



# Application Receipt Acknowledgement

Business Message Standard (BMS)

*Release 3.2*

*01-Dec-2014, Issue 1*



## 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

Date of Change	Version	Changed By	Reason for Change	Summary of Change
12-Jan-2012	BMS 3.0 – Issue 1	Mark Van Eeghem	BMS Release 3.0	See summary of changes
01-May-2013	BMS 3.1 – Issue 1	Coen Janssen	BMS Release 3.1	See summary of changes
01-Dec-2014	BMS 3.2 – Issue 1	Ewa Iwicka	BMS Release 3.2	See summary of changes

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# 1. Business Domain View

## 1.1. Introduction

### Message Definition

The Application Receipt Acknowledgement message enables a message recipient to confirm that he received the message and whether he was able to process it without error.

### Principles

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.

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.

## 1.2. 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 3.2	The documented design of components that are used in multiple messages within the eCom domain.
Shared Common Library 3.2	The documented design of components that are used in multiple messages within the eCom domain and GDSN.

# 2. Business Context

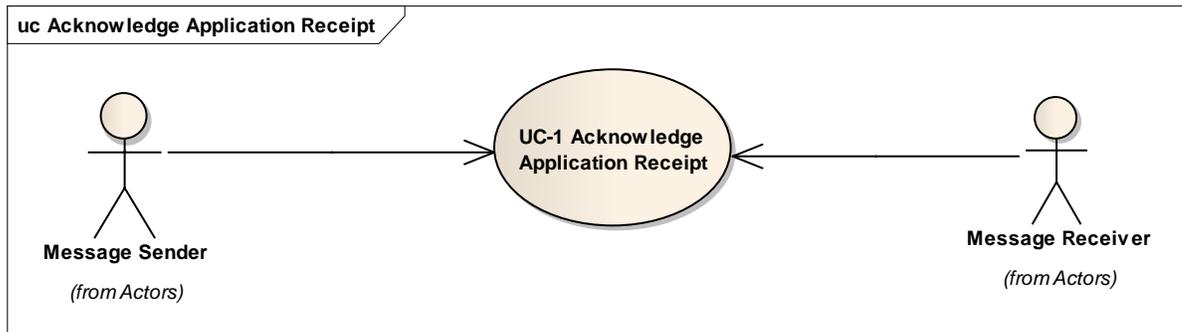
Context Category	Value(s)
Industry	All
Geopolitical	All
Product	All
Process	All
System Capabilities	GS1 eCom

