



# Application Receipt Acknowledgement Business Message Standard (BMS)

*Release 3.1*

*1-May-2013, Issue 1*



## Document Summary

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06-May-2009	GS1 Global Office, John Ryu on behalf of GS1 Netherlands, Stef Spaan	09-000134
02-Jul-2002, 16-Nov-2003	Drummond Group & Singapore Article Number Council	02-000134, 03-000175

## Business Requirements Document (BRAD) Reference

BRAD Title:	BRD Date:	BRAD Version
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

Date of Change	Version	Changed By	Reason for Change	Summary of Change
November 21, 2011	Issue 1.0.0	Coen Janssen	Editorial changes	
1-May-2013	BMS 3.1 Issue 1	Coen Janssen	BMS Release 3.1	See summary of changes

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# 1. Business Domain View

## 1.1. Problem Statement / Business Need

To ensure a reliable flow of information between companies, they must be assured that their trading partners receive messages and are able to process them without error.

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 BMS does not deal with the 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 fulfil 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.

The Application Receipt Acknowledgement ensures that trading partners are aware that the process is progressing in a predictable fashion. It 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

This standard defines the transaction model and data model for the following business messages:

- Application Receipt Acknowledgement

## 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 a GS1 XML message and optional indication of detected validation errors or warnings.
eCom Common Library 3.1	The documented design of components that are used in multiple messages within the eCom domain.
Shared Common Library 3.1	The documented design of components that are used in multiple messages within the eCom domain and GDSN.

## 1.5. Acknowledgements

### 1.5.1. Work Group

Function	Name	Company / organisation
Co-chair	Rossner (Pottier), Natascha	GS1 France
Co-chair	Schmidt, Tom Eric	August Storck KG
Member	Bemrose, Jonathan	R&R Ice Cream
Member	Bodemer, Petra	dm-drogerie markt GmbH + Co. KG
Member	Boikanyo, Rebone	GS1 South Africa / Consumer Goods Council of South Africa
Member	Canada, ON	M3B 3L1
Member	Carlson, Jim	General Mills, Inc.
Member	Chresta, Richard	GS1 Switzerland
Member	Cook, Don	Wal-Mart Stores, Inc.
Member	Cox, Marc	Philips Electronics N.V.
Member	Darnell, David	Systrends
Member	De Flou, Nele	GS1 Belgium & Luxembourg
Member	Dicks, Arne	GS1 Germany
Member	Duvinger, Karina	GS1 Sweden
Member	Foerderer, Klaus	GS1 Germany
Member	Gathmann, Stefan	GS1 Ireland
Member	Grangard, Anders	GS1 Global Office
Member	Harpell, Eileen	GS1 Community Room Staff
Member	Herregodts, Kurt	GS1 Belgium & Luxembourg
Member	Kempkes, Fred	Unilever N.V.
Member	Kernan, Brendan	GS1 Ireland
Member	Kidd, Robin	Nestle
Member	Krid, Anne-Claire	GS1 France
Member	Lanoue, Tom	General Mills, Inc.
Member	Laur, Rita	GS1 Canada
Member	Lenman, Mia	GS1 Sweden
Member	Lerch, Hanjoerg	METRO Group
Member	Moberg, Dale	Axway
Member	Montes de Oca, Alejandra	GS1 Mexico
Member	Ng, Ella	GS1 Australia
Member	Peelen, Esther	GS1 Netherlands
Member	Pelekies, Andreas	GS1 Germany
Member	Perrier, Patricia	GS1 France

