



Business Message Standard (BMS) Application Receipt Acknowledgement

BMS Release: 2.6.0, BRG Name: eCom

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Document Summary

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Business Requirements Document (BRAD) Reference

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BRD Application Receipt Acknowledgement – Business Requirements Document	06-Dec-2004	0.41.2
BRAD eCom Maintenance Release 2 BMS 2.6.0	29-Jun-2009	Version 0.1.1

Document Change History

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Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
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30-Oct-2009	1.1.3 Issue	Lisa Herrick	BMS Release 2.6.0 – eBallot Approved	Updated to Issue	Not Applicable

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1. Business Domain View

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 GS1 Messages and are able to process them without error. The GS1 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 BMS 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.

1.2. Objective

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

1.3. Audience

Initiator – organization responsible for generating and sending a GS1 Business Message.

Responder – organization that receives and processes a GS1 Business Message. This organization is also responsible for creating an XML Application Receipt Acknowledgment And Or Error Application Receipt Acknowledgement in reply to the received GS1 Business Message when applicable. A Responder may outsource to an Agent to act on their behalf.

1.4. References

Reference Name	Description
BRD Application Receipt Acknowledgement	Business Requirements Document that outlines the requirements and supporting processes for a business application level acknowledgement of the receipt of an EAN.UCC XML message and optional indication of detected validation errors or warnings.
Common Library	BMS Release 2.6.0

1.5. Acknowledgements

1.5.1. eCom BRG

Role	First Name	Last Name	Company / organisation
BRG Chair	Carol	Edison	General Mills, Inc.
BRG Member	Kyra	Blankenstein	GS1 Netherlands
BRG Member	Zsolt	Bocsi	GS1 Hungary
BRG Member	J. Craig	Brinkman	Procter & Gamble Co.
BRG Member	Miriam	Burke	Procter & Gamble Co.
BRG Member	Jean-Luc	Champion	GS1 Global Office
BRG Member	Richard	Chresta	GS1 Switzerland
BRG Member	Troy	Denyer	GS1 Australia
BRG Member	Marilyn	Dodd	3M Company
BRG Member	John	Duker	Procter & Gamble Co.
BRG Member	Karina	Duvinger	GS1 Sweden
BRG Member	Klaus	Foerderer	GS1 Germany
BRG Member	Anders	Grangard	GS1 Global Office
BRG Member	Douglas	Hill	GS1 Denmark
BRG Member	Ewa	Iwicka	GS1 Global Office
BRG Member	Coen	Janssen	GS1 Netherlands
BRG Member	Tan	Jin Soon	GS1 Singapore
BRG Member	Fred	Kempkes	Unilever N.V.
BRG Member	Vladimir	Kozovic	GS1 Serbia
BRG Member	Anne-Claire	Krid	GS1 France
BRG Member	Rita	Laur	GS1 Canada
BRG Member	Sean	Lockhead	GS1 Global Office
BRG Member	Ana Paula	Maniero	GS1 Brazil
BRG Member	Eric	Maree	Accenture Supply Chain Services
BRG Member	Michal	Martinko	Hewlett-Packard
BRG Member	Juan	Mengide	GS1 Argentina
BRG Member	Marcus	Moritz	GS1 Germany
BRG Member	Eileen	Naused	McCormick & Company, Inc.
BRG Member	Debra	Noyes	Johnsonville Sausage, Inc
BRG Member	Esther	Peelen	GS1 Netherlands
BRG Member	Leon	Plaksin	GS1 Australia
BRG Member	Valerie	Post	Link Snacks Inc, Jack Links Beef Jerky
BRG Member	Natascha	Pottier	GS1 France
BRG Member	Mirko	Repetto	GS1 Italy

Role	First Name	Last Name	Company / organisation
BRG Member	Pere	Rosell	GS1 Spain
BRG Member	Steven	Rosenberg	GS1 US
BRG Member	Ryohei	Ariga	Procter & Gamble Co. (Japan)
BRG Member	John	Ryu	GS1 Global Office
BRG Member	Tom Eric	Schmidt	August Storck KG
BRG Member	Federico	Sedano Acosta	GS1 Argentina
BRG Member	Jon	Sharratt	Target Corporation
BRG Member	Emilie	SION	GS1 France
BRG Member	Matthew	Smith	Bunnings Group Limited
BRG Member	Gabriel	Sobrino	GS1 Netherlands
BRG Member	Stef	Spaan	GS1 Netherlands
BRG Member	Krisztina	Vatai	GS1 Hungary
BRG Member	Shan	Welch	GS1 UK
BRG Member	Jan	Westerkamp	GS1 Netherlands
BRG Member	Mary	Wilson	GS1 US

