the EAN.UCC community in CPFR & Architecture. The five documents that cover the Signals Architecture may be found in the EAN.UCC eRoom (my eRooms > eCommerce Global Implementation Forum (ecGIF) > Sub - Teams > XML Error Response Message > Working Documents > Signals Architecture Documents). The documents' filenames are <i>DRAFT_CPFR_v1.0_with_Signals_Architecture_model_HTML.zip</i> , <i>DRAFT_CPFR_v1.0_with_Signals_Architecture_schemas.zip</i> , <i>Draft_Signals Flow.pdf</i> , <i>EAN.UCC_Signals_proposed_Architecture.pdf</i> , <i>Signals_Architecture_definitions.pdf</i> .
Sample Activity Sequence Diagram	This document was prepared by Anders Grangard of Gencod to acquaint the ecGIF team on how to develop sequence activity diagrams for use on this project. This Word document may be found in the EAN.UCC eRoom (my eRooms > eCommerce Global Implementation Forum (ecGIF) > Sub - Teams > XML Error Response Message > Working Documents). The document's filename is <i>SampleActivitySequence.doc</i> .

## Business Solution Design

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XML Error Response Data Flow	This diagram illustrates the intended data flow for the XML Errors and Advice Message and was used for conversational purposes during ecGIF working sessions. This PowerPoint document may be found in the EAN.UCC eRoom (my eRooms > eCommerce Global Implementation Forum (ecGIF) > Sub - Teams > XML Error Response Message > Working Documents). The document's filename is <i>XML_Error_Data_Flow.ppt</i> .
<b>Order Acknowledgement Business Requirements (BRD) Document</b>	
<b>GDSN Business Requirements (BRD) Document</b>	
<b>Plan Implementation Guide Document</b>	
<b>Change Requests from Plan BRG</b>	EAN.UCC Change Requests: 02-000134 & 03-000175

### 1.1.5 References

Reference Name	Description
N/A	N/A

## Business Solution Design

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### 1.1.6 Acknowledgements

*(List of the individuals—and their companies—who participated in the creation, review and approval of this BMS.)*

#### 1.1.6.1 BRG Members

Function	Name	Company / Organisation
BRG Chair	Carol Edison (carol.edison@genmills.com)	General Mills, Inc.
BRG Member	Atkins, Mickey (matkins@aholdusa.com)	Ahold Information Services
BRG Member	Dodd, Marilyn (mododd@mmm.com)	3M Company
BRG Member	Flaten, Pam (pam.flaten@target.com)	Target Corporation
BRG Member	Flint, Don (Donald.flint@chep.com)	CHEPS
BRG Member	Grangard, Anders (agrangard@gencod-ean.fr)	GENCOD EAN France
BRG Member	Hervey, John (jhervey@nacsonline.com)	National Association of Convenience Stores (NACS)
BRG Member	Jennings, Jim (jennings.jf.1@pg.com)	Procter and Gamble Company
BRG Member	Kallenbach, Joy (joy.kallenbach@bestbuy.com)	Best Buy Company, Inc.
BRG Member	Kambayashi, Takashi (Takashi.kambayashi@ulsystems.co.jp)	Kasumi Co., Ltd.
BRG Member	Laur, Rita (rital@eccc.org)	ECCC
BRG Member	Lu, Marisa (Marisalu@eantaiwan.org.tw)	EAN Taiwan
BRG Member	Maxwell, Chris (chris.k.Maxwell@fritolay.com)	Pepsi Co.
BRG Member	Miller, Marvin (marvin.miller@unilever.com)	Unilever Home & Personal Care NA
BRG Member	Quigley, Rebecca (rquigley@na.cokecce.com)	Coca-Cola Enterprises
BRG Member	Repec, Craig Alan (repec@ccg.de)	CCG
BRG Member	Schroeder, Robert (rschroed@jcpenny.com)	JCPenney Co, Inc.
BRG Member	Suen, K. K (kksuen@hkana.org)	Hong Kong Article Numbering Assn
BRG Member	Vavrick, Terry (tvavrick@hersheys.com)	Hershey Foods Corporation
BRG Member	Westerkamp, Jan (jwesterkamp@ean.nl)	EAN Nederland

## Business Solution Design

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### ITRG Members

Function	Name	Company / organisation
ITRG Chair		
ITRG Member		
ITRG Member		
ITRG Member		
...		

### 1.1.6.2 Task/Project Group Participants (*where applicable*)

Function	Name	Company / Organisation
Participant	Aronowitz, Eric (earonow@kcc.com)	Kimberly-Clark Corporation
Participant	Duker, John (Co-Chair) (duker.jp@pg.com)	Procter & Gamble Company
Participant	Flaten, Pam (Pam.flatten@target.com)	Target
Participant	Flint, Don (donald.flint@chep.com)	CHEP
Participant	Gorton, Matthew (mgorton@qrs.com)	QRS
Participant	Grangard, Anders (agrangard@gencod-ean.fr)	Gencod EAN France
Participant	Harness, Doug (dharness@uc-council.org)	Uniform Code Council, Inc.
Participant	Hearn, Andrew (ahearn@uc-council.org)	Uniform Code Council, Inc.
Participant	Hoang, Anthony (Co-Chair) (ahoang@wwre.org)	WWRE
Participant	Johnson, Matt (mjohanson@syncra.com)	Syncra Systems
Participant	Kartha, Neelakantan (n_kartha@stercomm.com)	Sterling Commerce, Inc.
Participant	Kudela, Melanie (mkudela@uc-council.org)	Uniform Code Council, Inc.
Participant	Meadows, Jay (jay.a.meadows@lowes.com)	Lowe's Companies Inc.
Participant	Richardson, Rich (rrichardson@uc-council.org)	Uniform Code Council, Inc.
Participant	Schwarz, Sandy (sschwarz@uc-council.org)	Uniform Code Council, Inc.
Participant	Southall, Michele (msouthall@uc-council.org)	Uniform Code Council, Inc.
Participant	Webb, Sylvia (swebb@gefeg.com)	GEFEG
Participant	Wilson, Mary (mwilson@uc-council.org)	Uniform Code Council, Inc.
Participant	Zoromski, Mary (mzoromsk@kcc.com)	Kimberly-Clark Corporation



## Business Solution Design

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### 1.1.6.3 Design Team Members

Function	Name	Organisation
Modeller	John Ryu	GS1
XML Technical Designer		
EANCOM Technical Designer		
Peer Reviewer		

# Business Solution Design

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## 1.2 Business Context

*(Note: The business context of the business)*

Context Category	Value(s)
Industry	All
Geopolitical	All
Product	All
Process	All
System Capabilities	All
Official Constraints	None

## 1.3 Additional Technical Requirements Analysis

### 1.3.1 Technical Requirements (optional)

*(User Interface, Security, Performance, Quality, etc.)*

Number	Statement	Rationale

## Business Solution Design

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### 1.4 Business Transaction View

This Business Requirement Document outlines the requirements and supporting processes for a business application level acknowledgement of the receipt of a EAN.UCC XML message and optional indication of detected validation errors or warnings. The

#### 1.4.1 Business Transaction Use Case Diagram

*Detailed Use Case for generic use of the message. Focuses on commands associated with business solution.*

*Note: Each Use Case shall be given a consecutive paragraph number (e.g., 2.4.1) and heading.)*

#### 1.4.2 Use Case Description

<b>Use Case ID</b>	UC-1										
<b>Use Case Name</b>	Initiator sending directly to a Responder										
<b>Use Case Description</b>	The Initiator sends the intended XML Instance Document (business message) within the context of a Business Process and potentially and a multi-step Collaboration. The Responder upon receiving the XML Instance Document acknowledges receipt (and optionally detects errors/warnings) at the SBDH,, Transaction, Command and/or Document hierarchical levels and responds to the message Initiator.										
<b>Actors</b>	Initiator, Responder										
<b>Preconditions</b>	The Responder receives message.										
<b>Postconditions</b>	The message Initiator receives the Application Receipt Acknowledgement, including optional error/warning message(s).										
<b>Scenario</b>	<p><b>Begins when...</b></p> <p>1. The Responder's Back End application receives an XML Instance Document (business message)</p> <p><b>Optionally continues with...</b></p> <table border="1"> <thead> <tr> <th>Step #</th> <th>Actor</th> <th>Activity Step</th> </tr> </thead> <tbody> <tr> <td>2</td> <td></td> <td>The Responder continues by fully detecting all possible errors/warnings in the business document.</td> </tr> <tr> <td>3</td> <td></td> <td>The Responder determines how they will uniquely identify the business document(s) for which errors/warnings were detected back to the Initiator.</td> </tr> </tbody> </table> <p><b>Ends when...</b></p> <p>4. The Responder generates and sends the Application Receipt Acknowledgement message back to the Initiator.</p>		Step #	Actor	Activity Step	2		The Responder continues by fully detecting all possible errors/warnings in the business document.	3		The Responder determines how they will uniquely identify the business document(s) for which errors/warnings were detected back to the Initiator.
Step #	Actor	Activity Step									
2		The Responder continues by fully detecting all possible errors/warnings in the business document.									
3		The Responder determines how they will uniquely identify the business document(s) for which errors/warnings were detected back to the Initiator.									
<b>Alternative Scenario</b>	<i>(any alternatives to the above scenario)</i> No Alternative Scenario										