Function	Name	Company / organisation
Member	Przybilla, Christian	GS1 Germany
Member	Pujol, Xavier	GS1 Spain
Member	Racek, Greg	Wal-Mart Stores, Inc.
Member	Repetto, Mirko	GS1 Italy
Member	Robba, Steven	1WorldSync Holdings, Inc.
Member	Rosell, Pere	GS1 Spain
Member	Rosenberg, Steven	GS1 US
Member	Schmid, Sue	GS1 Australia
Member	Schneider, Christian	GS1 Switzerland
Member	Sehorz, Eugen	GS1 Austria
Member	Sharma, Vishal	General Mills, Inc.
Member	Shimazaki, Ayako	GS1 Japan
Member	Sion, Emilie	GS1 France
Member	Souza, Nadia	GS1 Brasil
Member	Strand, Roman	GS1 Germany
Member	Tan, Milton	GS1 Malaysia
Member	Tompsett, Simon	Waitrose
Member	Trelle, Ute	1WorldSync Holdings, Inc.
Member	Tse, Steve	GS1 Hong Kong
Member	Tyson, Betty	Knouse Foods Cooperative, Inc
Member	Van den Bergh, Senne	GS1 Belgium & Luxembourg
Member	Van der Eijk, Pim	OASIS - Sonnenglanz Consulting BV
Member	Veldhuis, Saskia	Procter & Gamble Co.
Member	Welch, Shan	GS1 UK
Member	Westerkamp, Jan	GS1 Netherlands
Member	Wilson, Mary	GS1 US
Member	Windsperger, Bekki	Best Buy Co., Inc.
Member	Yang, Shaopeng	GS1 China
Member	Yusdiar, Dani	GS1 Indonesia
Member	Zwanziger, Greg	SUPERVALU

### 1.5.2. Development Team Members

Function	Name	Organisation
GSMP Process Lead	Jean-Luc Champion	GS1 Global Office
Standards Content Lead	Coen Janssen	GS1 Global Office
Technical Development Lead	Ewa Iwicka	GS1 Global Office
Peer Review	Eric Kauz	GS1 Global Office

