

# **Business Message Standard (BMS)**

**for**

## **Replenishment Proposal**

**BRG: Plan  
IRT: Upstream Standards**

**BMS Release: 2.1**

**Document Version: 1.2.5**

**Date: 21.07.2005**



### Change Request Reference

Refer to Change Request (CR) Number(s):	CR04-000211
CR Submitter(s):	Regenald Kramer
Date of CR Submission to GSMP:	05.11.2004

### Business Requirements Analysis Document (BRAD) Reference

BRAD Title:	BRAD Upstream Standards – Demand & Supply Signals
BRAD Date:	01.11.2004
BRAD Version:	0.1.0

BRAD Title:	Replenishment – Business Requirement Document
BRAD Date:	30/03/2004
BRAD Version:	1.0.0

### Document Summary

Document Number:	<i>Unique identifier from initial check-in number</i>
Document Title:	BMS for Replenishment Proposal
Owner:	BRG: Plan IRT: Upstream Standards Chairperson: Fred Kempkes
Status:	(check one box) <input type="checkbox"/> DRAFT <input checked="" type="checkbox"/> Approved
BMS Template Version:	1.2
Targeted BMS Publication Version	2.1

## Document Change History

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

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
31.12.2004	1.0.0	Eric Kauz	Initial Version in BMS/BSD template	Migration of BRD to standard BMS/BSD format	N/A
12.01.2005	1.1.0	Coen Janssen	UIM project	Draft version	N/A
20.01.2005	1.1.1	Coen Janssen	Review		N/A
14.02.2005	1.1.2	Coen Janssen	Motion to public review	Some corrections	
07.04.2005	1.2.0	Coen Janssen	Public Review Plan BRG February 21 – March 1 2005	Changes to functionality : See chapter 11.	
21.04.2005	1.2.1	Coen Janssen	Vienna meeting	Added some further clarifications to chapter 11.	
30.05.2005	1.2.2	Coen Janssen	Peer review comments	Functional changes, see chapter 11. Corrected the GDD report. Corrected the Use Case description. Changed the footer text.	
09.06.2005	1.2.3	Coen Janssen	Updated GDD official names.		
21.07.2005	1.2.4	Coen Janssen	Technical Design Public Review	Several cosmetic changes Functional change, see paragraph 1.10	
25.04.2007	1.2.5	Giovanni Biffi	Editorial Changes	Minor Editorial Changes to the Document	N/A

# Business Message Standard

---

## Table of contents

---

Chapter	Page
<b>1 Business Solution .....</b>	<b>1</b>
1.1 Business Domain View.....	1
1.1.1 Problem Statement / Business Need.....	1
1.1.2 Objective.....	1
1.1.3 Audience.....	1
1.1.4 Artefacts .....	1
1.1.5 References .....	2
1.1.6 Acknowledgements .....	2
1.1.6.1 IRT Members .....	2
1.1.6.2 BRG Members .....	2
1.1.6.3 ITRG Members .....	3
1.1.6.4 Design Team Members .....	3
1.2 Business Context .....	3
1.3 Additional Technical Requirements Analysis .....	4
1.3.1 Technical Requirements (optional).....	4
1.4 Business Transaction View .....	4
1.4.1 Business Transaction DELIVERY PLAN .....	4
1.4.2 Business Transaction Use Case Diagram.....	4
1.4.3 Use Case Description.....	5
1.4.4 Business Transaction Activity Diagram(s) .....	5
1.4.5 Business Transaction Sequence Diagram(s) (optional) .....	5
1.5 Information Model (including GDD Report) .....	6
1.5.1 Data Description .....	6
1.5.2 GDD Report.....	7
1.5.3 Class Diagrams .....	10
1.5.4 Code Lists.....	11
1.6 Business Document Example .....	12
1.7 Implementation Considerations .....	15
1.8 Testing.....	15
1.8.1 Pass / Fail Criteria .....	15
1.8.2 Test Data .....	15
1.9 Appendices.....	15

**Business Message Standard**

---

Table of contents

---

1.10 Summary of Changes..... 15

**2 Technical Solution Design..... 17**

## 1 Business Solution

### 1.1 Business Domain View

#### 1.1.1 Problem Statement / Business Need

*(States the business need, establishing the context for the business transactions and information requirements.)*

The replenishment process in broader sense addresses the business practice to exchange data between a buying party (e.g. buyer) and a supplying party (e.g. seller/supplier) related to the future demand of finished or semi-finished products, ingredients, packaging and raw materials.