1.5.2. Task/Project Group Participants

Function	Name	Company / organisation
Participant	Aronowitz, Eric	Kimberly-Clark Corporation
Participant	Duker, John (Co-Chair)	Procter & Gamble Company
Participant	Flaten, Pam	Target
Participant	Flint, Don	CHEP
Participant	Gorton, Matthew	QRS
Participant	Grangard, Anders	GS1
Participant	Harness, Doug	GS1
Participant	Hearn, Andrew	GS1
Participant	Hoang, Anthony (Co-Chair)	WWRE
Participant	Johnson, Matt	Syncra Systems
Participant	Kartha, Neelakantan	Sterling Commerce, Inc.
Participant	Kudela, Melanie	GS1
Participant	Meadows, Jay	Lowe's Companies Inc.
Participant	Richardson, Rich	GS1
Participant	Schwarz, Sandy	GS1
Participant	Southall, Michele	GS1
Participant	Webb, Sylvia	GEFEG
Participant	Wilson, Mary	GS1
Participant	Zoromski, Mary	Kimberly-Clark Corporation

1.5.3. Design Team Members

Function	Name	Organisation
Modeler	Lisa Herrick	GS1 Global Office
XML Technical Designer	Dipan Anarkat	GS1 Global Office
EANCOM Technical Designer	Not Applicable	Not Applicable
Peer Reviewer	John Ryu	GS1 Global Office

2. Business Context

Context Category	Value(s)
Industry	All
Geopolitical	All
Product	All
Process	All
System Capabilities	GS1
Official Constraints	None

3. Additional Technical Requirements Analysis

This section documents the analysis of additional technical requirements.

3.1. Technical Requirements (optional)

Not Applicable

4. Business Transaction View

4.1. Business Transaction Use Case Diagram

This Business Requirement Document outlines the requirements and supporting processes for a business application level acknowledgement of the receipt of a GS1 XML message and optional indication of detected validation errors or warnings.

4.2. Use Case Description

Use Case ID	UC-1
Use Case Name	Initiator sending directly to a Responder
Use Case Description	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.
Actors (Goal)	Initiator, Responder
Performance Goals	
Preconditions	The Responder receives message.
Post conditions	The message Initiator receives the Application Receipt Acknowledgement, including optional error/warning message(s).

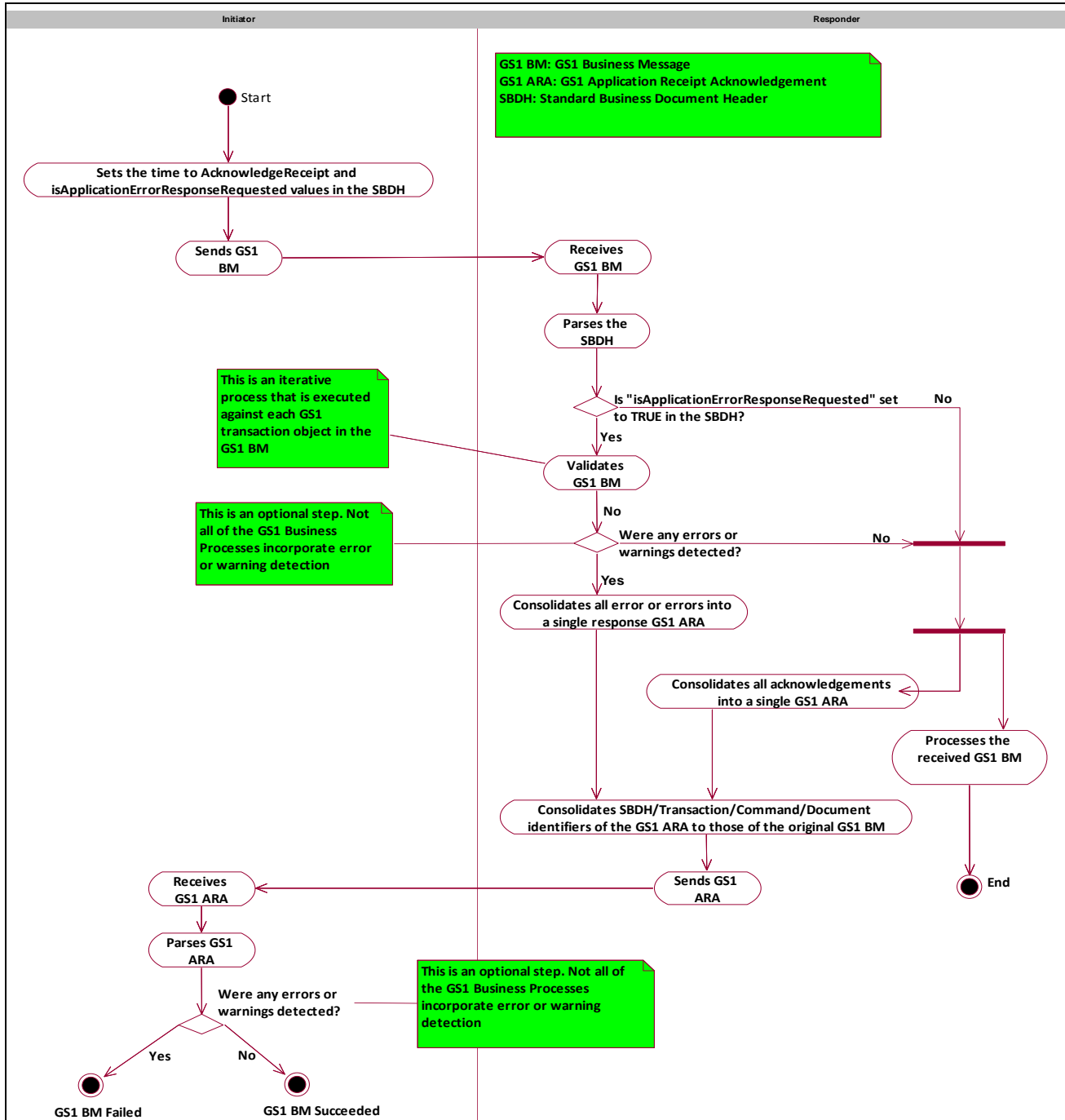
Scenario	<p>Begins when...</p> <p>1. The Responder's Back End application receives an XML Instance Document (business message)</p> <p>Optionally Continues with...</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #003366; color: white;"> <th>Step #</th> <th>Actor</th> <th>Activity Step</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">Responder</td> <td>The Responder continues by fully detecting all possible errors/warnings in the business document.</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">Responder</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>Ends when...</p> <p>4. The Responder generates and sends the Application Receipt Acknowledgement message back to the Initiator.</p>	Step #	Actor	Activity Step	2	Responder	The Responder continues by fully detecting all possible errors/warnings in the business document.	3	Responder	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	Responder	The Responder continues by fully detecting all possible errors/warnings in the business document.								
3	Responder	The Responder determines how they will uniquely identify the business document(s) for which errors/warnings were detected back to the Initiator.								
Alternative Scenario	No Alternative Scenario									
Related Requirements	Not Applicable									
Related Rules	Not Applicable									