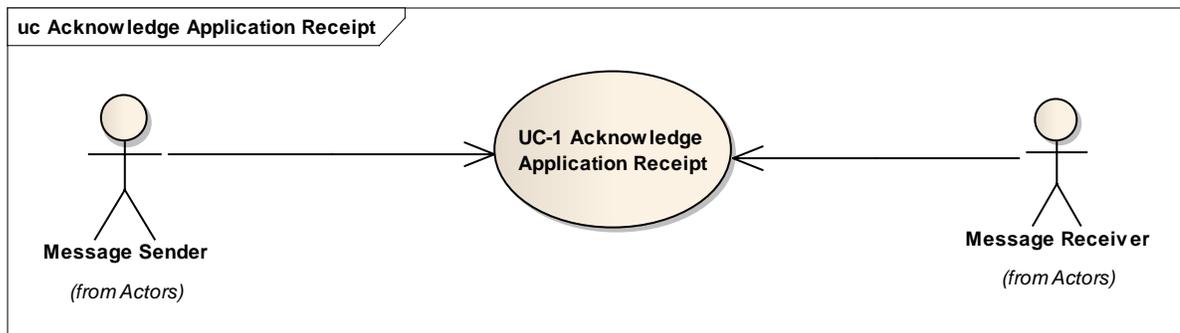
## 2. Business Context

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

## 3. Business Transaction View

### 3.1. Business Transaction – Acknowledge Application Receipt

#### Use Case Diagram

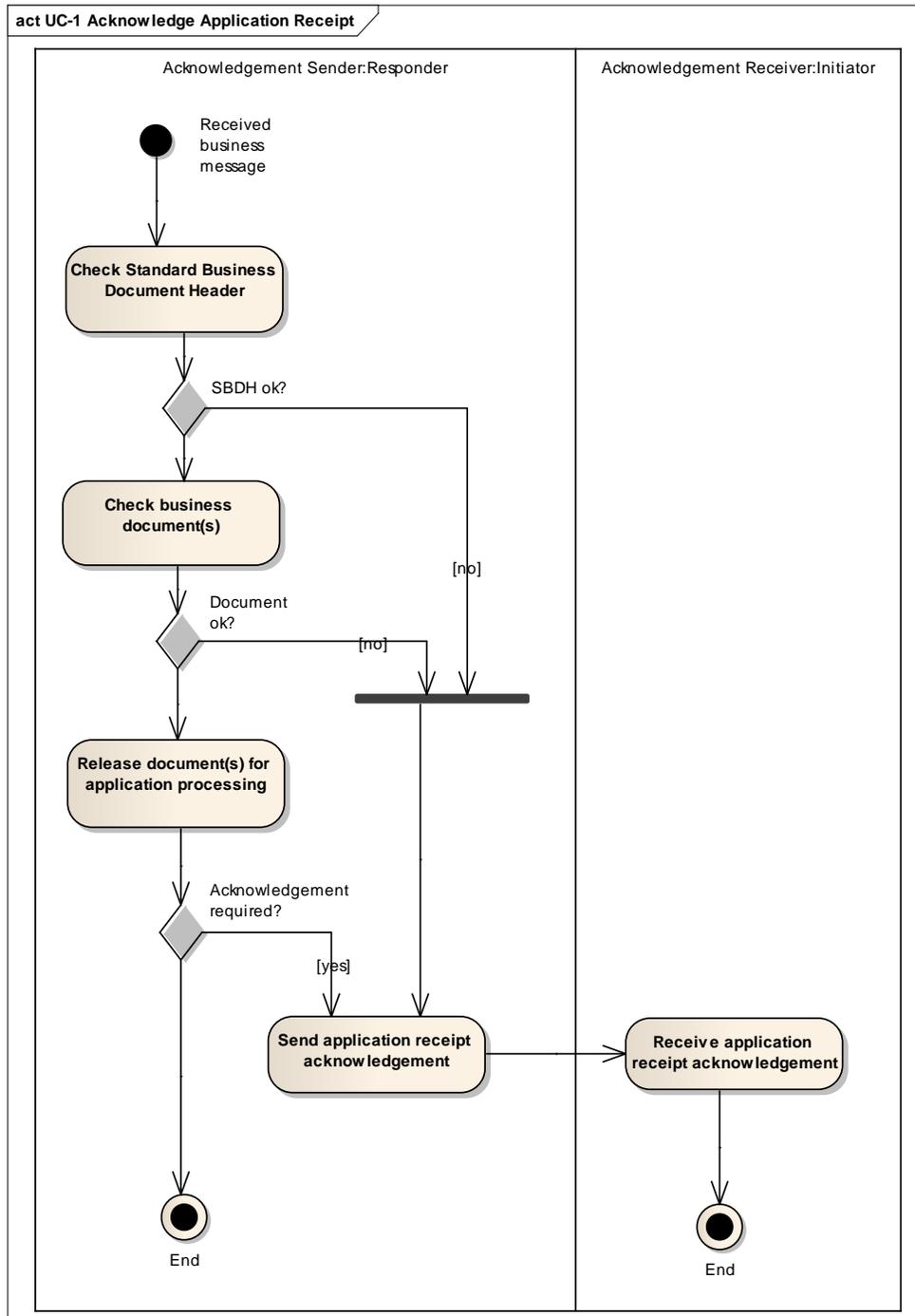


#### Use Case Description

<b>Use Case ID</b>	UC-1
<b>Use Case Name</b>	Acknowledge application receipt
<b>Use Case Description</b>	The Initiator sends the Business Message within the context of a Business Process and potentially a multi-step Collaboration. The Responder upon receiving the Business Message detects errors/warnings at the SBDH or Document hierarchical levels and responds to the message Initiator.
<b>Actors (Goal)</b>	Initiator, Responder
<b>Performance Goals</b>	
<b>Preconditions</b>	<ul style="list-style-type: none"> <li>■ Agreement to use the Application Receipt Acknowledgement (see UC-2).</li> <li>■ The Responder has received a Business Message.</li> </ul>
<b>Post conditions</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" data-bbox="570 359 1450 562"> <thead> <tr style="background-color: #003366; color: white;"> <th>Step #</th> <th>Actor</th> <th>Activity Step</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>Responder</td> <td>The Responder continues by fully detecting all possible errors/warnings in the business document.</td> </tr> <tr> <td>3</td> <td>Responder</td> <td>The Responder determines the type of response required to send 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	Responder	The Responder continues by fully detecting all possible errors/warnings in the business document.	3	Responder	The Responder determines the type of response required to send 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 the type of response required to send to the Initiator.								
<b>Alternative Scenario</b>	No Alternative Scenario									
<b>Related Requirements</b>	Not Applicable									
<b>Related Rules</b>	Not Applicable									