## Business Solution Design

<b>Use Case ID</b>	UC-2																		
<b>Use Case Name</b>	Agreement to use the Application Receipt Acknowledgement																		
<b>Use Case Description</b>	When Trading partners agree to use the Application Receipt Acknowledgement message, they must agree what actions will be taken should Acknowledgements not be received within the normal course of business. The Trading Partners must decide whether they will enforce a <b>'Time To Acknowledge Receipt'</b> and if so, what actions will be taken if the lead time lapses before an Acknowledgement is received by the Initiator. The Trading Partners must also decide whether they will enforce the optional <b>'Is Application Error Response Requested'</b> choreography.																		
<b>Actors (Goal)</b>	Responder: To be assured that both parties understand the full process being implemented and what actions are to be taken if the expected outcome is not achieved.  Initiator: To be assured that both parties understand the full process being implemented and what actions are to be taken if the expected outcome is not achieved.																		
<b>Performance Goals</b>	None, this is a business agreement between trading partners.																		
<b>Preconditions</b>	Responder and Initiator must agree to use the Application Receipt Acknowledgement.																		
<b>Post conditions</b>	The Responder and Initiator agree on a full process that includes the Application Receipt Acknowledgement and all potential outcomes.																		
<b>Scenario</b>	<p><b>Begins when...</b></p> <p>1. The Responder and Initiator agree to use the Application Receipt Acknowledgement message.</p> <p><b>Continues with...</b></p> <table border="1"> <thead> <tr> <th>Step #</th> <th>Actor</th> <th>Activity Step</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>Initiator &amp; Responder</td> <td>Agree on the duration of the Acknowledgement Receipt Lead Time period.</td> </tr> <tr> <td>3</td> <td>Initiator &amp; Responder</td> <td>Agree whether to use the <b>'Is Application Error Response Requested'</b> choreography.</td> </tr> <tr> <td>4</td> <td>Initiator &amp; Responder</td> <td>If a Time To Acknowledge Receipt is to be enforced, they agree on the steps to be taken if an Application Receipt Acknowledgement is not received within the agreed time period.</td> </tr> <tr> <td>5</td> <td>Initiator &amp; Responder</td> <td>Agree on the steps to be taken if an Application Receipt Acknowledgement is not received.</td> </tr> <tr> <td>6</td> <td>Initiator &amp; Responder</td> <td>Agree on the steps to be taken if Errors or Warnings are detected</td> </tr> </tbody> </table> <p><b>Ends when...</b></p> <p>7. Responder and Initiator have full agreement on their process.</p>	Step #	Actor	Activity Step	2	Initiator & Responder	Agree on the duration of the Acknowledgement Receipt Lead Time period.	3	Initiator & Responder	Agree whether to use the <b>'Is Application Error Response Requested'</b> choreography.	4	Initiator & Responder	If a Time To Acknowledge Receipt is to be enforced, they agree on the steps to be taken if an Application Receipt Acknowledgement is not received within the agreed time period.	5	Initiator & Responder	Agree on the steps to be taken if an Application Receipt Acknowledgement is not received.	6	Initiator & Responder	Agree on the steps to be taken if Errors or Warnings are detected
Step #	Actor	Activity Step																	
2	Initiator & Responder	Agree on the duration of the Acknowledgement Receipt Lead Time period.																	
3	Initiator & Responder	Agree whether to use the <b>'Is Application Error Response Requested'</b> choreography.																	
4	Initiator & Responder	If a Time To Acknowledge Receipt is to be enforced, they agree on the steps to be taken if an Application Receipt Acknowledgement is not received within the agreed time period.																	
5	Initiator & Responder	Agree on the steps to be taken if an Application Receipt Acknowledgement is not received.																	
6	Initiator & Responder	Agree on the steps to be taken if Errors or Warnings are detected																	
<b>Alternative Scenario</b>	<i>(any alternatives to the above scenario)</i>  No alternative scenario.																		
<b>Related Requirements</b>	When a message is sent, the Initiator requires an answer from the Responder that the Business Message has been received.																		
<b>Related Rules</b>	<table border="1"> <thead> <tr> <th>Rule</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table>	Rule	Description																
Rule	Description																		

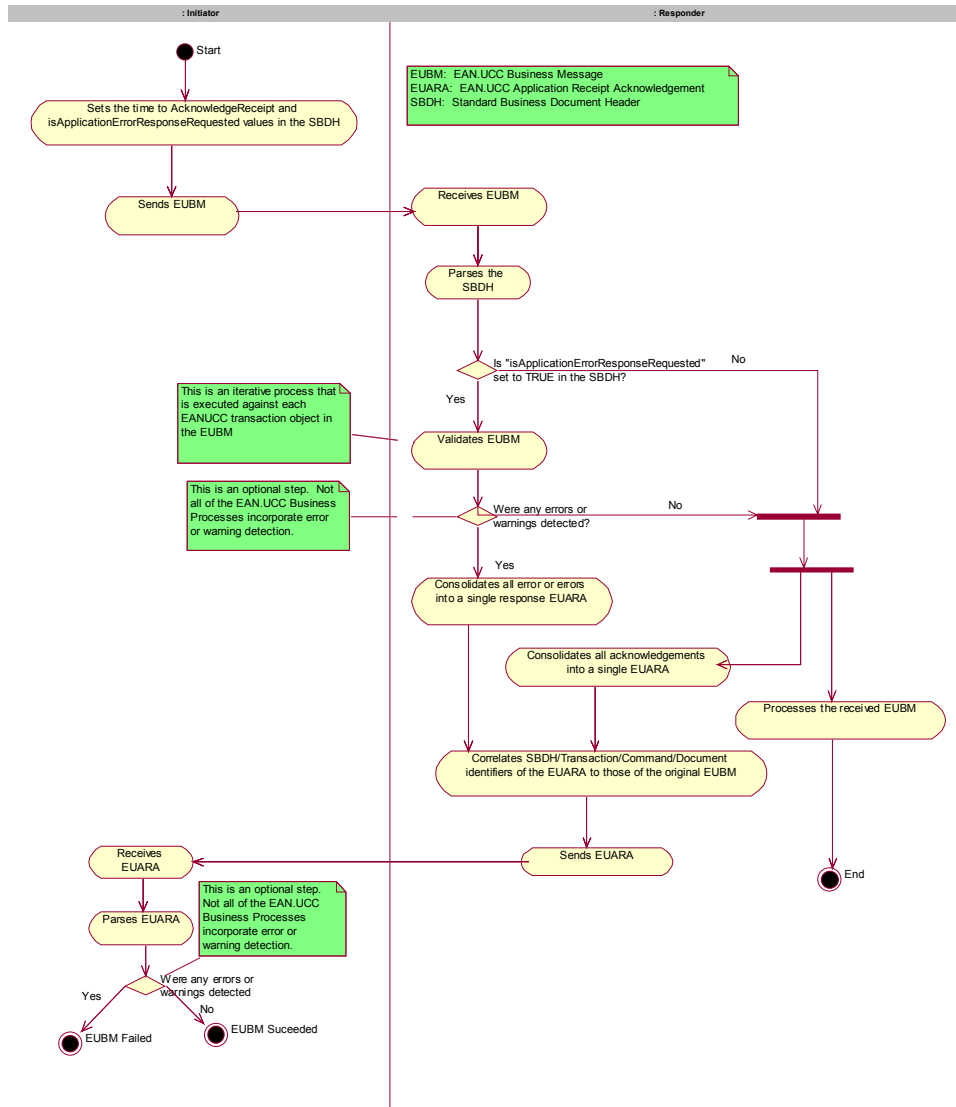
## Business Solution Design

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	1	<b>Acknowledgement Receipt Lead Time existence:</b> The Initiator and Responder must agree on an Acknowledgement Lead Time.
	2	<b>Acknowledgement Receipt Lead Time rule:</b> Prior to the lapse of the Time to Acknowledge Receipt Lead Time, the Initiator must have received the Application Receipt Acknowledgement.
	3	The Initiator and Responder <b>must</b> agree whether the Application Receipt Acknowledgement will be used in their individual collaborations.
	4	The Initiator and Responder <b>may</b> agree on specific processes to be performed should an Acknowledgement not be received within the agreed Acknowledgement Lead time.