Use Case ID	UC-2
Use Case Name	Agreement to use the Application Receipt Acknowledgement
Use Case Description	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 ' Time To Acknowledge Receipt ' 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 ' Is Application Error Response Requested ' choreography.
Actors (Goal)	<p>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.</p> <p>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.</p>
Performance Goals	None, this is a business agreement between trading partners.
Preconditions	Responder and Initiator must agree to use the Application Receipt Acknowledgement.
Post conditions	The Responder and Initiator agree on a full process that includes the Application Receipt Acknowledgement and all potential outcomes.

Scenario	<p>Begins when...</p> <p>1. The Responder and Initiator agree to use the Application Receipt Acknowledgement message.</p> <p>Continues with...</p> <table border="1" data-bbox="560 359 1479 745"> <thead> <tr> <th>Step #</th> <th>Actor</th> <th>Activity Step</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>Initiator & Responder</td> <td>Agree on the duration of the Acknowledgement Receipt Lead Time period.</td> </tr> <tr> <td>3</td> <td>Initiator & Responder</td> <td>Agree whether to use the 'Is Application Error Response Requested' choreography.</td> </tr> <tr> <td>4</td> <td>Initiator & 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 & 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 & Responder</td> <td>Agree on the steps to be taken if Errors or Warnings are detected</td> </tr> </tbody> </table> <p>Ends when...</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 ' Is Application Error Response Requested ' 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																	
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3	Initiator & Responder	Agree whether to use the ' Is Application Error Response Requested ' 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																	
Alternative Scenario	Not Applicable																		
Related Requirements	When a message is sent, the Initiator requires an answer from the Responder that the Business Message has been received.																		
Related Rules	<table border="1"> <thead> <tr> <th>Rule</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Acknowledgement Receipt Lead Time existence: The Initiator and Responder must agree on an Acknowledgement Lead Time.</td> </tr> <tr> <td>2</td> <td>Acknowledgement Receipt Lead Time rule: Prior to the lapse of the Time to Acknowledge Receipt Lead Time, the Initiator must have received the Application Receipt Acknowledgement.</td> </tr> <tr> <td>3</td> <td>The Initiator and Responder must agree whether the Application Receipt Acknowledgement will be used in their individual collaborations.</td> </tr> <tr> <td>4</td> <td>The Initiator and Responder may agree on specific processes to be performed should an Acknowledgement not be received within the agreed Acknowledgement Lead time.</td> </tr> </tbody> </table>	Rule	Description	1	Acknowledgement Receipt Lead Time existence: The Initiator and Responder must agree on an Acknowledgement Lead Time.	2	Acknowledgement Receipt Lead Time rule: 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 must agree whether the Application Receipt Acknowledgement will be used in their individual collaborations.	4	The Initiator and Responder may agree on specific processes to be performed should an Acknowledgement not be received within the agreed Acknowledgement Lead time.								
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3	The Initiator and Responder must agree whether the Application Receipt Acknowledgement will be used in their individual collaborations.																		
4	The Initiator and Responder may agree on specific processes to be performed should an Acknowledgement not be received within the agreed Acknowledgement Lead time.																		

4.3. Business Transaction Activity Diagram(s)

Figure 4-1 Activity Diagram: Application Receipt Acknowledgement



4.4. Business Transaction Sequence Diagram(s) (optional)

Not Applicable

5. Information Model (Including GDD Report)

5.1. GDD Report



Note: Reference Common Library Business Message (BMS) Release 2.6.0 for all common information.