## Activity Diagram

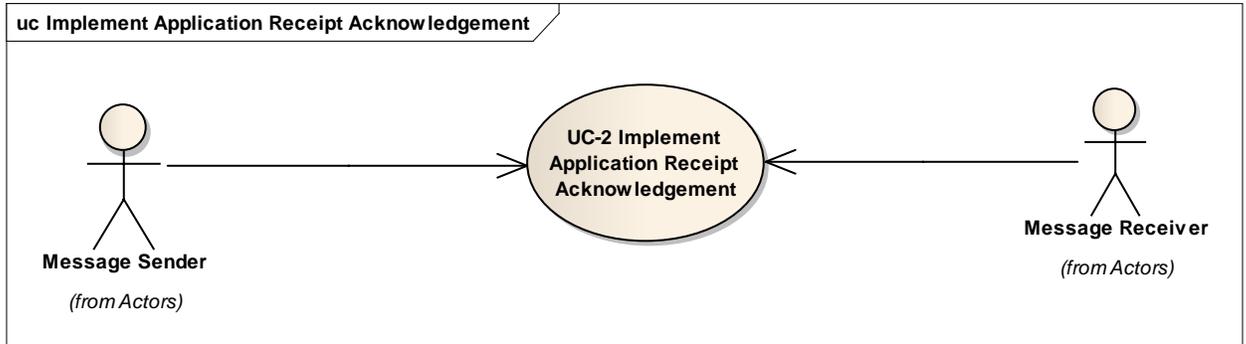


## Sequence Diagram

Not Applicable

## 3.2. Business Transaction – Implement Application Receipt Acknowledgement

### Use Case Diagram



### Use Case Description

<b>Use Case ID</b>	UC-2
<b>Use Case Name</b>	Implement 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>	<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>
<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>	Not Applicable																			
<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>1</td> <td><b>Acknowledgement Receipt Lead Time existence:</b> The Initiator and Responder must agree on an Acknowledgement Lead Time.</td> </tr> <tr> <td>2</td> <td><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.</td> </tr> <tr> <td>3</td> <td>The Initiator and Responder <b>must</b> agree whether the Application Receipt Acknowledgement will be used in their individual collaborations.</td> </tr> <tr> <td>4</td> <td>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.</td> </tr> </tbody> </table>	Rule	Description	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.									
Rule	Description																			
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.																			