## 1.4.3 Business Transaction Activity Diagram(s)



## 1.4.4 Business Transaction Sequence Diagram(s) (optional)

(Note: Sequence diagrams are optional. The business process modeller shall determine the use and number of sequence diagrams included. Each sequence diagram shall be given a consecutive paragraph number (e.g., 2.5.1) and heading.)

## Business Solution Design

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### 1.5 Information Model (including GDD Report)

#### 1.5.1 Data Description:

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	RELATED REQUIREMENT
ApplicationReceiptAcknowledgement				BRD Title: Application Receipt Acknowledgement BRD Version 0.41.2 BRD Date: 20041206
			CommandApplicationReceiptAcknowledgement	
			DocumentApplicationReceiptAcknowledgement	
		applicationReceiptAcknowledgementIdentification	EntityIdentification	
			SBDHApplicationReceiptAcknowledgement	
			TransactionApplicationReceiptAcknowledgement	
ApplicationReceiptAcknowledgementErrorReference				BRD Title: Application Receipt Acknowledgement BRD Version 0.41.2 BRD Date: 20041206
	attributeLocation			
	attributeName			
	attributeValue			

## Business Solution Design

CommandApplicationReceiptAcknowledgement			BRD Title: Application Receipt Acknowledgement BRD Version 0.41.2 BRD Date: 20041206
	errorCount		
	originalCommandType		
	statusType		
		DocumentApplicationReceiptAcknowledgement	
	originalEntityIdentification	EntityIdentification	
		ErrorOrWarning	
Document			BMS Title: Common Library BMS Version 2.0.0 BMS Date: 20041231
	contentVersion		
	creationDateTime		
	documentStatus		
	documentStructureVersion		
	lastUpdateDate		
DocumentApplicationReceiptAcknowledgement			BRD Title: Application Receipt Acknowledgement BRD Version 0.41.2 BRD Date: 20041206



## Business Solution Design

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	errorCount			
	originalDocumentCreationDateTime			
	originalDocumentReceivedDateTime			
	originalDocumentType			
	statusType			
			DocumentElementError	
		originalEntityIdentification	EntityIdentification	
			ErrorOrWarning	
DocumentElementError				BRD Title: Application Receipt Acknowledgement BRD Version 0.41.2 BRD Date: 20041206
	errorCount			
			ErrorOrWarning	
EntityIdentification				BMS Title: Common Library BMS Version 2.0.0 BMS Date: 20041231
	uniqueCreatorIdentification			
		contentOwner	PartyIdentification	

## Business Solution Design

ErrorOrWarning			BRD Title: Application Receipt Acknowledgement BRD Version 0.41.2 BRD Date: 20041206
	code		
		ApplicationReceiptAcknowledgementErrorReference	
	codeDescription	MultiLongDescription	
	originOfErrorOrWarning	PartyIdentification	
MultiLongDescription			BMS Title: Common Library BMS Version 2.0.0 BMS Date: 20041231
	description		
PartyIdentification			BMS Title: Common Library BMS Version 2.0.0 BMS Date: 20041231
	globalLocationNumber		
		AdditionalPartyIdentification	
SBDHApplicationReceiptAcknowledgement			BRD Title: Application Receipt Acknowledgement BRD Version 0.41.2 BRD Date: 20041206

## Business Solution Design

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	errorCount			
	statusType			
			CommandApplicationReceiptAcknowledgement	
			ErrorOrWarning	
			TransactionApplicationReceiptAcknowledgement	
TransactionApplicationReceiptAcknowledgement				BRD Title: Application Receipt Acknowledgement BRD Version 0.41.2 BRD Date: 20041206
	errorCount			
	statusType			
			CommandApplicationReceiptAcknowledgement	
		originalEntityIdentification	EntityIdentification	
			ErrorOrWarning	

## Business Solution Design

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### 1.5.2 GDD Report :

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	Official Dictionary Entry Name	Definition	Multiplicity
ApplicationReceiptAcknowledgement				Application_ Receipt Acknowledgement. Details	ApplicationReceiptAcknowledgement is a distinctive EAN.UCC Business Document used to respond to other EAN.UCC Business Messages. This document serves two key purposes. The Responder may use this distinctive document to communicate successful receipt acknowledgement of an EAN.UCC Business Document (e.g. Order, CIN, Invoice) or one of the other levels of the EAN.UCC Business Message (SBDH, Transaction, Command) back to the Initiator. Secondly, the Responder may also use this distinctive document to communicate validation exceptions back to the Initiator at the SBDH, Transaction, Command or Document levels.	
			CommandApplicationReceiptAcknowledgement	Application_ Receipt Acknowledgement. Choice_ Association. Command_ Application_ Receipt Acknowledgement	not defined	1..1
			DocumentApplicationReceiptAcknowledgement	Application_ Receipt Acknowledgement. Choice_ Association. Document_ Application_ Receipt	not defined	1..1

## Business Solution Design

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	Official Dictionary Entry Name	Definition	Multiplicity
				Acknowledgement		
		applicationReceiptAcknowledgementIdentification	EntityIdentification	Application_ Receipt Acknowledgement. Document_ Identification_ Association. Entity Identification	The ApplicationReceiptAcknowledgementIdentification is used by the Responder to uniquely identify an instance of the ApplicationReceiptAcknowledgement document back to the Initiator.	1..1
			SBDHApplicationReceiptAcknowledgement	Application_ Receipt Acknowledgement. Choice_ Association. SBDH_ Application_ Receipt Acknowledgement	not defined	1..1
			TransactionApplicationReceiptAcknowledgement	Application_ Receipt Acknowledgement. Choice_ Association. Transaction_ Application_ Receipt Acknowledgement	not defined	1..1

## Business Solution Design

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	Official Dictionary Entry Name	Definition	Multiplicity
ApplicationReceiptAcknowledgementErrorReference				Application_ Receipt Acknowledgement_ Error Reference. Details	The ApplicationReceiptAcknowledgementErrorReference is used by the Responder to communicate an exact reference to the cause of an error or warning.	
	attributeLocation			Application_ Receipt Acknowledgement_ Error Reference. Attribute_ Location. Text	The AttributeLocation is used by the Responder to communicate the exact location of the attribute in the EAN.UCC Business Message for which an error or warning was detected. The Initiator may use the AttributeLocation to reference the original EAN.UCC Business Message and pinpoint the attribute in question. One standard method of providing the AttributeLocation of EAN.UCC Business Messages is by providing the XPath of the attribute.	0..1
	attributeName			Application_ Receipt Acknowledgement_ Error Reference. Attribute_ Name. Text	The AttributeName is used by the Responder to communicate the proper business name of an attribute. The Initiator may use AttributeName to reference the cause of an error or warning.	1..1

## Business Solution Design

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	Official Dictionary Entry Name	Definition	Multiplicity
	attributeValue			Application_ Receipt Acknowledgment_ Error Reference. Attribute_ Value. Text	The AttributeValue is used by the Responder to communicate the original value of an attribute for which an error or warning was detected. The Initiator may use the AttributeValue to see the invalid value sent by the Initiator in the EAN.UCC Business Message that caused the error or warning to be detected. The AttributeValue removes any question as to what value the Responder parsed out of the Initiator's message.	0..1
CommandApplicationReceiptAcknowledgement				Command_ Application_ Receipt Acknowledgement. Details	The CommandApplicationReceiptAcknowledgement is used by the Responder to communicate receipt acknowledgements, errors or warnings for the Command element. EAN.UCC Messages contain four main hierarchical tag levels—SBDH, Transaction, Command & Document—in which Command is the second to lowest level. The Initiator of the original EAN.UCC Business Message will be, as a result, required to parse the application receipt acknowledgements, errors or warnings for this element.	