Between retailer and manufacturer (the downstream supply chain) the data is basically based on future demand based on finished products and time series but it can also be restricted to actual sales date for a certain period of time. Feed-back from the manufacturer on his availability to deliver is required, where available inventories (of both sides) are taken in account.

Between manufacturer and material supplier (the upstream supply chain) the data is basically based on material requirements for production and the timing for it. And also the feedback from the material supplier on his availability to deliver and the schedule for delivery. Inventories (on both sides) are taken in account for the actual delivery schedule. Based on the delivery schedule (replenishment proposal), a transport and shipping planning can be derived.

#### 1.1.2 Objective

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

*(Above is standards text for the objective.)*

#### 1.1.3 Audience

*(List of expected internal and external users of the BMS expressed as stakeholder.)*

Anyone involved in the replenishment process with another party in the (extended) supply chain process. These parties basically are retailers, manufactures and suppliers of ingredients, packaging and raw materials. But can also be parties in between like wholesalers or logistic service providers managing warehouses.

#### 1.1.4 Artefacts

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

Artefact name	State	Artefact / State description

### 1.1.5 References

	Reference Name	Description
[Ref1]	BMS Common Library	The documented design of components that are used in multiple messages.
[Ref2]	BRAD Upstream Standards - Demand & Supply Signals 0.1.0	
[Ref3]	Replenishment – Business Requirement Document 1.0.0	

### 1.1.6 Acknowledgements

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

#### 1.1.6.1 IRT Members

Function	Name	Company / organisation
IRT Chair	Fred Kempkes	Unilever
IRT Participant	Kevin Zeng	Procter & Gamble
IRT Participant	Stephen Bell	CPG Market
IRT Participant	Roland Dachs, Olivier Grienberger, Don Reed	Crown Cork
IRT Participant	Arthur Doldersum	SCA
IRT Participant	James Kimber	General Mills, Inc.
IRT Participant	Kristen Halwachs	UCCnet
IRT Participant	Nicola Comiotto, Menno Smit	Nestlé
IRT Participant	Pawel Solowinski	Kappa Packaging
IRT Participant	Peter Broend, Johannes Lundgren	Novozymes
IRT Participant	Paul Moodey	Johnson & Johnson
IRT Participant	Wouter Crul	Nspyre
IRT Participant	Thierry Baillif, Gabriel Galeazzi	Firmenich
IRT Participant	Jan Peter Klijn	Royal Sens
IRT Participant	Yasushi Kiyama	Ajinomoto Co.
IRT Participant	Georges Socquet	Givaudan

#### 1.1.6.2 BRG Members

Function	Name	Company / organisation
BRG Manager	Tom Heist	GS1 Head Office
BRG Chair	Fred Kempkes	Unilever Bestfoods Europe
BRG Member	Mutsuo Fukada	The Distribution Code Centre - DCC
BRG Member	Roman Strand	Centrale Fur Coorganisation - CCG
BRG Member	Ricardo Toshio Yague	EAN Brazil

BRG Member	David Ferrell	Wal-Mart Stores
BRG Member	Victoria M. Kendzierski	Thomson
BRG Member	Murray Pratt	Kraft Foods
BRG Member	Larry Roth	Kimberly-Clark
BRG Member	Robert Rzepka	Worldwide Retail Exchange
BRG Member	Thomas Stenftenagel	Procter & Gamble

### 1.1.6.3 ITRG Members

Function	Name	Company / organisation
ITRG Chair		
ITRG Member	Stef Spaan	GS1 Netherlands
ITRG Member		
ITRG Member		
...		