### Activity Diagram

Not Applicable

### Sequence Diagram

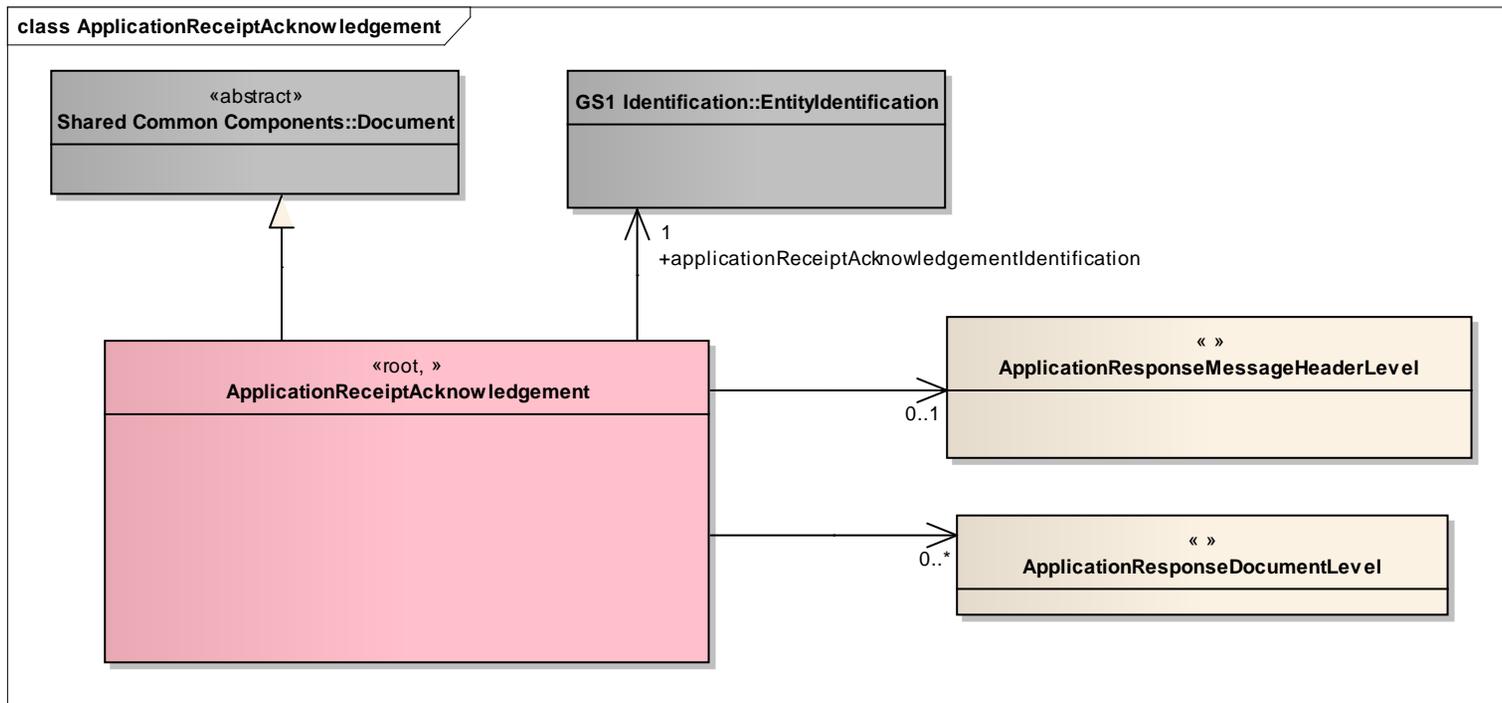
Not Applicable

## 4. Business Information View

- Note:** Reference Shared Common Library Business Message (BMS) Release 3.0.0 and eCom Domain Common Library Business Message (BMS) Release 3.0.0 for all common information.

### 4.1. Application Receipt Acknowledgement

#### Class Diagram

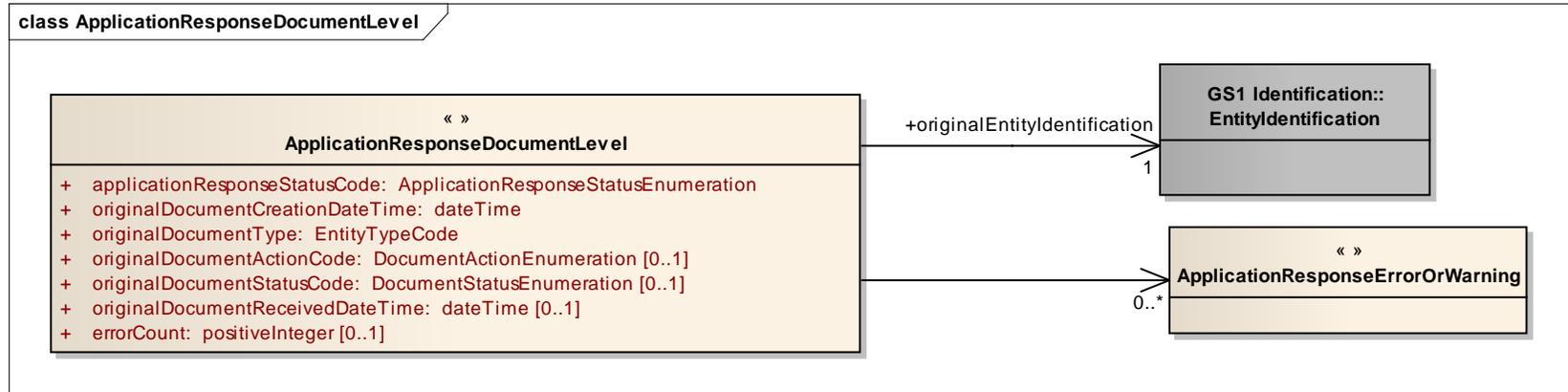


**GDD Report**

Content	Attribute / Role	Datatype /Secondary class	Multipl icity	Definition	Requirem ents
ApplicationReceiptAcknowledge ment				Application Receipt Acknowledgement is a distinctive GS1 Business Document used to respond to other GS1 Business Messages. This document serves two key purposes: The Responder may use the document to communicate successful receipt acknowledgement of a GS1 Business Document (e.g. Order, Invoice) back to the Initiator. Secondly, the Responder may also use the document to communicate validation exceptions back to the Initiator.	
Association		ApplicationResponseMes sageHeaderLevel	0..1	Receipt acknowledgements, errors or warnings for the message header level.	
Association		ApplicationResponseDoc umentLevel	0..*	Receipt acknowledgements, errors or warnings for each Business Document.	
Association	applicationRec eiptAcknowl edgementIdentifi cation	EntityIdentification	1..1	The unique identification of the Application Receipt Acknowledgement document.	
Generalization		Document		Used to specify basic information about the content of the message including version number, creation date and time.	