Context Category	Value(s)
Official Constraints	None

### 3. Business Transaction View

#### 3.1. Business Transaction – Acknowledge Application Receipt

##### Use Case Diagram

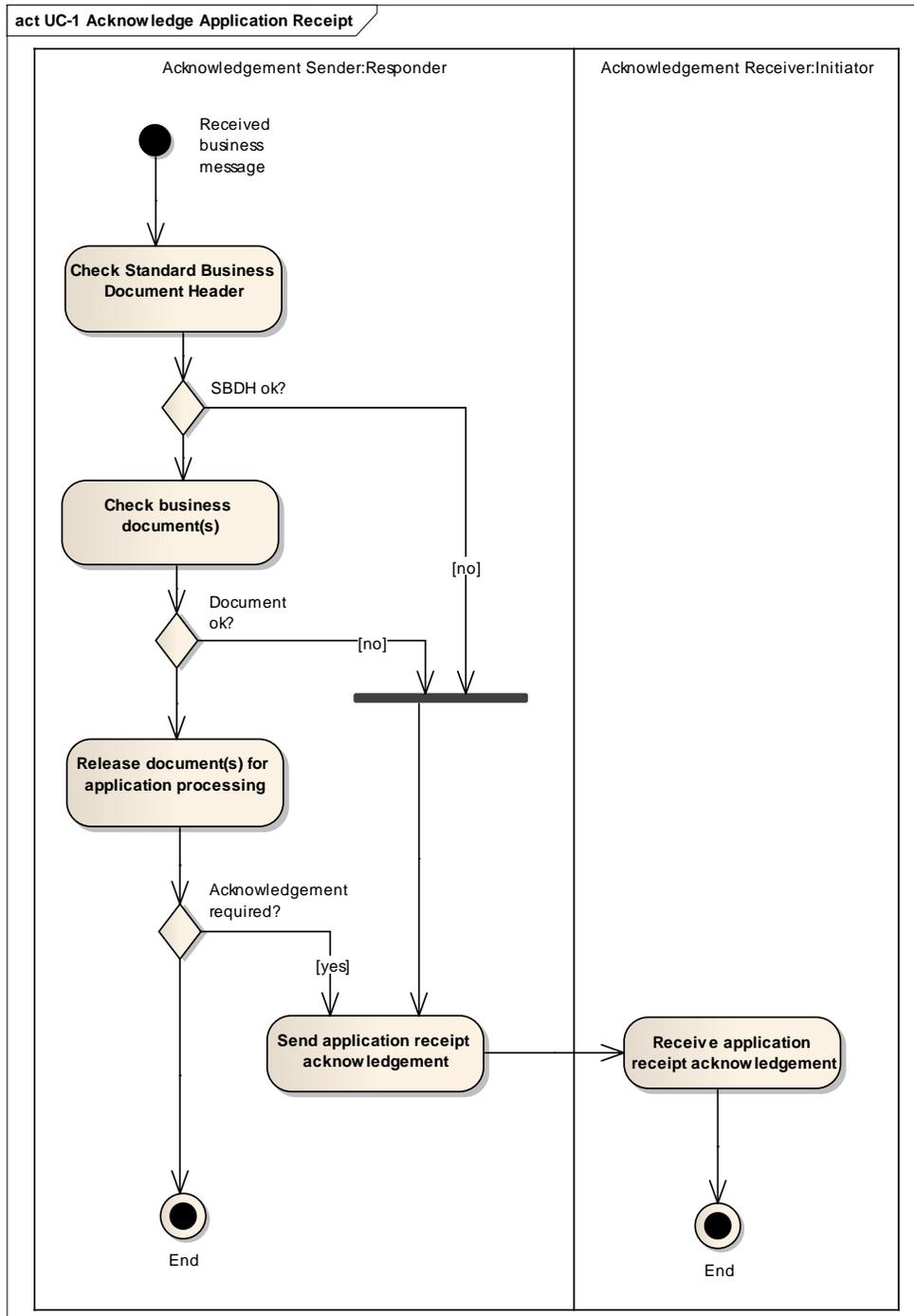


##### Use Case Description

<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 1451 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