## Business Solution Design

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	Official Dictionary Entry Name	Definition	Multiplicity
	errorCount			Command_ Application_ Receipt Ac- knowledge- ment. Error Count_ Value. Numeric	The ErrorCount is a field used by the Responder to assist the Initiator to determine the number of errors or warnings detected. The ErrorCount may be applied for any hierarchical level of this business message— SBDH, Transaction, Command, and Document. In addition, ErrorCount may also be applied at the Document level when an individual attribute in the Initiator's Document invokes multiple error rules (e.g. a GTIN field may be of the incorrect length and may also contain invalid characters like alpha-characters). So, for example, if there is a Command that contains 2 errors and the Document within that Command contains 5 errors, the ErrorCount on CommandApplicationReceiptAcknowledge- ment would be set to 2 and the ErrorCount on DocumentApplicationReceiptAcknowledge- ment would be set to 5	0..1
	originalCommand- Type			Command_ Application_ Receipt Ac- knowledge- ment. Original_ Document_ Command_ Type. Document Command Type_ Code	Used by the Responder to communicate the original CommandType back to the Initiator. Use of this attribute is mandatory when the Responder and Initiator have agreed to provide Application Receipt Acknowledge- ments or errors for the Command element. In such a case, the Initiator defines the CommandType in the EAN.UCC Business Message to the Responder (setting the Command Type is required by the EAN.UCC XML Architecture; e.g. ADD, CHANGE_BY_REFRESH, CORRECT and DELETE). The Responder returns the exact CommandType received from the Initiator back to the original Initiator.	1..1



## Business Solution Design

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	Official Dictionary Entry Name	Definition	Multiplicity
	statusType			Command_Application_Receipt Acknowledgement. Status_Type. Receipt Acknowledgement Status_Code	StatusType is a status field used by a Responder within the ApplicationReceiptAcknowledgement message to indicate whether the status is RECEIVED, ERROR or WARNING. If both Errors and Warnings are detected, the statusType should indicate ERROR. The StatusType may be communicated for any level of the four-hierarchical levels of this business message—SBDH, Transaction, Command, and Document. Each EAN.UCC BRG will determine for each business process, the most appropriate hierarchical level(s) to provide the StatusType. For example, Order BRG may provide StatusType at the Document Level only so that StatusType at the SBDH, Transaction and Command levels are not an option. In addition, Order BRG may only support the RECEIVED Status. If the ERROR or WARNING StatusTypes are applied within an EAN.UCC Business Process, the ApplicationReceiptAcknowledgement class must be applied so that the error/warning code, description, and other fields may be communicated.	1..1
			DocumentApplicationReceiptAcknowledgement	Command_Application_Receipt Acknowledgement. Association. Document_Application_Receipt Acknowledgement	not defined	0..*

## Business Solution Design

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	Official Dictionary Entry Name	Definition	Multiplicity
		originalEntityIdentification	EntityIdentification	Command_Application_Receipt Acknowledgement.Document_ Identification_Association.Entity Identification	The originalEntityIdentification is used by the Responder to uniquely identify an instance of a Transaction, Command or Document back to the Initiator. The Initiator should provide a globally unique originalEntityIdentification (Content Owner GLN & Unique Creator ID) for each instance of a Transaction, Command or Document in an EAN.UCC Business Message to the Responder. (Some exceptions apply, for example, in Order BRG, PO Numbers are often re-used) The Responder needs the originalEntityIdentification to be unique so that when these values are provided back to the Initiator in a ApplicationReceiptAcknowledgement Message, the Initiator may correlate the receipt or error with the Initiator's original business message.	1..1
			ErrorOrWarning	Command_Application_Receipt Acknowledgement.Association.Error Or Warning	not defined	0..*
Document				Electronic_Document.Details	Used to specify basic information about the content of the message including version number; creation date and time.	
	contentVersion			Electronic_Document.Content_Version.Identifier	Not defined in BRD	0..1

## Business Solution Design

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	Official Dictionary Entry Name	Definition	Multiplicity
	creationDateTime			Electronic_Document.Creation_Date.Date Time	Not defined in BRD	1..1
	documentStatus			Electronic_Document.Status.Identifier	Indicates if the document is a copy or an original.	1..1
	documentStructureVersion			Electronic_Document.Document Structure_Version.Identifier	Not defined in BRD	0..1
	lastUpdateDate			Electronic_Document.Last Update_Date.Date Time	Not defined in BRD	0..1
DocumentApplicationReceiptAcknowledgement				Document_Application_Receipt Acknowledgement.Details	The DocumentApplicationReceiptAcknowledgement is used by the Responder to communicate receipt acknowledgements, errors or warnings for the Document entity. This business message contains four hierarchical levels—SBDH, Transaction, Command & Document—in which Document is the lowest attribute. The Initiator of the original EAN.UCC Business Message will be, as a result, required to parse the receipt acknowledgements, errors or warnings at this level.	

## Business Solution Design

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	Official Dictionary Entry Name	Definition	Multiplicity
	errorCount			Document_Application_Receipt Acknowledgement. Error Count_Value. Numeric	<p>The ErrorCount is a field used by the Responder to assist the Initiator to determine the number of errors or warnings detected. The ErrorCount may be applied at any level of this business message—SBDH, Message, and Document.</p> <p>So, for example, if there is a Message that contains 2 errors and the Document within that Message contains 5 errors, the ErrorCount on CommandApplicationReceiptAcknowledgement would be set to 2 and the ErrorCount on DocumentReceiptAcknowledgement= would be set to 5.</p>	0..1
	originalDocumentCreationDateTime			Document_Application_Receipt Acknowledgement. Original_Document_Creation_Date Time. Date Time	<p>The OriginalDocumentCreationDateTime is used by the Responder to communicate back the original Creation Date Time stamp placed on the EAN.UCC Business Document created by the Initiator. An Initiator is always required to provide a CreationDateTime at the Document-Level by the EAN.UCC Business Message Standard. The OriginalDocumentCreationDateTime becomes critical to uniquely identifying an EAN.UCC Business Document back to the Initiator when the Document Identification (Content Owner GLN &amp; Unique Creator ID) may be duplicated. In such a case, the Document Identification is paired with the OriginalDocumentCreationDateTime to ensure unique identification of the original EAN.UCC Business Document. OriginalDocumentCreationDateTime is based on the Initiator's system clock. The format of this datetime is based on the W3C Implementation of ISO 8601.</p>	1..1

## Business Solution Design

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	Official Dictionary Entry Name	Definition	Multiplicity
	originalDocumentReceivedDateTime			Document_Application_Receipt_Acknowledgement.Original_Document_Received_DateTime. Date Time	The OriginalDocumentReceivedDateTime is used by a Responder to communicate the date time at which the Responder received the EAN.UCC Business Document. This attribute assists in determining the actual date time elapsed since the Initiator stamped the EAN.UCC Business Document with the OriginalDocumentCreationDateTime. OriginalDocumentReceivedDateTime is based on the Responder's system clock. The format of this datetime is based on the W3C Implementation of ISO 8601.	0..1
	originalDocumentType			Document_Application_Receipt_Acknowledgement.Original_Document_Type. Text	The OriginalDocumentType is used by the Responder to communicate the type of EAN.UCC Business Document being responded to back to the Initiator. Valid values for this field will come from an EAN.UCC enumerated list that will list choices such as ORDER, CATALOGUE_ITEM_NOTIFICATION, and REQUEST_FOR_PAYMENT.	1..1

## Business Solution Design

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	Official Dictionary Entry Name	Definition	Multiplicity
	statusType			Document_Application_Receipt Acknowledgement. Status_Type. Receipt Acknowledgement Status_Code	StatusType is a status field used by a Responder within the ApplicationReceiptAcknowledgement message to indicate whether the status is RECEIVED, ERROR or WARNING. The StatusType may be communicated for any level of the four tag levels of the message —SBDH, Transaction, Command, and Document. Each EAN.UCC BRG will determine for each business process, the most appropriate level to provide the StatusType. For example, Order BRG will provide StatusType at the Document Level only such that StatusType at the SBDH, and Command levels are not an option. In addition, Order BRG only supports the RECEIVED Status. If the ERROR or WARNING StatusTypes are applied within an EAN.UCC Business Process, the ApplicationReceiptAcknowledgement class must be applied so that the error/warning code, description, and other fields may be communicated.	1..1
			DocumentElementError	Document_Application_Receipt Acknowledgement. Association. Document Element_Error	not defined	0..*

## Business Solution Design

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	Official Dictionary Entry Name	Definition	Multiplicity
		originalEntityIdentification	EntityIdentification	Document_Application_Receipt Acknowledgement.Original_Entity Identification_Association.Entity Identification	The originalEntityIdentification is used by the Responder to uniquely identify an instance of a Transaction, Command or Document back to the Initiator. The Initiator should provide a globally unique originalEntityIdentification (Content Owner GLN & Unique Creator ID) for each instance of a Transaction, Command or Document in an EAN.UCC Business Message to the Responder. (Some exceptions apply, for example, in Order BRG, PO Numbers are often re-used) The Responder needs the originalEntityIdentification to be unique so that when these values are provided back to the Initiator in a ApplicationReceiptAcknowledgement Message, the Initiator may correlate the receipt or error with the Initiator's original business message.	1..1
			ErrorOrWarning	Document_Application_Receipt Acknowledgement.Association.Error Or Warning	n.a.	0..*
DocumentElementError				Document Element_Error.Details	The DocumentElementError is used by the Responder to communicate errors detected for the document entity. Errors are detected for the document entity when the error pertains to a specific attribute within the EAN.UCC Business Document sent by the Initiator.	