## 4.2. Application Response Document Level

### Class Diagram



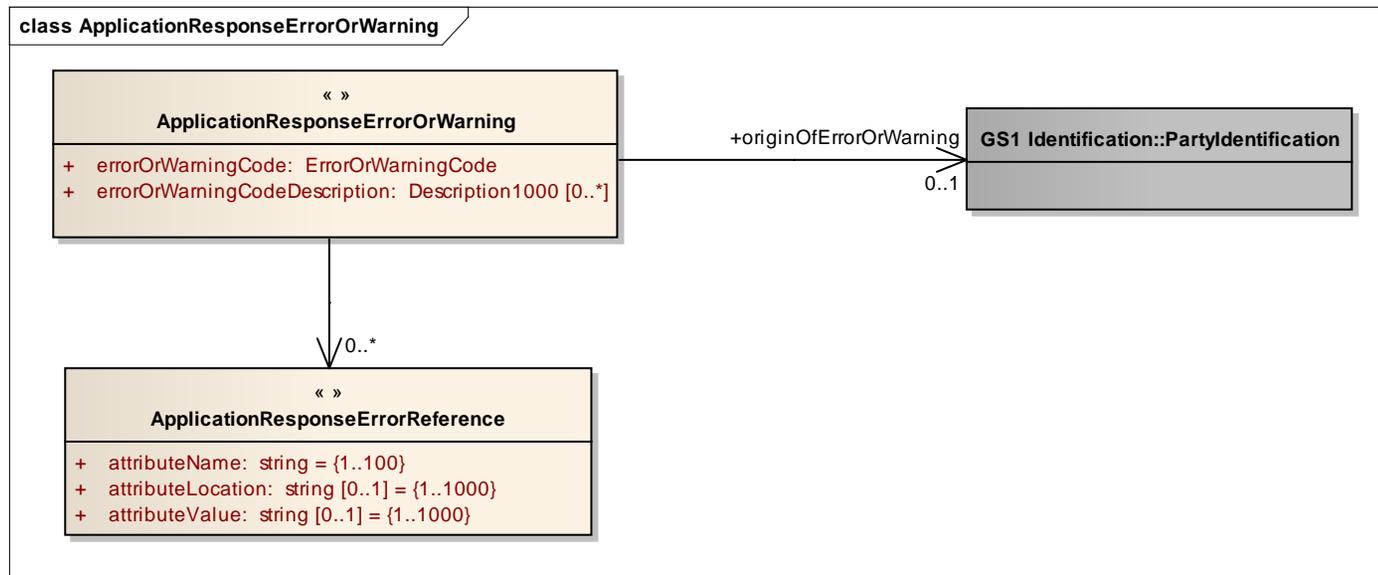
### GDD Report

Content	Attribute / Role	Datatype /Secondary class	Multipl icity	Definition	Requireme nts
ApplicationResponseDocumentLevel				This structure is used to communicate receipt acknowledgements, errors or warnings for a Business Document.	
Association		ApplicationResponseErrorOrWarning	0..*	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.	
Association	originalEntityIdentification	EntityIdentification	1..1	The identification of the document being responded to, as stated in the original document.	
Attribute	applicationResponseStatusCode	ApplicationResponseStatusEnumeration	1..1	Code specifying the status of the received GS1 Business Document. Values are RECEIVED, ERROR or WARNING.	
Attribute	originalDocumentCreationDateTime	dateTime	1..1	The creation date time of the document being responded to, as stated in the original document.	
Attribute	originalDocumentType	EntityTypeCode	1..1	Code specifying the type of GS1 Business Document being responded to.	
Attribute	originalDocumentActionCode	DocumentActionEnumeration	0..1	The document action code as stated in the original document being responded to.	added in MR3

Content	Attribute / Role	Datatype /Secondary class	Multipl icity	Definition	Requireme nts
Attribute	originalDocumentS tatusCode	DocumentStatusE numeration	0..1	The document status code as stated in the original document being responded to.	added in MR3
Attribute	originalDocumentR eceivedDateTime	dateTime	0..1	The date time at which the Responder received the original document being responded to.	
Attribute	errorCount	positiveInteger	0..1	The number of errors or warnings detected in the Business Document.	