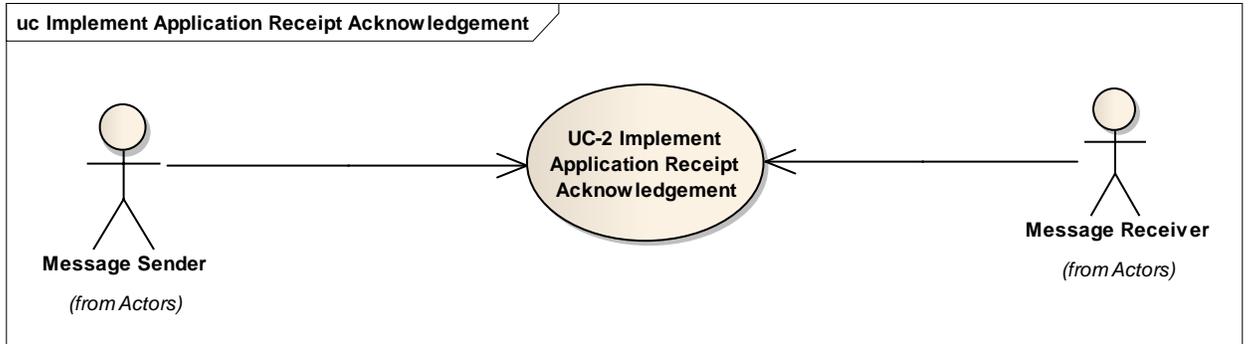


### Sequence Diagram

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

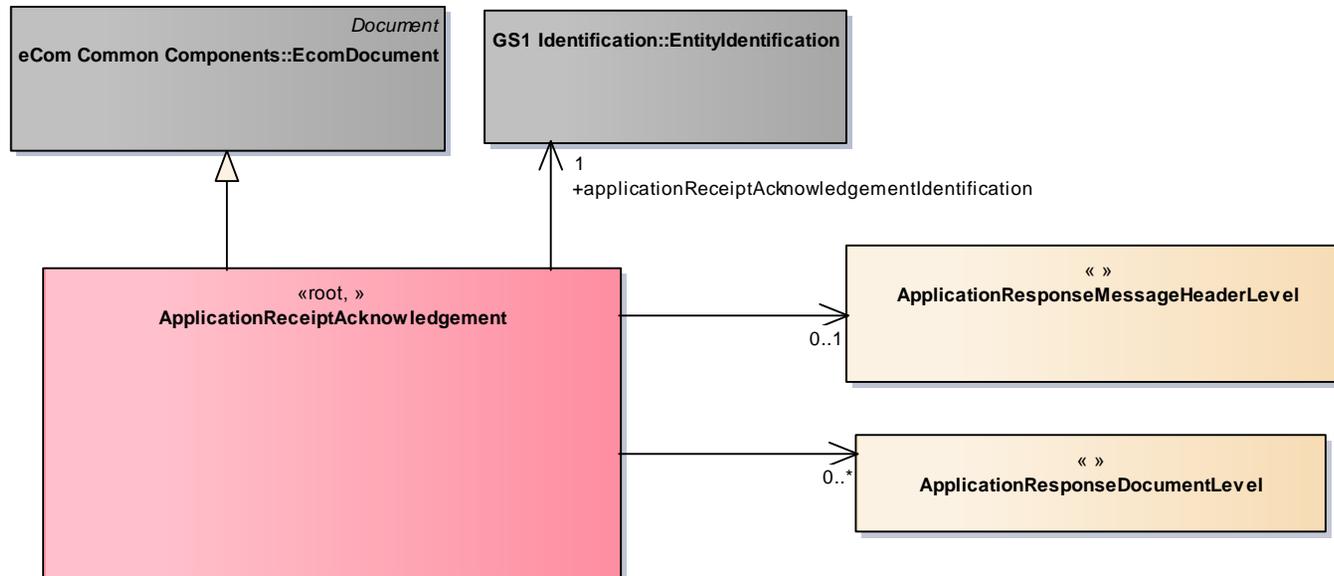
### Sequence Diagram

Not Applicable

## 4. Business Information View

### 4.1. Application Receipt Acknowledgement

Class Diagram



## GDD Report

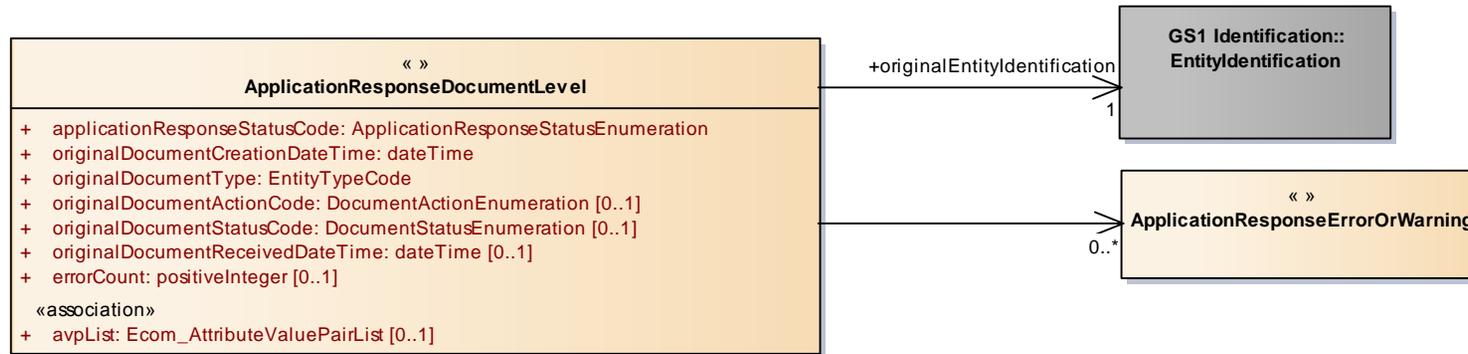
The content of the ApplicationReceiptAcknowledgement class, its structure and component definitions can be accessed in the Global Data Dictionary:

[http://apps.gs1.org/GDD/bms/Version3\\_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:ApplicationReceiptAcknowledgement](http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:ApplicationReceiptAcknowledgement)

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
ApplicationReceiptAcknowledgement				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 an 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	applicationReceiptAcknowledgementIdentification	EntityIdentification	1..1	The unique identification of the Application Receipt Acknowledgement document.	
Association		ApplicationResponseDocumentLevel	0..*	Receipt acknowledgements, errors or warnings for each Business Document.	
Generalization		EcomDocument		Basic information about the content of the message including version number, creation date and time.	
Association		ApplicationResponseMessageHeaderLevel	0..1	Receipt acknowledgements, errors or warnings for the message header level.	

## 4.2. Application Response Document Level

### Class Diagram



### GDD Report

The content of the ApplicationResponseDocumentLevel class, its structure and component definitions can be accessed in the Global Data Dictionary:

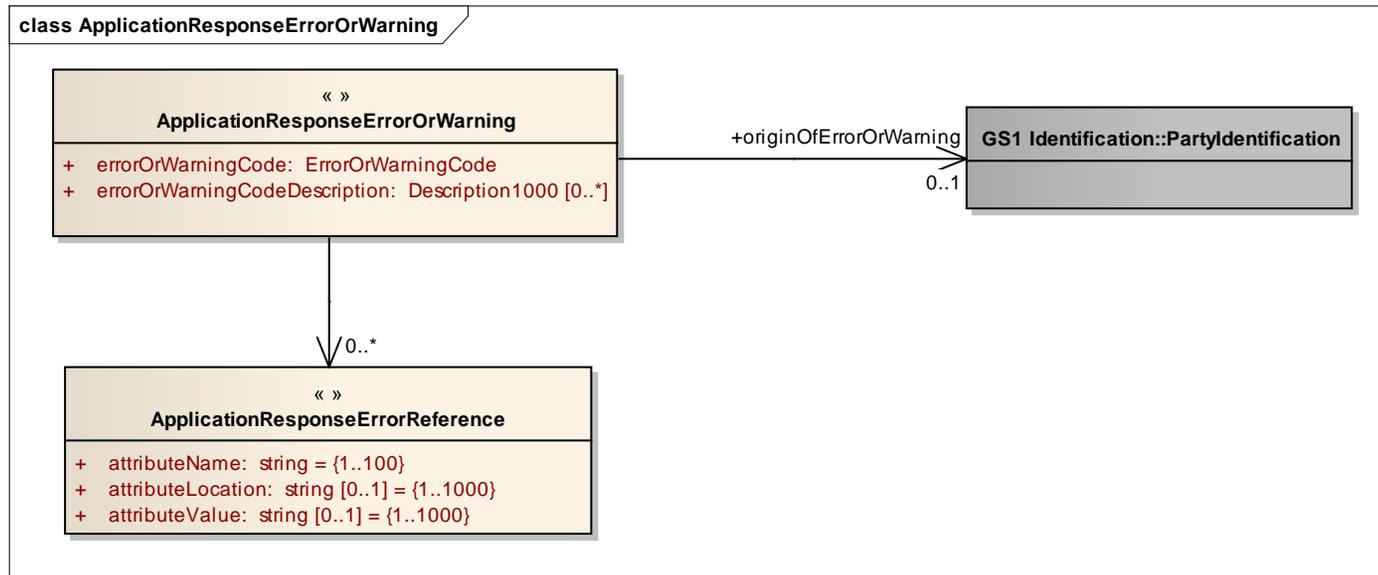
[http://apps.gs1.org/GDD/bms/Version3\\_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:ApplicationResponseDocumentLevel](http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:ApplicationResponseDocumentLevel)