### 1.1.6.4 Design Team Members

Function	Name	Organisation
Modeller	Coen Janssen	GS1 Netherlands
XML Technical Designer	Dipan Anarkat	GS1 Head Office
EANCOM Technical Designer	Marco Schuyt	GS1 Netherlands
Peer Reviewer	Eric Kauz	GS1 Head Office

## 1.2 Business Context

(Note: The context of the business)

Context Category	Value(s)
Industry	<i>All, Consumer Packaged Goods</i> All
Geopolitical	<i>All, Global, Europe, Unites States, Japan, UK</i> All
Product	<i>All, Direct Materials, Food, Non-Food, Hard lines, Apparel</i> All
Process	<i>All, Order (Direct To Consumer), Order (Direct Store Delivery), Order, Pay (Self Billing), Deliver (Direct Store Delivery) .....</i> Plan
Official Constraints	<i>None, Value Added Tax, Sales Tax</i> None
Roles	<i>Buyer, Seller, Ship From, Ship To, Payer Payee, Data Source, Data Recipient</i> Buyer, Seller



## Business Solution Design

System Capabilities	All, EANCOM, XML, AIDC, EPC-network EANCOM, XML
---------------------	--

If no value use, the default of "All" except for Official Constraints where default is "None".

(Process, Geopolitical, Industry, User Role (Retailer, Supplier, etc.))

If context cannot be specified, select from the context classification code list in the GDD.).

### 1.3 Additional Technical Requirements Analysis

#### 1.3.1 Technical Requirements (optional)

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

Number	Statement	Rationale
1.		

### 1.4 Business Transaction View

#### 1.4.1 Business Transaction DELIVERY PLAN

#### 1.4.2 Business Transaction Use Case Diagram

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

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

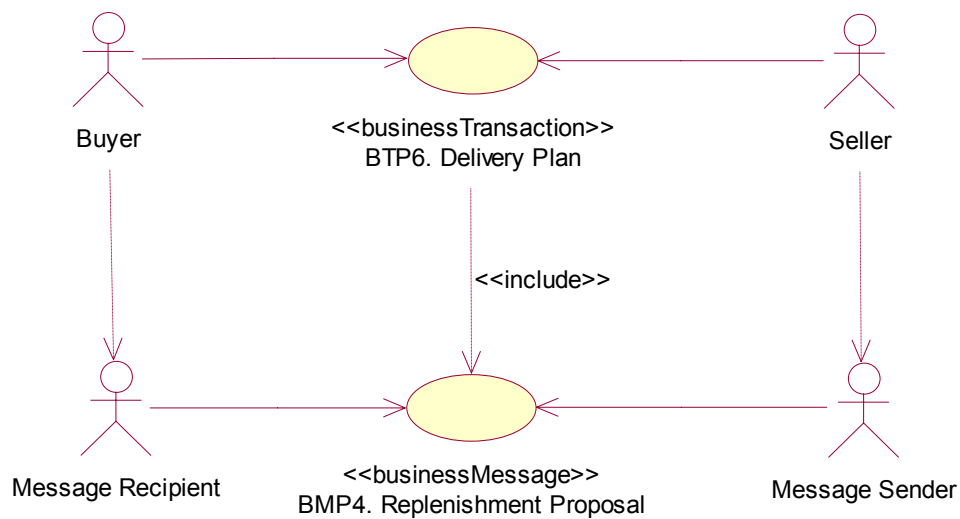


Figure 1 – Use Case Diagram: Business Transaction

## Business Solution Design

### 1.4.3 Use Case Description

Use Case ID	BTP6											
Use Case Name	Delivery Plan											
Use Case Description	The Delivery Plan is sent by the supplier and communicates to the buyer the quantities of which items will be delivered when & where by the supplier.											
Actors (Goal)	Seller: To send the Delivery Plan. Buyer: To receive the Delivery Plan.											
Performance Goals												
Preconditions	Delivery Plan: CALCULATED											
Post conditions	Delivery Plan: COMMUNICATED											
Scenario	<p><b>Begins when:</b> Seller has calculated the delivery plan.</p> <p><b>Continues with:</b></p> <table><thead><tr><th>Step #</th><th>Actor</th><th>Activity Step</th></tr></thead><tbody><tr><td>1.</td><td>Seller</td><td>Sends Replenishment Proposal message to the Buyer.</td></tr><tr><td>2.</td><td>Buyer</td><td>Receives Replenishment Proposal message</td></tr></tbody></table> <p><b>Ends when:</b> Buyer receives Replenishment Proposal message</p>			Step #	Actor	Activity Step	1.	Seller	Sends Replenishment Proposal message to the Buyer.	2.	Buyer	Receives Replenishment Proposal message
Step #	Actor	Activity Step										
1.	Seller	Sends Replenishment Proposal message to the Buyer.										
2.	Buyer	Receives Replenishment Proposal message										
Alternative Scenario	<p><i>(any alternatives to the above scenario)</i></p> <table><thead><tr><th>Step #</th><th>Actor</th><th>Activity Step</th></tr></thead><tbody><tr><td>1.</td><td></td><td></td></tr><tr><td>2.</td><td></td><td></td></tr></tbody></table>			Step #	Actor	Activity Step	1.			2.		
Step #	Actor	Activity Step										
1.												
2.												
Guidelines	<table><tbody><tr><td>1.</td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></tbody></table>			1.								
1.												