## Business Solution Design

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	Official Dictionary Entry Name	Definition	Multiplicity
	errorCount			Document Element_ Error. Error Count_ Value. Numeric	The ErrorCount is a field used by the Responder to assist the Initiator to determine the number of errors or warnings detected. The ErrorCount may be applied for any hierarchical level of this business message—SBDH, Transaction, Command, and Document. In addition, ErrorCount may also be applied for the Document entity when an individual attribute in the Initiator's Document invokes multiple error rules (e.g. a GTIN field may be of the incorrect length and may also contain invalid characters like alpha-characters). So, for example, if there is a Command that contains 2 errors and the Document within that Command contains 5 errors, the ErrorCount on CommandApplicationReceiptAcknowledgement would be set to 2 and the ErrorCount on DocumentApplicationReceiptAcknowledgement would be set to 5. The Initiator and Responder also have the option to set the ErrorCount to zero when no errors are detected and the StatusType is RECEIVED.	0..1
			ErrorOrWarning	Document Element_ Error. Association. Error Or Warning	not defined	1..*
EntityIdentification				Entity Identification. Details	The unique identification of a document.	



## Business Solution Design

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	Official Dictionary Entry Name	Definition	Multiplicity
	uniqueCreatorIdentification			Entity Identification. Identification. Identifier	N/A	1..1
		contentOwner	PartyIdentification	Entity Identification. Content Owner. Party Identification		1..1
ErrorOrWarning				Error Or Warning. Details	The ErrorOrWarning is applied by the Responder when a StatusType is equal to ERROR or WARNING. This class of attributes is not applicable when the StatusType is RECEIVED.	
	code			Error Or Warning. Code. Error Or Warning_ Code	The Code is used by the Responder to indicate the EAN.UCC Error Code of the error or warning being communicated. The Initiator may use the Code field to enable automated machine processing of errors.	1..1
			ApplicationReceiptAcknowledgementErrorReference	Error Or Warning. Association. Application_ Receipt Acknowledgement_ Error Reference	not defined	0..1

## Business Solution Design

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	Official Dictionary Entry Name	Definition	Multiplicity
		codeDescription	MultiLongDescription	Error Or Warning. Code Description_ Association. Long_ Multi-language Description	The CodeDescription is used by the Responder to indicate the textual description of the error or warning code being communicated. The Initiator may use the CodeDescription to enable manual/human processing of errors or warnings	1..1
		originOfErrorOrWarning	PartyIdentification	Error Or Warning. Origin Of Error Or Warning_ Association. Party Identification	The originOfErrorOrWarning may be used by the Responder to communicate the exact party that detected the error or warning. The exact origin of the error or warning may be a sub-division of the Responder's organization, or the exact origin may be a third party partner. The Initiator may use the originOfErrorOrWarning to enable more advance exception handling since the Initiator will know the exact source of the error/warning detection.	0..1
MultiLongDescription				Long_ Multi-language Description. Details	The Multi Long Description Class contains one or more Multi Description Classes. It allows for multiple combinations of language and longtext.	
	description			Long_ Multi-language Description. Description. an1000_ Language_ Text		1..*
PartyIdentification				Party Identification. Details	Unique location number identifying the Party for which the rest of the message defines.	
	globalLocationNumber			Party Identification. Primary_ Identification. GLN_ Identifier		1..1

## Business Solution Design

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	Official Dictionary Entry Name	Definition	Multiplicity
			AdditionalPartyIdentification		Party Identification. Additional. Non GLN_ Party Identification	0..*
SBDHApplicationReceiptAcknowledgement				SBDH_Application_ Receipt Acknowledgement. Details	The SBDHApplicationReceiptAcknowledgement is used by the Responder to communicate receipt acknowledgements, errors or warnings at the SBDH level. This business message contains four levels—SBDH, Transaction, Command & Document—in which SBDH is the highest level. The Initiator of the original EAN.UCC Business Message will, as a result, be required to parse the receipt acknowledgements, errors or warnings at this level.	

## Business Solution Design

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	Official Dictionary Entry Name	Definition	Multiplicity
	errorCount			SBDH_ Application_ Receipt Acknowledgement. Error Count_ Value. Numeric	The ErrorCount is a field used by the Responder to assist the Initiator to determine the number of errors or warnings detected. The ErrorCount may be applied at any level of this business message—SBDH, Transaction, Command, and Document. In addition, ErrorCount may also be applied at the Document level when an individual attribute in the Initiator's Document invokes multiple error rules (e.g. a GTIN field may be of the incorrect length and may also contain invalid characters like alpha-characters). So, for example, if there is a Command that contains 2 errors and the Document within that Command contains 5 errors, the ErrorCount on CommandApplicationReceiptAcknowledgement would be set to 2 and the ErrorCount on DocumentApplicationReceiptAcknowledgement would be set to 5. The Initiator and Responder also have the option to set the ErrorCount to zero when no errors are detected and the StatusType is RECEIVED.	0..1

## Business Solution Design

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	Official Dictionary Entry Name	Definition	Multiplicity
	statusType			SBDH_ Application_ Receipt Acknowledgement. Status_ Type. Receipt Acknowledgement Status_ Code	StatusType is a status field used by a Responder within the ApplicationReceiptAcknowledgement message to indicate whether the status is RECEIVED, ERROR or WARNING. The StatusType may be communicated for any of the four tag levels of the message—SBDH, Transaction, Command, and Document. Each EAN.UCC BRG will determine for each business process, the most appropriate level to provide the StatusType. For example, Order BRG will provide StatusType at the Document Level only such that StatusType at the SBDH, Transaction and Command levels are not an option. In addition, Order BRG only supports the RECEIVED Status. If the ERROR or WARNING StatusTypes are applied within an EAN.UCC Business Process, the ApplicationReceiptAcknowledgement class must be applied so that the error/warning code, description, and other fields may be communicated.	1..1
			CommandApplicationReceiptAcknowledgement	SBDH_ Application_ Receipt Acknowledgement. Choice_ Association. Command_ Application_ Receipt Acknowledgement	not defined	0..*
			ErrorOrWarning	SBDH_ Application_ Receipt Acknowledgement. Association. Error Or Warning	n.a.	0..*

## Business Solution Design

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	Official Dictionary Entry Name	Definition	Multiplicity
			TransactionApplicationReceiptAcknowledgement	SBDH_ Application_ Receipt Acknowledgement. Choice_ Association. Transaction_ Application_ Receipt Acknowledgement	not defined	0..*
TransactionApplicationReceiptAcknowledgement				Transaction_ Application_ Receipt Acknowledgement. Details	The TransactionApplicationReceiptAcknowledgement is used by the Responder to communicate receipt acknowledgements, errors or warnings at the Document level. EAN.UCC Messages contain four hierarchal tag levels—SBDH, Transaction, Command & Document—in which Transaction is the second to highest level. The Initiator of the original EAN.UCC Business Message will, as a result, be required to parse the receipt acknowledgements, errors or warnings at this level.	