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
ApplicationReceiptAcknowledgement				Application_ Receipt Acknowledgement. Details	ApplicationReceiptAcknowledgement is a distinctive GS1 Business Document used to respond to other GS1 Business Messages. This document serves two key purposes. The Responder may use this distinctive document to communicate successful receipt acknowledgement of an GS1 Business Document (e.g. Order, CIN, Invoice) or one of the other levels of the GS1 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_	This information on CommandApplicationReceiptAcknowledgement for ApplicationReceiptAcknowledgement.	1..1			



Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
				Receipt Acknowledgement					
			Document	Application_ Receipt Acknowledgement. Inheritance_ Association. Electronic_ Document	This document takes on the common GS1 document header structure.	1..1			
			DocumentApplicationReceiptAcknowledgement	Application_ Receipt Acknowledgement. Choice_ Association. Document_ Application_ Receipt Acknowledgement	This information on DocumentApplicationReceipt Acknowledgement for ApplicationReceiptAcknowledgement.	1..1			
		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	This information on SBDHApplicationReceiptAcknowledgement for ApplicationReceiptAcknowledgement.	1..1			
			TransactionApplicationReceiptAcknowledgement	Application_ Receipt Acknowledgement. Choice_	This information on TransactionApplicationReceiptAcknowledgement for ApplicationReceiptAcknowledgement.	1..1			



Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
				Association_ Transaction_ Application_ Receipt Acknowledgement	gement.				
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 GS1 Business Message for which an error or warning was detected. The Initiator may use the AttributeLocation to reference the original GS1 Business Message and pinpoint the attribute in question. One standard method of providing the AttributeLocation of GS1 Business Messages is by providing the XPath of the attribute.	0..1	Text. Content		minLength='1' maxLength='1000'
	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	Text. Content		minLength='1' maxLength='1000'
	attributeValue			Application_ Receipt Acknowledgement_ Error	The AttributeValue is used by the Responder to communicate the original value of an attribute for which	0..1	Text. Content		minLength='1' maxLength='1000'



Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
				Reference. Attribute_ Value. Text	an error or warning was detected. The Initiator may use the AttributeValue to see the invalid value sent by the Initiator in the GS1 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.				
CommandApplicationReceiptAcknowledgement				Command_ Application_ Receipt Acknowledgement. Details	The CommandApplicationReceipt Acknowledgement is used by the Responder to communicate receipt acknowledgements, errors or warnings for the Command element. GS1 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 GS1 Business Message will be, as a result, required to parse the application receipt acknowledgements, errors or warnings for this element.				
	errorCount			Command_ 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 for any hierarchical level of this business message—SBDH, Transaction, Command, and Document. In addition,	0..1	Numeric. Content Numeric. Format. Text		maxInclusive='4294967295'

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
					<p>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 CommandApplicationReceipt Acknowledgement would be set to 2 and the ErrorCount on DocumentApplicationReceipt Acknowledgement would be set to 5</p>				
	originalCommandType			Command_Application_Receipt_Acknowledgement.OriginalCommandType.DocumentCommandList_Code	<p>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 Acknowledgements or errors for the Command element. In such a case, the Initiator defines the CommandType in the GS1 Business Message to the Responder (setting the Command Type is required by the GS1 XML Architecture; e.g. ADD, CHANGE_BY_REFRESH, CORRECT and DELETE). The Responder returns the exact CommandType</p>	1..1	Code. Content		Facets constrained by code list values

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
					received from the Initiator back to the original Initiator.				
	statusType			Command_Application_ReceiptAcknowledgement.StatusType.ApplicationReceiptAcknowledgementStatusList_Code.	<p>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 GS1 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 GS1 Business Process, the ApplicationReceiptAcknowledgement class must be applied so that the error/warning code, description, and other fields may be communicated.</p>	1..1	Code. Content		Facets constrained by code list values
			DocumentA	Command_	This information on	0..*			

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
			ApplicationReceiptAcknowledgement	Application_ Receipt Acknowledgement. Association. Document_ Application_ Receipt Acknowledgement	DocumentApplicationReceipt Acknowledgement for CommandApplicationReceipt Acknowledgement.				
		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 GS1 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.	This information on ErrorOrWarning for CommandApplicationReceipt Acknowledgement.	0..*			

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
				Error Or Warning					
DocumentApplicationReceiptAcknowledgement				Document_Application_Receipt_Acknowledgement. Details	The DocumentApplicationReceipt Acknowledgement 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 GS1 Business Message will be, as a result, required to parse the receipt acknowledgements, errors or warnings at this level.				
	errorCount			Document_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 for any hierarchical level of this business message—SBDH, Transaction, Command, and D ...	0..1	Numeric. Content Numeric. Format. Text		maxInclusive='4294967295'
	originalDocumentCreationDateTime			Document_Application_Receipt_Acknowledgement. Original_Document_Creation_DateTime. Numeric	The OriginalDocumentCreationDateTime is used by the Responder to communicate back the original Creation Date Time stamp placed on the GS1 Business Document created by the Initiator. An Initiator is always required to provide a CreationDateTime at the Document-Level by the GS1 Business Message	1..1	Numeric. Content Numeric. Format. Text		



Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
					Standard. The OriginalDocumentCreationDate _{Time} becomes critical to uniquely identifying an GS1 Business Document back to the Initiator when the Document Identification (Content Owner GLN & Unique Creator ID) may be duplicated. In such a case, the Document Identification is paired with the OriginalDocumentCreationDate _{Time} to ensure unique identification of the original GS1 Business Document. OriginalDocumentCreationDate _{Time} is based on the Initiator's system clock. The format of this datetime is based on the W3C Implementation of ISO 8601.				
	originalDocumentReceivedDate _{Time}			Document_Application_Receipt_Acknowledgement.Original_Document_Received_Date _{Time} . Numeric	The OriginalDocumentReceivedDate _{Time} is used by a Responder to communicate the date time at which the Responder received the GS1 Business Document. This attribute assists in determining the actual date time elapsed since the Initiator stamped the GS1 Business Document with the OriginalDocumentCreationDate _{Time} . OriginalDocumentReceivedDate _{Time} is based on the Responder's system clock. The format of this datetime is based on the W3C Implementation of ISO 8601.	0..1	Numeric. Content Numeric. Format. Text		
	originalDoc			Document_	The OriginalDocumentType	1..1	Numeric.		

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
	umentType			Application_ Receipt Acknowledgement.Original Document Type.NonNegativeInteger_Numeric	is used by the Responder to communicate the type of GS1 Business Document being responded to back to the Initiator. Valid values for this field will come from an GS1 enumerated list that will list choices such as ORDER, CATALOGUE_ITEM_NOTIFICATION, and REQUEST_FOR_PAYMENT. Reference the EntityTypeList for the more possible values.		Content		
	statusType			Document_ Application_ Receipt Acknowledgement.Status Type.Application ReceiptAcknowledgementStatusList_ 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 GS1 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	1..1	Code. Content		Facets constrained by code list values

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
					RECEIVED Status. If the ERROR or WARNING StatusTypes are applied within an GS1 Business Process, the ApplicationReceiptAcknowledgement class must be applied so that the error/warning code, description, and other fields may be communicated.				
			DocumentElementError	Document_Application_Receipt_Acknowledgement.Association.Document_Element_Error	This information on DocumentElementError for DocumentApplicationReceipt Acknowledgement.	0..*			
		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 GS1 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	1..1			

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
					Initiator may correlate the receipt or error with the Initiator's original business message.				
			ErrorOrWarning	Document_Application_Receipt_Acknowledgement. Association. Error Or Warning	This information on ErrorOrWarning for DocumentApplicationReceipt Acknowledgement.	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 GS1 Business Document sent by the Initiator.				
	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	0..1	Numeric. Content Numeric. Format. Text		maxInclusive='4294967295'

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
					Document within that Command contains 5 errors, the ErrorCount on CommandApplicationReceipt Acknowledgement would be set to 2 and the ErrorCount on DocumentApplicationReceipt Acknowledgement 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.				
			ErrorOrWarning	Document Element_ Error. Association. Error Or Warning	This information on ErrorOrWarning for DocumentElementError.	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. Code	The Code is used by the Responder to indicate the GS1 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	Code. Content Code List. Agency. Identifier Code List. Agency Name. Text	CR 09-134, 08-103	Facets constrained by code list values
			ApplicationReceiptAcknowledgementErrorReference	Error Or Warning. Association. Application_ Receipt Acknowledgement_ Error Reference	This information on ApplicationReceiptAcknowledgementErrorReference for ErrorOrWarning.	0..1			

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
		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 subdivision of the Responder's organisation, 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			
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 GS1 Business Message will, as a result, be required to parse the receipt acknowledgements, errors or warnings at this level.				

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
	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 CommandApplicationReceipt_Acknowledgement would be set to 2 and the ErrorCount on DocumentApplicationReceipt_Acknowledgement 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	Numeric. Content Numeric. Format. Text		maxInclusive='4294967295'
	statusType			SBDH_Application_Receipt_Acknowledgement.Status_Type.Application	StatusType is a status field used by a Responder within the ApplicationReceipt_Acknowledgement message to indicate whether the status is	1..1	Code. Content		Facets constrained by code list values



Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
				ReceiptAcknowledgementStatusList_Code.	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 GS1 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 GS1 Business Process, the ApplicationReceiptAcknowledgement class must be applied so that the error/warning code, description, and other fields may be communicated.				
			CommandApplicationReceiptAcknowledgement	SBDH_ApplicationReceiptAcknowledgement.Choice.Association.Command_ApplicationReceipt	This information on CommandApplicationReceipt Acknowledgement for SBDHApplicationReceiptAcknowledgement.	0..*			



Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
				Acknowledgement					
			ErrorOrWarning	SBDH_Application_Receipt_Acknowledgement. Association. Error Or Warning	This information on ErrorOrWarning for SBDHApplicationReceiptAcknowledgement.	0..*			
			TransactionApplicationReceiptAcknowledgement	SBDH_Application_Receipt_Acknowledgement. Choice_Association. Transaction_Application_Receipt_Acknowledgement	This information on TransactionApplicationReceiptAcknowledgement for SBDHApplicationReceiptAcknowledgement.	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. GS1 Messages contain four hierarchal tag levels—SBDH, Transaction, Command & Document—in which Transaction is the second to highest level. The Initiator of the original GS1 Business Message will, as a result, be required to parse the receipt acknowledgements, errors or warnings at this level.				
	errorCount			Transaction_Application_Receipt_Acknowledgement	The ErrorCount is a field used by the Responder to assist the Initiator to determine the number of	0..1	Numeric. Content Numeric. Format. Text		maxInclusive='4294967295'

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
				nt. Error Count_ Value. Numeric	<p>errors or warnings detected. The ErrorCount may be applied for any tag level of the GS1 Message—SBDH, Transaction, Command, and Document. In addition, ErrorCount 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 CommandApplicationReceipt Acknowledgement would be set to 2 and the ErrorCount on DocumentApplicationReceipt Acknowledgement 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.</p>				
	statusType			Transaction_ Application_ Receipt Acknowledgement. Status Type. Application Receipt Acknowledgement Status	<p>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</p>	1..1	Code. Content		Facets constrained by code list values



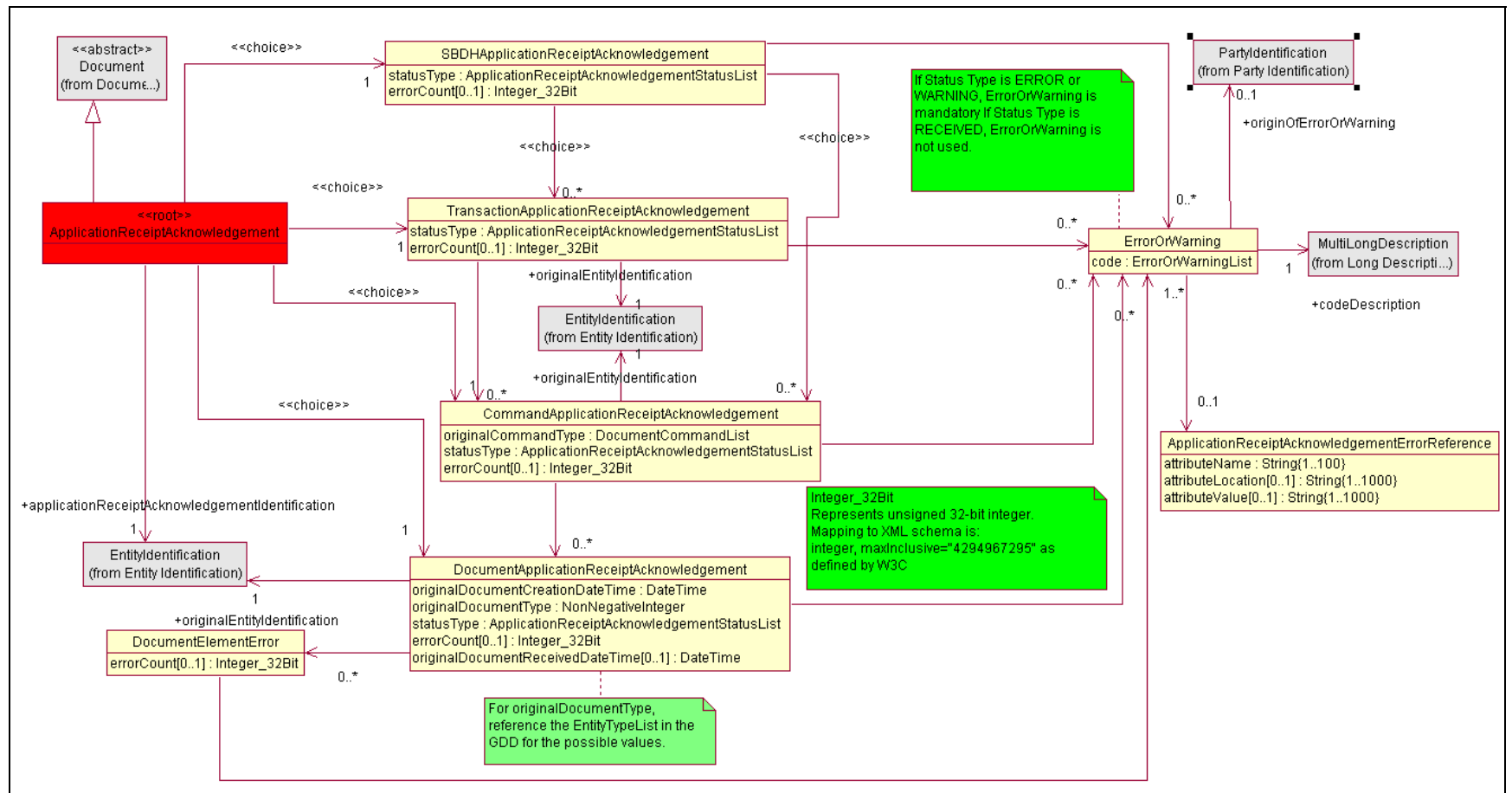
Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
					ERROR. The StatusType may be communicated for any level of the four-hierarchical levels of this business message—SBDH, Transaction, Command, and Document. Each GS1 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 GS1 Business Process, the ApplicationReceiptAcknowledgement class must be applied so that the error/warning code, description, and other fields may be communicated.				
			CommandApplicationReceiptAcknowledgement	Transaction_Application_Receipt Acknowledgement. Association. Command_Application_Receipt Acknowledgement	This information on CommandApplicationReceipt Acknowledgement for TransactionApplicationReceipt Acknowledgement.	0..*			
		originalEntityIdentification	EntityIdentification	Transaction_Application_Receipt	The originalEntityIdentification is used by the Responder to	1..1			