### 1.4.4 Business Transaction Activity Diagram(s)

*(Note: Activity diagrams are optional. The business process modeller shall determine the use and number of activity diagrams included in the BMS. Each activity diagram shall be given a consecutive paragraph number (e.g., 2.4.1) and heading.)*

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

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

## Business Solution Design

### 1.5 Information Model (including GDD Report)

#### 1.5.1 Data Description

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Related Requirement
Replenishment-Proposal				
	replenishmentProposalDocumentType			[ref3]
	structureType			
		<<is a>>	Document	[ref2] {7.8.1-2+3}
		replenishmentProposalIdentification	EntityIdentification	[ref2] {7.8.1-1}
		buyer	PartyIdentification	[ref2] {7.8.1-5}
		seller	PartyIdentification	[ref2] {7.8.1-6}
		materialRequirementsPlanner	Contact	[ref2] {7.8.1-10}
		additionalReferenceNumber	Reference	[ref3]
		replenishmentRequest	DocumentReference	[ref3]
			ReplenishmentProposalItemLocation-Information	
Replenishment-ProposalItemLocationInformation				
			TradeItemIdentification	[ref2] {7.8.1-12}
		shipTo	PartyIdentification	[ref2] {7.8.1-7}
		shipFrom	PartyIdentification	[ref2] {7.8.1-8}
		inventoryLocation	PartyIdentification	[ref2] {7.8.1-9}
			replenishmentProposalLineItem	
Replenishment-ProposalLineItem				
		<<is a>>	LineItem	[ref2] {7.8.1-11}
	timeBucketSize			[ref2] {7.8.1 Missing requirement}
	proposedQuantity			[ref2] {7.8.1-13+14}
	packagingType			[ref3]
		periodOfReplenishment	TimeOrDateTimePeriod	[ref2] {7.8.1-15+16+17+18}
		purchaseConditions	DocumentOrDocumentLineReference	[ref2] {7.8.1-4}
		proposedQuantitySpecification	QuantitySpecification	[ref3]

## Business Solution Design

### 1.5.2 GDD Report

(Output from GDD should be pasted in this section.)

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
Replenishment-Proposal				Replenishment Proposal. Details	Contains the seller delivery or production plan for the buyer for given trade items and locations for specific time periods.	
	replenishmentProposalDocumentType			Replenishment Proposal. Replenishment Proposal Document Type. Replenishment Proposal Document Type List Code	Contains the type of replenishment plan; production or delivery.	1..1
	structureType			Replenishment Proposal. Structure Type. Structure Type List Code	Contains the type of grouping and sequence of the business document.	1..1
		<<is a>>	Document	Replenishment Proposal. Generalization. Document		1..1
		replenishmentProposalIdentification	EntityIdentification	Replenishment Proposal. Replenishment Proposal Identification. Entity Identification	Contains the unique identifier of the business document.	1..1
		buyer	PartyIdentification	Replenishment Proposal. Buyer. Party Identification	Contains the identification of the party that is buying the goods.	1..1
		seller	PartyIdentification	Replenishment Proposal. Seller. Party Identification	Contains the identification of the party that is selling the goods.	1..1
		materialRequirementsPlanner	Contact	Replenishment Proposal. Material Requirements Planner. Contact	Contains the name or ID of the person or department responsible for the planning at the buyer side.	0..1
		additionalReferenceNumber	Reference	Replenishment Proposal. Additional Reference Number. Reference	Contains reference to an additional business document.	0..1
		replenishmentRequest	DocumentReference	Replenishment Proposal. Replenishment Request. Document Reference		0..1
			Replenishment-ProposalItemLocationInformation	Replenishment Proposal. Association. Replenishment Proposal Item Location Information		1..*