## Business Solution Design

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	Official Dictionary Entry Name	Definition	Multiplicity
	errorCount			Transaction_ Application_ Receipt Ac- knowledge- ment. Error Count_ Value. Numeric	The ErrorCount is a field used by the Responder to assist the Initiator to determine the number of errors or warnings detected. The ErrorCount may be applied for any tag level of the EAN.UCC Message—SBDH, Transaction, Command, and Document. In addition, Error-Count may also be applied for the document when an individual attribute in the Initiator's Document invokes multiple error rules (e.g. a GTIN field may be of the incorrect length and may also contain invalid characters like alpha-characters). So, for example, if there is a Command that contains 2 errors and the Document within that Command contains 5 errors, the ErrorCount on CommandApplicationReceiptAcknowledgement would be set to 2 and the ErrorCount on DocumentAp- plicationReceiptAcknowledgement would be set to 5. The Initiator and Responder also have the option to set the ErrorCount to zero when no errors are detected and the StatusType is RECEIVED.	0..1

## Business Solution Design

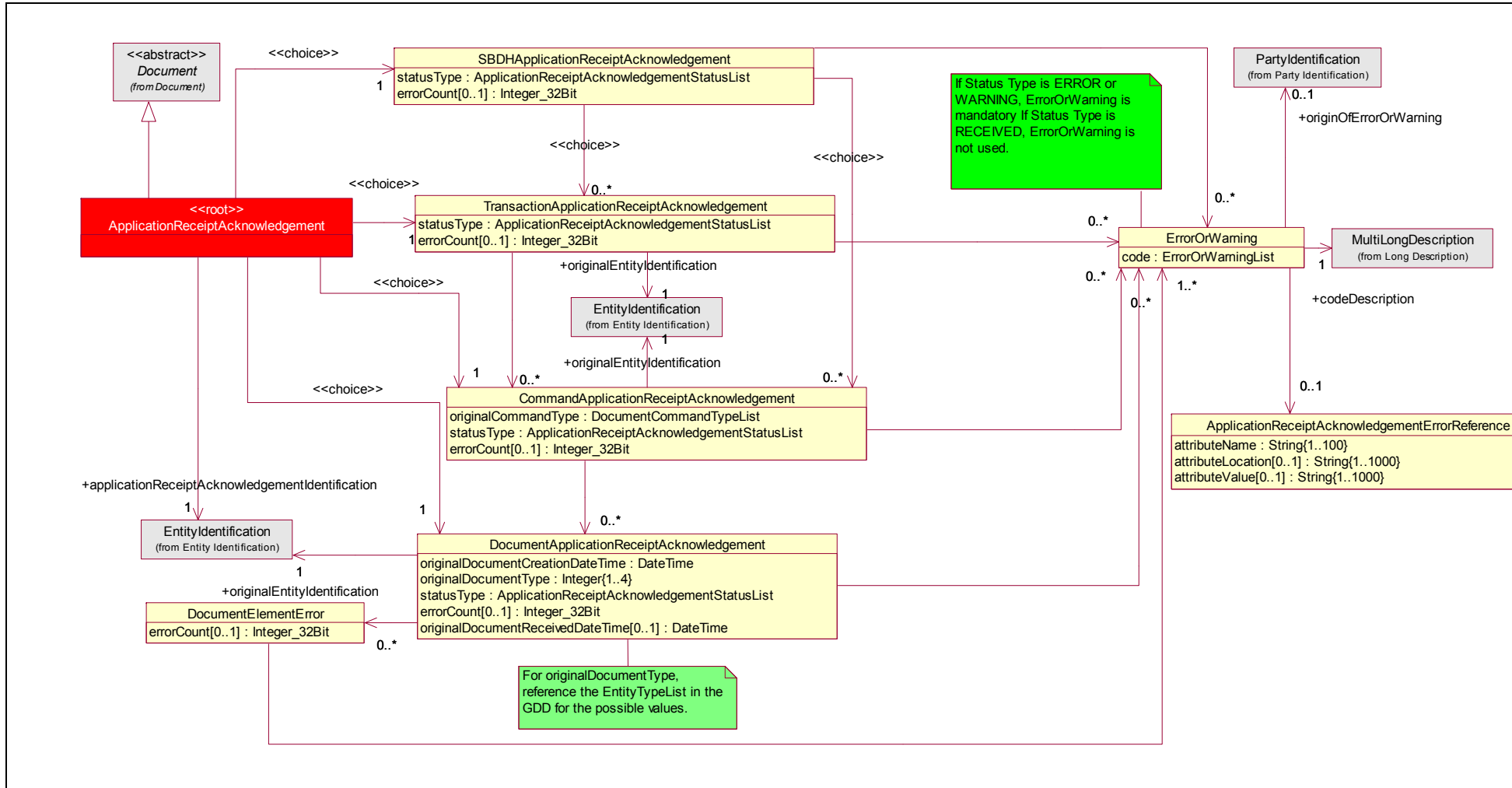
CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	Official Dictionary Entry Name	Definition	Multiplicity
	statusType			Transaction_ Application_ Receipt Ac- knowledge ment. Status_ Type. Receipt Ac- knowledge ment Status_ Code	StatusType is a status field used by a Responder within the ApplicationReceiptAcknowledgement message to indicate whether the status is RECEIVED, ERROR or WARNING. The StatusType may be communicated for any level of the four-tag levels of the message—SBDH, Transaction, Command, and Document. Each EAN.UCC BRG will determine for each business process, the most appropriate attribute to provide the StatusType. For example, Order BRG will provide StatusType for the Document attribute only such that StatusType at the SBDH, Transaction and Command attributes are not an option. In addition, Order BRG only supports the RECEIVED Status. If the ERROR or WARNING StatusTypes are applied within an EAN.UCC Business Process, the ApplicationReceiptAcknowledgementclass must be applied so that the error/warning code, description, and other fields may be communicated.	1..1
			CommandApplica- tionReceiptAcknowl- edgement	Transaction_ Application_ Receipt Ac- knowledge ment. Association. Command_ Application_ Receipt Ac- knowledge ment	not defined	0..*



## Business Solution Design

CLASS (ABIE)	ATTRIBUTE (BBIE)	ASSOCIATION (ASBIE)	SECONDARY CLASS	Official Dictionary Entry Name	Definition	Multiplicity
		originalEntityIdentification	EntityIdentification	Transaction_Application_Receipt Acknowledgement.Original_Document_Association.Entity Identification	The originalEntityIdentification is used by the Responder to uniquely identify an instance of a Transaction, Command or Document back to the Initiator. The Initiator should provide a globally unique originalEntityIdentification (Content Owner GLN & Unique Creator ID) for each instance of a Transaction, Command or Document in an EAN.UCC Business Message to the Responder. (Some exceptions apply, for example, in Order BRG, PO Numbers are often re-used) The Responder needs the originalEntityIdentification to be unique so that when these values are provided back to the Initiator in a ApplicationReceiptAcknowledgement Message, the Initiator may correlate the receipt or error with the Initiator's original business message.	1..1
			ErrorOrWarning	Transaction_Application_Receipt Acknowledgement.Association.Error Or Warning	not defined	0..*

1.5.3 Class Diagrams



## Business Solution Design

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### 1.5.4 Code Lists

Code List Name	Code List Description
DocumentCommandTypeList	Provides the list of document commands available in the EAN.UCC Standard.
Code Name	Code Description
ADD	Add
CHANGE_BY_REFRESH	Change By Refresh
CORRECT	Correct
DELETE	Delete

Code List Name	Code List Description
ErrorOrWarningList	Provides the list of error or warning available in the EAN.UCC Application Receipt Acknowledgement Processing.
Code Name	Code Description
APPLICATION_ROUTING_ERROR	Application Routing Error
BUSINESS_SCOPE_BLOCK	Indicates the type of scope, the identifiers for the scope, other supporting information and the scope content itself
CODE_NOT_MAPPED_TO_APPLICATION	Code Not Mapped to Application
CUSTOMER_IDENTIFICATION_NUMBER_AND_ENTITY_NAME_DO_NOT_MATCH	Customer Identification Number and Entity Name Do not match
CUSTOMER_IDENTIFICATION_NUMBER_DOES_NOT_EXIST	Customer Identification Number Does not Exist
CUSTOMER_IDENTIFICATION_NUMBER_IS_INVALID	Customer Identification Number is Invalid
CUSTOMER_IDENTIFICATION_NUMBER_IS_MISSING	Customer Identification Number Is Missing
DOCUMENT_ENCLOSED_IN_THE_FIRST_TRANSMISSION	Documents enclosed in the first transmission
DOCUMENT_ENCLOSED_IN_THE_SECOND_TRANSMISSION	Documents enclosed in the second transmission

## Business Solution Design

SECOND_TRANSMISSION	
DOCUMENT_NOT_ATTACHED	Document not attached
DOCUMENT_NOT_AVAILABLE	Document not available
DOCUMENT_NOT_REQUIRED_WAIVER_ISSUED	Document not required, waiver issued
DUPLICATE	Duplicate
GAP_IN_TIME_PERIOD	Expected adjacent, non-overlapping weekly samples but got non-adjacent weekly samples.
INCOMPLETE_MESSAGE	Incomplete Message
INCORRECT_DATE	Incorrect Date
INSTANCE_IDENTIFIER	Descriptor which contains reference information which uniquely identifies this instance of the SBD between the sender and the receiver
INVALID_DATE	Invalid Date
INVALID_BUSINESS_PROCESS_CURRENT_STATUS_CODE	Invalid Business Process Current Status Code
INVALID_BUYER_EVENT_IDENTIFICATION	As a result of an acknowledgement, change, or change in status; the 'buyer' Event ID does not exist
INVALID_BUYER_IDENTIFICATION	Buyer (Trading Partner Identification) is invalid.
INVALID_BUYER_LOCATION_GROUP_IDENTIFICATION	Invalid buyer group location Identification
INVALID_BUYER_LOCATION_IDENTIFICATION	Invalid buyer location identification number
INVALID_PRODUCT_BUYER_GROUP_IDENTIFICATION	Product / Item Buyer Group Identification Number does not exist.
INVALID_PRODUCT_OR_ITEM_IDENTIFICATION	Product / Item Number does not exist
INVALID_PRODUCT_SELLER_GROUP_IDENTIFICATION	Product / Item Seller Group Identification Number does not exist.
INVALID_SELLER_EVENT_IDENTIFICATION	As a result of an acknowledgement, change, or change in status; the 'seller' Event ID does not exist
INVALID_SELLER_IDENTIFICATION	Seller (Trading Partner Identification) is invalid.
INVALID_SELLER_LOCATION_GROUP_IDENTIFICATION	Invalid seller group location Identification
INVALID_SELLER_LOCATION_IDENTIFICATION	Invalid seller location identification number