### 4.3. Application Response Error Or Warning

#### Class Diagram



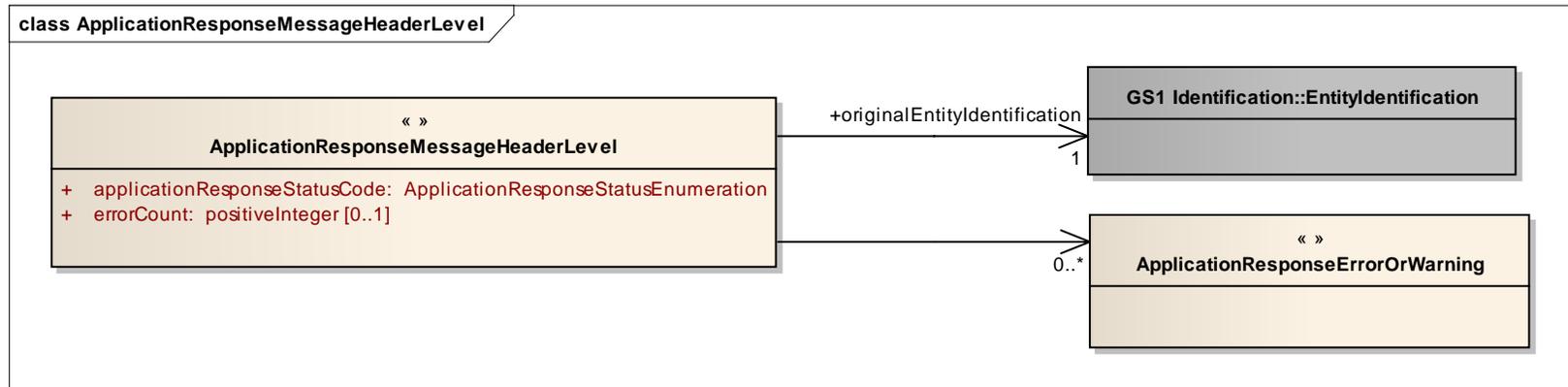
#### GDD Report

Content	Attribute / Role	Datatype /Secondary class	Multipl icity	Definition	Requireme nts
ApplicationResponseErrorOrW arning				Details describing the nature and location of an error or warning.	

Content	Attribute / Role	Datatype /Secondary class	Multipl icity	Definition	Requireme nts
Association		ApplicationResponseErrorReference	0..*	Exact references to the cause of an error or warning.	
Association	originOfErrorOrWarning	PartyIdentification	0..1	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 organisation, or the exact origin may be a third party partner.	
Attribute	errorOrWarningCode	ErrorOrWarningCode	1..1	Code specifying the type of error or warning.	
Attribute	errorOrWarningCodeDescription	Description1000	0..*	Textual description of the error or warning code.	
ApplicationResponseErrorReference				An exact reference to the cause of an error or warning.	
Attribute	attributeName	string	1..1	The proper business name of an attribute.	
Attribute	attributeLocation	string	0..1	The exact location of the attribute in the GS1 Business Message for which an error or warning was detected. One standard method of providing the AttributeLocation is by providing the XPath of the attribute.	
Attribute	attributeValue	string	0..1	The original value of an attribute for which an error or warning was detected.	

## 4.4. Application Response Message Header Level

### Class Diagram



### GDD Report

Content	Attribute / Role	Datatype /Secondary class	Multiplicity	Definition	Requirements
ApplicationResponseMessageHeaderLevel				This structure is used to communicate receipt acknowledgements, errors or warnings for the message header level.	
Association	originalEntityIdentification	EntityIdentification	1..1	The identification of the message being responded to, as stated in the standard business document header of the original message.	
Association		ApplicationResponseErrorOrWarning	0..*	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.	
Attribute	applicationResponseStatusCode	ApplicationResponseStatusEnumeration	1..1	Code specifying the status of the received message. Values are RECEIVED, ERROR or WARNING.	
Attribute	errorCount	positiveInteger	0..1	The number of errors or warnings detected in the header of the message.	