## Business Solution Design

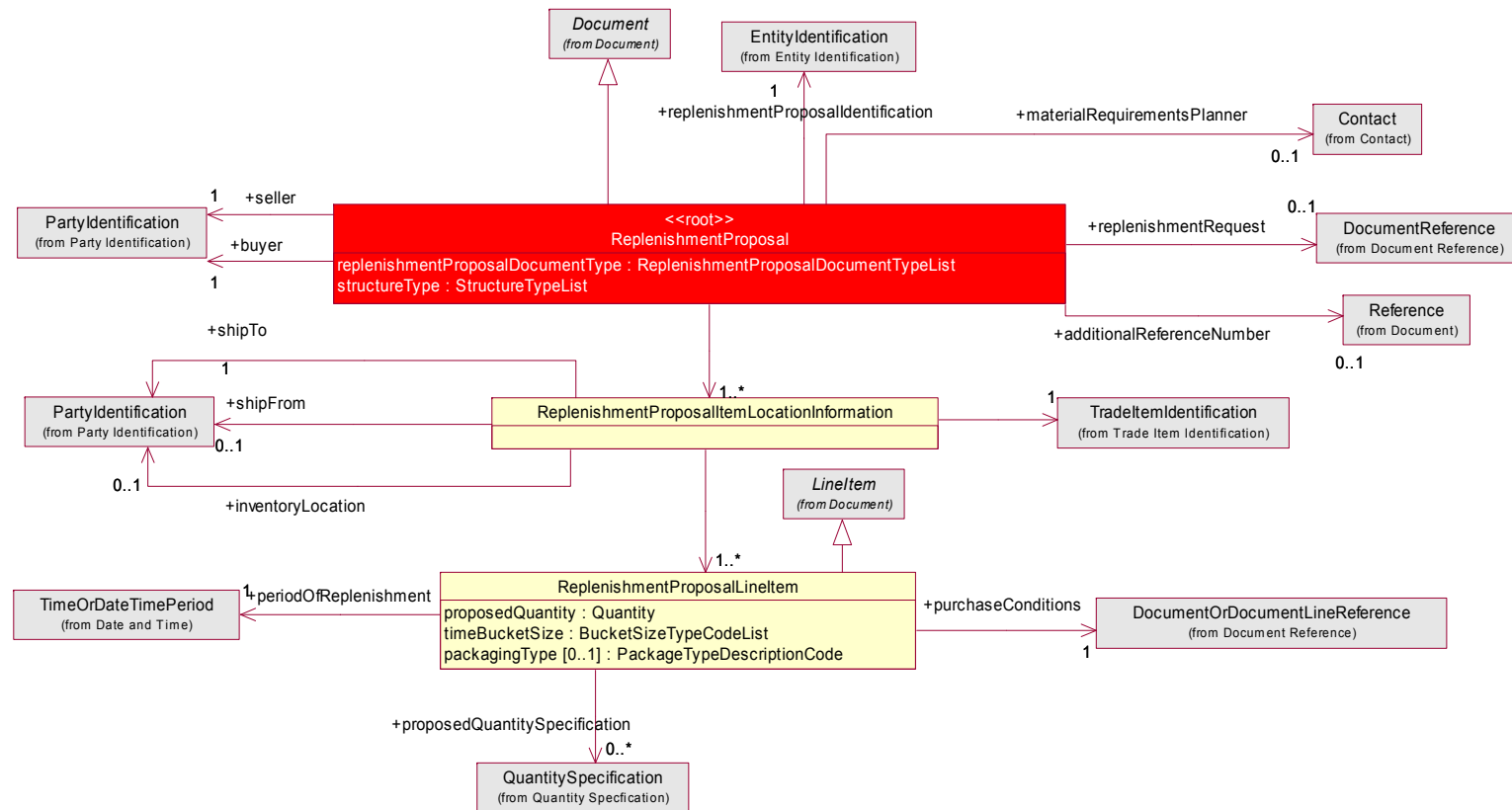
Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
Replenishment-ProposalItemLocationInformation				Replenishment Proposal Item Location Information. Details	Contains the replenishment plan for given trade items and locations for specific time periods.	
			TradeItemIdentification	Replenishment Proposal Item Location Information. Association. Trade Item Identification		1..1
		shipTo	PartyIdentification	Replenishment Proposal Item Location Information. Ship To. Party Identification	Contains the identification of the location whereto the required goods will be delivered.	1..1
		shipFrom	PartyIdentification	Replenishment Proposal Item Location Information. Ship From. Party Identification	Contains the identification of the location wherefrom the required goods will be delivered.	0..1
		inventoryLocation	PartyIdentification	Replenishment Proposal Item Location Information. Inventory Location. Party Identification	Identification of the physical place at the receiving side where the items are to be stored.	0..1
			replenishment-ProposalLineItem	Replenishment Proposal Item Location Information. Association. Replenishment Proposal Line Item		1..*
Replenishment-ProposalLineItem				Replenishment Proposal Line Item. Details	Contains the planned quantities per time bucket.	
		<<is a>>	LineItem	Replenishment Proposal Line Item. Generalization. Line Item		
	timeBucket-Size			Replenishment Proposal Line Item. Time Bucket Size. Bucket Size Type Code List_ Code	Contains a code describing the size of the planning period.	1..1
	proposed-Quantity			Replenishment Proposal Line Item. Proposed Quantity. Quantity	The number of units planned to be replenished.	1..1
	packaging-Type			Replenishment Proposal Line Item. Packaging Type. Packaging type Description Code List. Code	Contains the kind of logistic unit in which the goods will be delivered.	0..1
		periodOfReplenishment	TimeOr-DateTimePeriod	Replenishment Proposal Line Item. Period Of Re-	Contains the start and end dates and optionally start and end	1..1