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
ApplicationResponseDocumentLevel				This structure is used to communicate receipt acknowledgements, errors or warnings for a Business Document.	
Association	originalEntityIdentification	EntityIdentification	1	The identification of the document being responded to, as stated in the original 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.	
Attribute	applicationResponseStatusCode	ApplicationResponseStatusEnumeration	1..1	Code specifying the status of the received GS1 Business Document. Values are RECEIVED, ERROR or WARNING.	

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
Attribute	avpList	Ecom_AttributeValuePairList	0..1	Temporary attributes introduced between minor versions.	
Attribute	originalDocumentCreationDate	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	
Attribute	originalDocumentStatusCode	DocumentStatusEnumeration	0..1	The document status code as stated in the original document being responded to.;added in MR3	
Attribute	originalDocumentReceivedDate	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

The content of the ApplicationResponseErrorOrWarning class, its structure and component definitions can be accessed in the Global Data Dictionary:

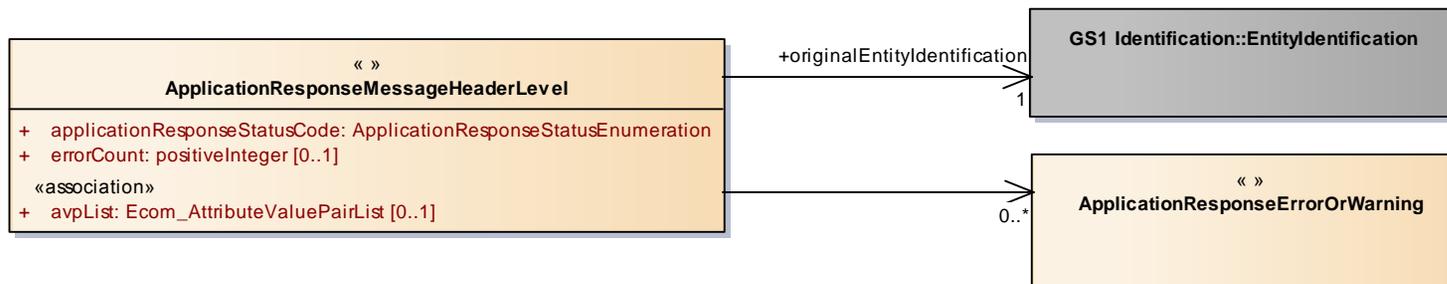
[http://apps.gs1.org/GDD/bms/Version3\\_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:ApplicationResponseErrorOrWarning](http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:ApplicationResponseErrorOrWarning)

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
ApplicationResponseErrorOrWarning				Details describing the nature and location of an error or warning.	
Association		ApplicationResponseErrorReference	0..*	Exact references to the cause of an error or warning.	

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
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

The content of the ApplicationResponseMessageHeaderLevel class, its structure and component definitions can be accessed in the Global Data Dictionary:

[http://apps.gs1.org/GDD/bms/Version3\\_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:ApplicationResponseMessageHeaderLevel](http://apps.gs1.org/GDD/bms/Version3_2/Pages/bieDetails.aspx?semanticURN=urn:gs1:gdd:bie:ApplicationResponseMessageHeaderLevel)

Content	Attribute / Role	Datatype / Secondaryclass	Multiplicity	Definition	Requirements
ApplicationResponseMessageHeaderLevel				This structure is used to communicate receipt acknowledgements, errors or warnings for the message header level.;renamed from SBDHApplicationReceiptAcknowledgement	
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 message being responded to, as stated in the standard business document header of the original message.	
Attribute	applicationResponseStatusCode	ApplicationResponseStatusEnumeration	1..1	Code specifying the status of the received message. Values are RECEIVED, ERROR or WARNING.	
Attribute	avpList	Ecom_AttributeValuePairList	0..1	Temporary attributes introduced between minor versions.	WR 14-000110
Attribute	errorCount	positiveInteger	0..1	The number of errors or warnings detected in the header of the message.	