## 4.5. Code Lists

 **Note:** Reference Shared Common Library Business Message (BMS) Release 3.0.0 and eCom Domain Common Library Business Message (BMS) Release 3.0.0 for all Code Lists

Class	Codelist	Referenced in
ApplicationResponseDocumentLevel	EntityTypeCode	Shared Common Library Business Message (BMS) Release 3.0.0
ApplicationResponseErrorOrWarning	ErrorOrWarningCode	eCom Domain Common Library Business Message (BMS) Release 3.0.0
ApplicationResponseDocumentLevel	DocumentActionEnumeration	Shared Common Library Business Message (BMS) Release 3.0.0
ApplicationResponseDocumentLevel	DocumentStatusEnumeration	Shared Common Library Business Message (BMS) Release 3.0.0

## 4.6. ApplicationResponseStatusEnumeration

Content	Datatype /Secondary class
ERROR	An error acknowledgement
RECEIVED	A received acknowledgement
WARNING	A warning acknowledgement

## 5. Business Message 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: <b>'2004-03-22T10:43:00-05:00'</b> Document Status: <b>'ORIGINAL'</b>  Entity Identification (Application Receipt Acknowledgement) Unique Creator Identification: <b>'RA-000001'</b> Party Identification (Content Owner (GLN)): <b>'0999999999991'</b>  Document Application Receipt Acknowledgement And Or Error: Original Document Creation Date Time: <b>'2004-03-03T08:43:00-05:00'</b> Original Document Type: <b>'3'</b> Status Type: <b>'ERROR'</b> Error Or Warning Code: <b>'INCOMPLETE_MESSAGE'</b>

**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 Code: 'ORIGINAL'

Entity Identification (Application Receipt Acknowledgement And Or Error Identification)  
 Unique Creator Identification: 'RA-000001'  
 Party Identification (Content Owner (GLN)): '0999999999991'

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'

**Message**

ApplicationReceiptAcknowledgement	
Document	
creationDateTime	'2004-03-22T10:43:00-05:00'
documentStatusCode	'ORIGINAL'
EntityIdentification (applicationReceiptAcknowledgementIdentification)	
entityIdentification	'RA-000001'
ApplicationResponseDocumentLevel	
applicationResponseStatusCode	'ERROR'
originalDocumentCreationDateTime	'2004-03-03T08:43:00-05:00'
originalDocumentType	'3'
EntityIdentification (originalEntityIdentification)	
entityIdentification	'POR024'
ApplicationResponseErrorOrWarning	
errorOrWarningCode	'INCOMPLETE_MESSAGE'

## 6. Implementation Considerations

### 6.1. Error Detection

 **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/gsmp/kc/ecom/xml/xml\\_sbdh](http://www.gs1.org/gsmp/kc/ecom/xml/xml_sbdh)

How To Determine An Application Receipt Acknowledgement Error	
Standard Business Document Header	
1	What are the data fields of the Standard Business Document Header? Which data fields of the Standard Business Document Header are utilized in the Business Process?
2	What Business Rules are associated with the individual data fields of the Standard Business Document Header?
3	Are the data fields in the Standard Business Document Header consistent with the data provided in the message? (e.g. do the enclosed Business Documents match the specified type?)
4	What are the SBDH-Level Instance Identifier uniqueness rules? What are the rules and expectations for the SBDH-Level Instance Identifier for the GS1 Business Process?
Business Document	
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_BY_REFRESH, DELETE)?
5	What are the <u>Document-Level Identifier</u> uniqueness rules? What are the rules and expectations for the Document-Level UniqueCreatorIdentification & the ContentOwner for the GS1 Business Process?
6	What is the expected response to each error?

## 6.2. Implementation

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.

## 7. Appendices

Not Applicable

## 8. Summary of Changes

### 8.1. BMS Release 3.0

Change	BSD Version	Associated CR Number
<p>BMS Release 3.0: Updates to reflect changes in modelling methodology</p> <ul style="list-style-type: none"><li>• Added DocumentActionEnumeration and DocumentStatusEnumeration to section code lists.</li><li>• Updated section 7.2 to reflect changes in the codes in Document Action Code List.</li><li>• Replaced 1 occurrence of ean.ucc by GS1 in both sections 1.4 and 7.1</li><li>• Replaced multiDescription1000 with repeatable description1000.</li></ul>	1.0.0	n/a

### 8.2. BMS Release 3.1

No work requests. Indirect changes due to upgrade to new Shared and eCom Common libraries.