## Business Solution Design

---

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
				plenishment. Time Or Date Time Period	times of the time bucket.	
		purchaseCondi-tions	DocumentOr-Documen-tLineReference	Replenishment Proposal Line Item. Purchase Condi-tions. Document Or Docu-ment Line Reference	Contains a reference to the commercial agreement under which the goods are supplied.	1..1
		proposedQuan-titySpecification	QuantitySpecifi-cation	Replenishment Proposal Line Item. Proposed Quan-tity Specification. Quantity Specification	Contains additional quantity information for the time bucket. Example: In Transit, Produced.	0..*

### 1.5.3 Class Diagrams



**Figure 2 – Class Diagram: Business Document**

## Business Solution Design

---

### 1.5.4 Code Lists

*(Output from GDD should be pasted in this section.)*

Code List Name	Code List Description
ReplenishmentProposalDocumentTypeList	not available
Code Name	Code Description
DELIVERY_PLAN	not available
PRODUCTION_PLAN	not available
ACTUAL_PRODUCTION	Document contains quantities of goods manufactured in previous periods.



### 1.6 Business Document Example

The following is an example of a delivery plan message. The message is send out on January 11th at 11 AM. The message is identified with the unique identifier 20050014. The content owner is the sending party, in this case the material supplier (Seller 8812345678901).

The delivery plan is sent by the material supplier (Seller 8812345678901) to the manufacturer (Buyer 8712345678911).

For informational purposes the material supplier includes the name of the material requirements planner of the manufacturer (Mr. Kramer).

The delivery plan is for one delivery site (Ship to 8712345670001), one supplier site (Ship from 8712345678960). For one of the products there is a specific storage location specified (Inventory location 8712345670077). It has an additional seller assigned id (ROTTERDAM-01).

The delivery plan contains two items: Item A (GTIN 08712345678901) and item B (GTIN 08712345678920 and buyer item number AB77770004).

Item A has two planned deliveries:

- on February 11th of 1000 units of which 500 units are in transit.
- on February 12th of 200 units.

The contract used for this product (2004000012) issued by the material supplier. Within the contract line 23 refers to this item.

Item B has one planned delivery on February 9th of 500 units. This needs to be delivered between 8 AM and 9 AM.