**Note:** Reference Shared Common Library Business Message (BMS) Release 3.2.0 and eCom Domain Common Library Business Message (BMS) Release 3.2.0 for all common information.

## 4.5. Code Lists

Class	Codelist	GDD Link
ApplicationResponseDocumentLevel	ApplicationResponseStatusEnumeration	<a href="http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:ApplicationResponseStatusEnumeration">http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:ApplicationResponseStatusEnumeration</a>
ApplicationResponseDocumentLevel	DocumentActionEnumeration	<a href="http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:DocumentActionEnumeration">http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:DocumentActionEnumeration</a>
ApplicationResponseDocumentLevel	DocumentStatusEnumeration	<a href="http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:DocumentStatusEnumeration">http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:DocumentStatusEnumeration</a>
ApplicationResponseDocumentLevel	EntityTypeCode	<a href="http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:EntityTypeCode">http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:EntityTypeCode</a>
ApplicationResponseErrorOrWarning	ErrorOrWarningCode	<a href="http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:ErrorOrWarningCode">http://apps.gs1.org/GDD/Pages/clDetails.aspx?semanticURN=urn:gs1:gdd:cl:ErrorOrWarningCode</a>

 **Note:** Refer to the Global Data Dictionary (GDD) for the code values.

## 5. Business Message Examples

### 5.1. Example 1

This is an example of an Application Receipt Acknowledgement message intended to confirm that the message has been received. The message is identified with the unique identification number RA0001.

#### Party Information

GS1 Global Location Number	Party Type
5412345000013	Buyer - message sender
4098765000010	Seller - message receiver

The message receiver – Seller (GLN 4098765000010) has received the Order message with identification number PO3352 from the sender – Buyer (GLN 5412345000013). As previously agreed between the two parties, the receiving application sends a message to the sending application that theOrder has been received. This does not equal to the acceptance of the Order.

#### Message example 1

Attribute	Value
<b>ApplicationReceiptAcknowledgement</b>	
creationDateTime	2011-03-11 11:43
documentStatusCode	ORIGINAL
<b>EntityIdentification (+applicationReceiptAcknowledgementIdentification)</b>	
entityIdentification	RA0001
<b>TransactionalParty (+contentOwner)</b>	
gln	4098765000010
<b>ApplicationResponseDocumentLevel</b>	

Attribute	Value
applicationResponseStatusCode	RECEIVED
originalDocumentCreationDateTime	2011-03-11 11:00
originalDocumentType	35
<b>EntityIdentification (+originalEntityIdentification)</b>	
entityIdentification	PO3352
<b>TransactionalParty (+contentOwner)</b>	
gln	5412345000013

## 5.2. Example 2

This is an example of an Application Receipt Acknowledgement message intended to report an error in the original message. The message is identified with the unique identification number RA0009.

The message receiver – Seller (GLN 4098765000010) has received the Order message with identification number PO3352 from the sender – Buyer (GLN 5412345000013). As previously agreed between the two parties, the receiving application sends a message to the sending application that theOrder was received and an error was detected – the message was incomplete.