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
				Acknowledgement. Original_Document_Association. Entity Identification	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 GS1 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.				
			ErrorOrWarning	Transaction_Application_Receipt_Acknowledgement. Association. Error Or Warning	This information on ErrorOrWarning for TransactionApplicationReceiptAcknowledgement.	0..*			

5.2. Class Diagrams

5.2.1. Application Receipt Acknowledgement

Figure 5-1 Class Diagram: Application Receipt Acknowledgement



Note: Reference Common Library Business Message (BMS) Release 2.6.0 for all common information.

5.3. Code Lists



Note: Reference Common Library Business Message Release 2.6.0 for all Code Lists

6. Business Document Example

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)): **'0999999999991'**

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

At 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)): **'0999999999991'**

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'**

7. Implementation Considerations

 **Note:** Please refer to the SBDH Technical Implementation Guide for guidance on usage of the data elements contained in the header. This document can be found at:

http://www.gs1.org/gsm/kc/ecom/xml/xml_sbdh

7.1. Standard Business Document Header , Transaction Component, Command Component

How To Determine An Application Receipt Acknowledgement Error	
Standard Business Document Header	
1	Can multiple Transactions XML Elements be nested within the EnvelopeSBDH XML Element for the associated GS1 Business Process?
2	What are the data fields of the Standard Business Document Header? Which data fields of the Standard Business Document Header are utilized in the GS1 Business Process and Business Document?
3	What Business Rules are associated with the individual data fields of the Standard Business Document Header?
4	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.)
5	What are the EnvelopeSBDH-Level Identifier uniqueness rules? What are the rules and expectations for the EnvelopeSBDH-Level Instance Identifier for the GS1 Business Process?
6	Collaboration-Level Error and Receipt Acknowledgement: How many steps are there in this Business Process? Which step of the Business Process is being considered?
Transaction Component	
7	What are the "unit of work" (a.k.a. transaction control) rules for the GS1 Business Process in question?
8	Can multiple Command XML Elements be nested within the Transaction XML Element for this GS1 Business Process? ...for this step in the GS1 Business Process?
9	Can multiple Command XML Elements of different Command Types (e.g. ADD, CHANGE, DELETE, CORRECT) be nested within a Transaction XML Element for this GS1 Business Process?...for this step in the GS1 Business Process?
10	For this GS1 Business Process, which Command Types (ADD, CHANGE, DELETE, CORRECT) are and are not valid within a Transaction XML Element for this GS1 Business Process?...for this step in the GS1 Business Process?
11	Which Instantiations for Command are valid for a Transaction in this GS1 Business Process (e.g. DocumentCommand)? (Currently, there is only the DocumentCommand Substitution Group, previously DocumentIdentificationCommand & LinkCommand).
12	What are the Transaction-Level Identifier uniqueness rules? What are the rules and expectations for the Transaction-Level UniqueCreatorIdentification & the ContentOwner for the GS1 Business Process?
13	What is the expected response to each error?
Command Component	
14	What are the valid GS1 Business Documents for this GS1 Business Process? ...for this step in the GS1 Business Process?
15	How many Business Documents may be included within the Command?

16	What are the valid EAN,UCC Business Documents for <u>each Command Type</u> (e.g. ADD, CHANGE, DELETE, CORRECT)?
17	What are the <u>Command-Level Identifier</u> uniqueness rules? What are the rules and expectations for the <u>Command-Level UniqueCreatorIdentification</u> & the <u>ContentOwner</u> for the GS1 Business Process?
18	What is the expected response to each error?
Implementation Steps	
1	Identify the <u>CommandType</u> for which the Application Receipt Acknowledgement And Or Error definition will apply
2	Determine the Command-Level <u>Data Field(s)</u> for which an Application Receipt Acknowledgement And Or Error is being defined? Also, determine the <u>Data Field Name</u> .
3	Fully describe the <u>Logical Business Rule</u> for which the Application Receipt Acknowledgement And Or Error is being defined.
4	Identify the <u>Business Process(es)</u> that requires an error or advice definition. If applicable, determine the <u>step within the collaboration</u> (a.k.a dialog).
5	Identify the <u>Actors</u> in the Business Process such that all parties are identified as message Initiator, Responder or Proxy.
6	Determine how the Command will be <u>uniquely identified</u> (see "How to uniquely identify a GS1 XML Business Document")
7	Determine the <u>XPath location</u> (or other identification method) of the data element in the Command structure for which the error or advice is being defined.
8	Identify a <u>unique code</u> for 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 <u>Error/Advice Descriptions</u> for each error or advice code. Multiple error descriptions will only exist if each description is unique by language code.