## Business Solution Design

TIFICATION	
INVALID_STATUS_TRANSITION	The Status of this Event has changed and does not follow the acceptable status change life cycle.
INVALID_TIME_PERIOD	Example: Expected weekly forecast and received monthly
ITEM_MARKED_FOR_DELETE	Item Marked For Delete
ITEM_NOT_AUTHORIZED	Item Not Authorized
MANIFEST_BLOCK	A flag to indicate that there is more than one type of Document in the instance
MESSAGE_UNDER_DEVELOPMENT	Message under development
MISSING_CODE_FOR_APPLICATION	Missing Code for Application
MISSING_DATA	Missing Data
MISSING_EFFECTIVE_MESSAGE_DATE	Missing Effective Message Date
MISSING_IDENTIFICATION_CODE	Missing Identification Code
MISSING_MESSAGE_REFERENCE_NUMBER	Missing Message Reference Number
MISSING_OR_INVALID_DUNS_NUMBER	Missing or Invalid DUNS Number
MISSING_OR_INVALID_LOCATION	Missing or Invalid Location
MISSING_OR_INVALID_MESSAGE_CODE	Missing or Invalid Message Code
MISSING_OR_INVALID_SCAC	Missing or Invalid SCAC
MISSING_OR_INVALID_UPC_CODE	Missing or Invalid U.P.C. Code
OTHER_UNLISTED_REASON	Other Unlisted Reason
OVERLAPPING_TIME_PERIOD	Expected adjacent, non-overlapping weekly samples, but got overlapping weekly samples.
PARTICIPATING_LOCATION	Number of Participating Locations does not equal the number of Locations communicated in the detail.
PARTICIPATION_PERCENT	Percent of all participating locations
RECEIVED_AFTER_CUTOFF_DATE_OR_TIME	Received After Cutoff Date or Time
SENDER_NOT_AUTHORIZED_FOR_THIS_MESSAGE	Sender Not Authorized for this message
STANDARD_STANDARD_BUSINESS	Originator of the type of the Business Data standard, e.g. SWIFT, OAG, used.

## Business Solution Design

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S_DOCUMENT_STANDARD_TYPE	
TO_ARRIVE_BY_SEPARATE_XML_MESSAGE	To arrive by separate XML message
TYPE	A logical indicator representing the type of Business Data being sent or the named type of business data.
TYPE_VERSION	(Standard Business Document. Standard Type Version. Identifier): Descriptor which contains versioning information or number of the standard that defines the document which is specified in the 'Type' data element, e.g. D.96A.
UNAUTHORIZED_BUSINESS_PROCESS_STATE	Unauthorized Business Process State code.
UNAUTHORIZED_BUSINESS_SERVICE_ACTION_CODE	Unauthorized Business Service Action Code

Code List Name	Code List Description
ApplicationReceiptAcknowledgementStatusList	Provides the list of receipt acknowledgement status codes available in the EAN.UCC Standard.
Code Name	Code Description
ERROR	An error acknowledgement.
RECEIVED	A received acknowledgement.
WARNING	A warning acknowledgement.

### 1.6 Business Document Example

**Example will be listed here something similar to an instance file.**

An example is listed below to aid in visualizing the message. This is only a sample and all components of the messages were not used. **Blue Bold** font represents the sample data.

#### **Example 1: ARA with an 'Error'.**

Application Receipt Acknowledgement And Or Error  
Document  
Creation Date Time: **'2004-03-22T10:43:00-05:00'**  
Document Status: **'ORIGINAL'**

Entity Identification (Application Receipt Acknowledgement And Or Error  
Identification)  
Unique Creator Identification: **'RA-000001'**  
Party Identification (Content Owner (GLN)): **'099999999991'**

Choice  
Document Application Receipt Acknowledgement And Or Error:  
Original Document Creation Date Time: **'2004-03-03T08:43:00-05:00'**  
Original Document Type: **'3'**  
Status Type: **'ERROR'**

Since Status Type is defined to be an ERROR, the Error Or Warning is mandatory.

Error Or Warning  
Code: **'59'**  
Multi Long Text Description (Code Description)  
text: **'Incomplete Message'** language **'EN'**  
text: **'Onvolledig Bericht'** language **'NL'**  
text: **'Mensaje Incompleto'** language **'ES'**

#### **Example 2: ARA with a 'RECEIVED' declaration**

Application Receipt Acknowledgement And Or Error  
Document  
Creation Date Time: **'2004-03-22T10:43:00-05:00'**  
Document Status: **'ORIGINAL'**

Entity Identification (Application Receipt Acknowledgement And Or Error  
Identification)  
Unique Creator Identification: **'RA-000001'**  
Party Identification (Content Owner (GLN)): **'099999999991'**

Choice  
Document Application Receipt Acknowledgement And Or Error:  
Original Document Creation Date Time: **'2004-03-03T08:43:00-05:00'**  
Original Document Type: **'3'**  
Status Type: **'RECEIVED'**

### 1.7 Implementation Considerations

#### How To Determine An Application Receipt Acknowledgement And Or Error

- Can multiple Transactions XML Elements be nested within the EnvelopeSBDH XML Element for the associated EAN.UCC Business Process?
- What are the data fields of the Standard Business Document Header? Which data fields of the Standard Business Document Header are utilized in the EAN.UCC Business Process and Business Document?
- What Business Rules are associated with the individual data fields of the Standard Business Document Header?
- Are the data fields in the Standard Business Document Header consistent with the data provided in the message? (e.g. If Type is specified, the enclosed Business Documents match. Or, if Multiple Type is specified, the enclosed Business Documents match.)
- What are the EnvelopeSBDH-Level Identifier uniqueness rules? What are the rules and expectations for the EnvelopeSBDH-Level Instance Identifier for the EAN.UCC Business Process?
- Collaboration-Level Error and Receipt Acknowledgement: How many steps are there in this Business Process? Which step of the Business Process is being considered?

#### How To Determine An Application Receipt Acknowledgement And Or Error

- What are the “unit of work” (a.k.a. transaction control) rules for the EAN.UCC Business Process in question?
- Can multiple Command XML Elements be nested within the Transaction XML Element for this EAN.UCC Business Process? ...for this step in the EAN.UCC Business Process?
- Can multiple Command XML Elements of different Command Types (e.g. ADD, CHANGE, DELETE) be nested within a Transaction XML Element for this EAN.UCC Business Process?...for this step in the EAN.UCC Business Process?
- For this EAN.UCC Business Process, which Command Types (ADD, CHANGE, DELETE) are and are not valid within a Transaction XML Element for this EAN.UCC Business Process?...for this step in the EAN.UCC Business Process?
- Which Extensions for Command are valid for a Transaction in this EAN.UCC Business Process (e.g. DocumentCommand)? (Currently, there is only the DocumentCommand Substitution Group, previously DocumentIdentificationCommand & LinkCommand).
- What are the Transaction-Level Identifier uniqueness rules? What are the rules and expectations for the Transaction-Level UniqueCreatorIdentification & the ContentOwner for the EAN.UCC Business Process?
- What is the expected response to each error?

#### How To Determine An Application Receipt Acknowledgement And Or Error

- What are the valid EAN.UCC Business Documents for this EAN.UCC Business Process? ...for this step in the EAN.UCC Business Process?
- How many Business Documents may be included within the Command?
- What are the valid EAN,UCC Business Documents for each Command Type (e.g. ADD, CHANGE, DELETE)?



- What are the Command-Level Identifier uniqueness rules? What are the rules and expectations for the Command-Level UniqueCreatorIdentification & the ContentOwner for the EAN.UCC Business Process?
- What is the expected response to each error?