### Message example 2

Attribute	Value
<b>ApplicationReceiptAcknowledgement</b>	
creationDateTime	2011-03-11 11:43
documentStatusCode	ORIGINAL
<b>EntityIdentification (+applicationReceiptAcknowledgementIdentification)</b>	
entityIdentification	RA0009
<b>TransactionalParty (+contentOwner)</b>	
gln	4098765000010
<b>ApplicationResponseDocumentLevel</b>	
applicationResponseStatusCode	ERROR
originalDocumentCreationDateTime	2011-03-11 11:00
originalDocumentType	35
<b>EntityIdentification (+originalEntityIdentification)</b>	
entityIdentification	PO3352
<b>TransactionalParty (+contentOwner)</b>	
gln	5412345000013
<b>ApplicationResponseErrorOrWarning</b>	
errorOrWarningCode	INCOMPLETE_MESSAGE

## 6. Implementation Considerations

### 6.1. User Guide

The Functional User Guide contains more information about the structure and content of the Application Receipt Acknowledgement message: [http://www.gs1.org/docs/ecom/xml/3/3.2/eCom-Trade\\_messages.html#ApplicationReceiptAcknowledgement](http://www.gs1.org/docs/ecom/xml/3/3.2/eCom-Trade_messages.html#ApplicationReceiptAcknowledgement)

### 6.2. Message Specific Considerations

#### 6.2.1. 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/gsm/kc/ecom/xml/xml\\_sbdh](http://www.gs1.org/gsm/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?

#### 6.2.2. 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> .

Implementation Steps	
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. Summary of Changes

Any change in the GS1 standards is done based on the Work Request (WR) submitted by the GS1 User Companies or Member Organisations. All Work Requests are documented in the Work Request system available on the GS1 website: <http://wr.gs1.org>. The system is accessible to registered users. New visitors need to register first, to be able to access it. WRs can be searched by the number referenced in tables below, see: Search Work Requests. The number starts with the two last digits of the year when it was submitted, followed by the consecutive number within that year.



**Note:** WRs submitted earlier than February 2012 should be searched in Old Change Requests.

### 7.1. BMS Release 3.0

Change	BSD Version	Associated CR Number
BMS Release 3.0: Updates to reflect changes in modelling methodology <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

### 7.2. BMS Release 3.1

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

## 7.3. BMS Release 3.2

Change	Associated WR
<p>Added Attribute Value Pair at the root, line item and sub line item levels</p> <div data-bbox="289 346 1304 583"> <p><b>class ApplicationReceiptAcknowledgement - maintenance view</b></p> <pre> classDiagram     class ApplicationReceiptAcknowledgement {         &lt;&lt;root, &gt;&gt;         maintenance     }             </pre> <p>Change: (Verified) 3.2 changed generalisation from Document to eComDocument class to include AVP (WR 14-110)</p> </div> <div data-bbox="289 604 1232 1052"> <p><b>class ApplicationResponseMessageHeaderLevel - maintenance view</b></p> <pre> classDiagram     class ApplicationResponseMessageHeaderLevel {         &lt;&lt; &gt;&gt;         + applicationResponseStatusCode: ApplicationResponseStatusEnumeration         + errorCount: positiveInteger [0..1]         &lt;&lt;association&gt;&gt;         + avpList: Ecom_AttributeValuePairList [0..1]         maintenance     }             </pre> <p>Change: (Verified) 3.2 added +avpList (WR 14-110)</p> </div> <div data-bbox="289 1073 1221 1591"> <p><b>class ApplicationResponseDocumentLevel - maintenance view</b></p> <pre> classDiagram     class ApplicationResponseDocumentLevel {         &lt;&lt; &gt;&gt;         + applicationResponseStatusCode: ApplicationResponseStatusEnumeration         + originalDocumentCreationDateTime: dateTime         + originalDocumentType: EntityTypeCode         + originalDocumentActionCode: DocumentActionEnumeration [0..1]         + originalDocumentStatusCode: DocumentStatusEnumeration [0..1]         + originalDocumentReceivedDateTime: dateTime [0..1]         + errorCount: positiveInteger [0..1]         &lt;&lt;association&gt;&gt;         + avpList: Ecom_AttributeValuePairList [0..1]         maintenance     }             </pre> <p>Change: (Verified) 3.2 added +avpList (WR 14-110)</p> </div>	14-000110

## 8. Appendices

Not Applicable

## 9. Acknowledgements

The following is a list of individuals (and their companies) who participated in the creation, review and approval of this BMS.

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