7.2. Business Document Layer

How To Determine An Application Receipt Acknowledgement Error	
1	What are <u>typical errors</u> associated with the Business Document?
2	What are the <u>data fields</u> in this business documents? What are the constraints and rules associated with individual data fields?
3	What are the <u>dependency constraints</u> and rules between the different data fields of the Business Document?
4	What are the specialized data field rules associated with <u>each Command Type</u> (ADD, CHANGE, DELETE, CORRECT)?
5	What are the <u>Document-Level Identifier</u> uniqueness rules? What are the rules and expectations for the <u>Document-Level UniqueCreatorIdentification</u> & the <u>ContentOwner</u> for the GS1 Business Process?
6	What is the expected response to each error?

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

4	Identify the <u>Business Process(es)</u> that requires an error or advice definition. If applicable, determine the <u>step within the collaboration</u> (a.k.a. dialog).
5	Identify the <u>Actors</u> in the Business Process such that all parties are identified as message Initiator, Responder or Proxy.
6	Determine how the Business Document will be <u>uniquely identified</u> (see “How to uniquely identify a GS1 XML Business Document”)
7	Determine the <u>XPath location</u> (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 <u>unique code</u> for 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 <u>Error/Advice Descriptions</u> for each error or advice code. Multiple error descriptions will only exist if each description is unique by language code.

7.3. Unique Identification

How to Uniquely Identify: XML Business Envelope Instance Document

1	To be updated with Standard Business Document Header fields Starting with version 2, all GS1 XML instance documents use the UN/CEFACT Standard Business Document Header (SBDH) as the outer layer of the instance document.
2	Key SBDH elements include HeaderVersion, Sender, Receiver, TypeVersion. The SBDH is further described in the Standard Business Document Header (SBDH) Technical Implementation Guide

How to Uniquely Identify: XML Business Transaction

1	All GS1 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.
2	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: XML Business Document Command

1	All GS1 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).
2	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: XML Business Document

1	All GS1 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).
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2	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.
3	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 GS1 trading partners reuse a PO Number in the Order Document
4	Also, please note that the exception to this method GS1 unique document identification is found in the set of business documents defined by the Plan BRG

8. Testing

This section describes the testing criteria for business solutions.

8.1. Pass / Fail Criteria

Not Applicable

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'

9. Appendices

Not Applicable

10. Summary of Changes

Change	BSD Version	Associated CR Number
BMS Release 2.6 – eCOM Maintenance Release 2 <ul style="list-style-type: none"> Global update from EAN-UCC to GS1 (GDD) Update document to current format Update (recreate) of Activity Diagram with GS1 Moved Code Lists to Common Library Document 	1.1.0	09-134, 08-103
BMS Release 2.6 – eCOM Maintenance Release 2 <ul style="list-style-type: none"> Updates per Peer Review feedback (primarily updates to the GDD report) Added note with link to SBDH Technical Implementation Guide in section 7, Implementation Considerations per Dipan Anarkat recommendation. Incorporated updates from Ewa Iwicka for the Implementation Consideration section. 	1.1.1	09-134
BMS Release 2.6.0 – eCom Maintenance Release 2 Changes based on TSD review to fix Legacy issues. Updates made to align the model with the current schema to ensure backward compatibility. <ol style="list-style-type: none"> Attribute “originalCommandType” had code list name “DocumentCommandTypeList”. Changed to “DocumentCommandList” based on schema usage. Updated model & GDD report <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> CommandApplicationReceiptAcknowledgement originalCommandType : DocumentCommandList statusType : ApplicationReceiptAcknowledgementStatusList errorCount[0..1] : Integer_32Bit </div> Attribute “originalDocumentType” changed from datatype Integer {1:4} to NonNegativeInteger based on schema usage. Updated model & GDD report <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> DocumentApplicationReceiptAcknowledgement originalDocumentCreationDateTime : DateTime originalDocumentType : NonNegativeInteger statusType : ApplicationReceiptAcknowledgementStatusList errorCount[0..1] : Integer_32Bit originalDocumentReceivedDateTime[0..1] : DateTime </div> Added Comment to UML to provide additional information about datatype Integer_32bit and how it is mapped into the XML schema. Updated model adding comment. 	1.1.2	09-134
BMS Release 2.6 – eCOM Maintenance Release 2 Updates per Peer Review feedback . Update to Activity Diagram to correct typo(s)	1.1.3	09-134