### Implementation Steps

1. Identify the CommandType for which the Application Receipt Acknowledgement And Or Error definition will apply
2. Determine the Command-Level Data Field(s) for which an Application Receipt Acknowledgement And Or Error is being defined? Also, determine the Data Field Name.
3. Fully describe the Logical Business Rule for which the Application Receipt Acknowledgement And Or Error is being defined.
4. Identify the Business Process(es) that requires an error or advice definition. If applicable, determine the step within the collaboration (a.k.a dialog).
5. Identify the Actors in the Business Process such that all parties are identified as message Initiator, Responder or Proxy.
6. Determine how the Command will be uniquely identified (see "How to uniquely identify an EAN.UCC XML Business Document")
7. Determine the XPath location (or other identification method) of the data element in the Command structure for which the error or advice is being defined.
8. Identify a unique code the new error or advice definition. Codes should be globally unique across business processes. Business processes will be uniquely identified in the Standard Business Document Header.
9. Develop one or more Error/Advice Descriptions for each error or advice code. Multiple error descriptions will only exist if each description is unique by language code.

### How To Determine An Application Receipt Acknowledgement And Or Error

- What are typical errors associated with the Business Document?
- What are the data fields in this business documents? What are the constraints and rules associated with individual data fields?
- What are the dependency constraints and rules between the different data fields of the Business Document?
- What are the specialized data field rules associated with each Command Type (ADD, CHANGE, DELETE)?
- What are the Document-Level Identifier uniqueness rules? What are the rules and expectations for the Document-Level UniqueCreatorIdentification & the ContentOwner for the EAN.UCC Business Process?
- What is the expected response to each error?

#### Implementation Steps

1. Identify the Business Document for which the Application Receipt Acknowledgement And Or Error definition will apply
2. Determine the Document-Level Data Field(s) for which an Application Receipt Acknowledgement And Or Error is being defined? Also, determine the Data Field Name.
3. Fully describe the Logical Business Rule for which the Application Receipt Acknowledgement And Or Error is being defined.

4. Identify the Business Process(es) that requires an error or advice definition. If applicable, determine the step within the collaboration (a.k.a. dialog).
5. Identify the Actors in the Business Process such that all parties are identified as message Initiator, Responder or Proxy.
6. Determine how the Business Document will be uniquely identified (see “How to uniquely identify an EAN.UCC XML Business Document”)
7. Determine the XPath location (or other identification method) of the data element in the XML Business Document structure for which the error or advice is being defined.
8. Identify a unique code the new error or advice definition. Codes should be globally unique across business processes. Business processes will be uniquely identified in the Standard Business Document Header.
9. Develop one or more Error/Advice Descriptions for each error or advice code. Multiple error descriptions will only exist if each description is unique by language code.

### How to uniquely identify an EAN.UCC XML Business EnvelopeInstance Document

- To be updated with Standard Business Document Header fields Starting with version 2, all EAN.UCC XML instance documents use the UN/CEFACT Standard Business Document Header (SBDH) as the outer layer of the instance document.
- Key SBDH elements include HeaderVersion, Sender, Receiver, TypeVersion. The SBDH is further described in the UN/CEFACT Standard Business Document Header Technical Specification version 1.3

### How to uniquely identify an EAN.UCC XML Business Transaction

- All EAN.UCC XML Transactions share a common method of unique transaction identification. With this unique transaction identification, a recipient can uniquely distinguish between different instances of Transactions.
- The unique transaction identification typically exists one level down from the root XML node of each transaction. The unique identification uses a common object called “EntityIdentification” that combines the “ContentOwner” and “UniqueCreatorID” to form a unique key.

### How to uniquely identify an EAN.UCC XML Business Document Command

- All EAN.UCC XML Commands (e.g. DocumentCommand) share a common method of unique command identification. With this unique command identification, a recipient can uniquely distinguish between different instances of the same type of command (e.g. DocumentCommand where some are ADD and some are CHANGE\_BY\_REFRESH).
- The unique command identification typically exists one level down from the root XML node of each command. The unique identification uses a common object called “EntityIdentification” that combines the “ContentOwner” and “UniqueCreatorID” to form a unique key.

### How to uniquely identify an EAN.UCC XML Business Document

## Business Solution Design

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- All EAN.UCC XML Business Document (e.g. Order, Catalogue Item Notification, or Registry Catalogue Item) share a common method of unique document identification. With this unique document identification, a document recipient can uniquely distinguish between different instances of the same type of document (e.g. multiple Order documents).
- The unique document identification typically exists one level down from the root XML node of each document. The unique identification uses a common object called “EntityIdentification” that combines the “ContentOwner” and “UniqueCreatorIdentification” to form a unique key.
- In some cases the “ContentOwner” and “UniqueCreatorIdentification” combination will not be unique. In such cases, the “ContentOwner” and “UniqueCreatorIdentification” will be combined with the “creationDate” of the document. One such example will be when EAN.UCC trading partners reuse a PO Number in the Order Document
- Also, please note that the exception to this method EAN.UCC unique document identification is found in the set of business documents defined by the Plan BRG.

### 1.8 Testing

#### 1.8.1 Pass / Fail Criteria

*Unit testing criteria for business solution.*

Number	Test Criteria	Related Requirement	Design Element	Pass Criteria	Fail Criteria
1	<i>Reflects a specific business requirement from a related BRAD. For example: When goods are ordered, the buyer requires an answer from the suppliers that the order has been received.</i>	<i>BRAD Name.Version. Req #</i>	<i>Message, role, attribute</i>	<i>Result which determines that requirement has been satisfied: For example:  Seller is able to create and send an Order Receipt Acknowledgement.</i>	<i>Result which shows that requirement has not been satisfied: For example:  Buyer does not receive the Order Receipt Acknowledgement.</i>
2					
3					

## Business Solution Design

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### 1.8.2 Test Data

Attribute	Value
Creation Date Time	'2004-03-22T10:43:00-05:00'
Document Status	'ORIGINAL'
Unique Creator Identification	'RA-000001'
Party Identification (Content Owner (GLN))	'0999999999991'
Original Document Creation Date Time	'2004-03-03T08:43:00-05:00'
Original Document Type	'3'
Status Type	'ERROR'
Error Or Warning Code	'59'
Multi Long Text Description (Code Description) text: language' text: language' text: language'	'Incomplete Message' 'EN' 'Onvolledig Bericht' 'NL' 'Mensaje Incompleto' 'ES'
Creation Date Time	'2004-03-22T10:43:00-05:00'
Document Status	'ORIGINAL'
Unique Creator Identification	'RA-000001'
Party Identification (Content Owner (GLN))	'0999999999991'
Original Document Creation Date Time	'2004-03-03T08:43:00-05:00'
Original Document Type	'3'
Status Type	'RECEIVED'

### 1.9 Appendices

### 1.10 Summary of Changes

Change	BMS Ver- sion	Associated CR Number

### 2 XML Technical Solution ITRG Packet

The Technical Representation of the Business process is documented in a Technical Solution ITRG Packet containing all supplemental XML artefacts and is used by the Information Requirements Group (ITRG) to evaluate the solution. Upon approval from the Information Technical Requirements Group (ITRG), the Technical Solution ITRG Packet is updated to the Technical Solution Implementers Packet and published with the Business

Message Standard at:

[http://www.ean-ucc.org/global\\_smp/ean.ucc\\_standards.htm](http://www.ean-ucc.org/global_smp/ean.ucc_standards.htm).

Technical Solution ITRG Packet Content:

- Business Message Standard (BMS)
- ITRG Review Packet
  - Style Sheet: This HTML has been created using a Style Sheet that is a visual representation of the data. It is not an actual Style Sheet, but an ex-ample of what a Style Sheet may look like.
  - Instance File: 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.
  - Technical Level GDD Report

Technical Solution Implementers Packet Content:

Contains all the message specific.XSD files required to implement

Example:

- AS2Envelope
- Command.xsd
- DocumentCommand.xsd
- Proxy.xsd
- ComponentLibrary.xsd

Both the Business Message Standard and the Implementers Packet are available during the ITRG Review Period in the working documents section of the ITRG eRoom:

[http://eroom.uncouncil.org/eRoom/facility/InformationTechnicalAssessmentGroupITAG/0\\_14f7](http://eroom.uncouncil.org/eRoom/facility/InformationTechnicalAssessmentGroupITAG/0_14f7)

All documents for review will be in this folder listed by name of the Change Request and Change Request Number. The Business Message Standard is not open for review, but offered as the basis for determining the suitability of the technical solutions.

This eRoom may be accessed by using the following User Name and Password:

User Name: guest

Password: guest