The contract used for this product (2004000012) issued by the material supplier. Within the contract line 25 refers to this item.

ReplenishmentProposal	
- creationDateTime	2005-01-11T11:00:00
- documentStatus	ORIGINAL
- replenishmentProposalType	DELIVERY_PLAN
- structureType	LOCATION_BY_ITEM
EntityIdentification (+ReplenishmentProposalIdentification)	
- uniqueCreatorIdentification	20050014
PartyIdentification (+contentOwner)	
- gLN	8812345678901
PartyIdentification (+seller)	
- gLN	8812345678901
PartyIdentification (+buyer)	
- gLN	8712345678911
Contact (+materialRequirementsPlanner)	
MultiDescription (+personOrDepartmentName)	

## Business Solution Design

- description (language, text)	EN, Kramer
ReplenishmentProposalItemLocationInformation *1	
PartyIdentification (+shipTo)	
- gLN	8712345670001
PartyIdentification (+shipFrom)	
- gLN	8712345678960
TradeItemIdentification	
- gTIN	08712345678901
ReplenishmentProposalLineItem *1.1	
- lineItemNumber	1
- timeBucketSize	DAY
- proposedQuantity (value, unitOfMeasure)	1000
TimeOrDateTimePeriod (+requirementsPeriod)	
TimePeriod	
- startDate	2005-02-11
- endDate	2005-02-11
DocumentOrDocumentLineReference (+purchaseConditions)	
DocumentLineReference	
- lineItemNumber	23
DocumentReference	
- entityType	PURCHASE_CONDITIONS
EntityIdentification	
- uniqueCreatorIdentification	2004000012
PartyIdentification (+contentOwner)	
- gLN	8812345678901
QuantitySpecification (+proposedQuantitySpecification)	
- quantitySpecificationType	IN_TRANSIT
- specificQuantity (value, unitOfMeasure)	500
ReplenishmentProposalLineItem *1.2	
- lineItemNumber	2
- timeBucketSize	DAY
- proposedQuantity (value, unitOfMeasure)	200
TimeOrDateTimePeriod (+requirementsPeriod)	
TimePeriod	
- startDate	2005-02-12
- endDate	2005-02-12
DocumentReference (+purchaseConditions)	
- entityType	PURCHASE_CONDITIONS

## Business Solution Design

EntityIdentification	
- uniqueCreatorIdentification	2004000012
PartyIdentification (+contentOwner)	
- gLN	8812345678901
DocumentLineReference	
- lineItemNumber	2
ReplenishmentProposalItemLocationInformation *2	
PartyIdentification (+shipTo)	
- gLN	8712345670001
PartyIdentification (+shipFrom)	
- gLN	8712345678960
PartyIdentification (+InventoryLocation)	
- gLN	8712345670077
AdditionalPartyIdentification	
AdditionalPartyIdentificationType	SELLER_ASSIGNED_IDENTIFIER_FOR_A_PARTY
AdditionalPartyIdentificationValue	ROTTERDAM-01
TradeItemIdentification	
- gTIN	08712345678920
AdditionalTradeItemIdentification	
AdditionalTradeItemIdentificationType	BUYER_ASSIGNED
AdditionalTradeItemIdentificationValue	AB77770004
ReplenishmentProposalLineItem *2.1	
- lineItemNumber	3
- timeBucketSize	DAY
- proposedQuantity (value, unitOfMeasure)	500
TimeOrDateTimePeriod (+requirementsPeriod)	
DateTimePeriod	
- startDate	2005-02-09T08:00:00
- endDate	2005-02-09T09:00:00
DocumentOrDocumentLineReference (+purchaseConditions)	
DocumentLineReference	
- lineItemNumber	25
DocumentReference (+purchaseConditions)	
- entityType	PURCHASE_CONDITIONS
EntityIdentification	
- uniqueCreatorIdentification	2004000012
PartyIdentification (+contentOwner)	
- gLN	8812345678901

## Business Solution Design

---

### 1.7 Implementation Considerations

### 1.8 Testing

#### 1.8.1 Pass / Fail Criteria

*Unit testing criteria for business solution.*

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

#### 1.8.2 Test Data

Attribute	Value
Attribute Name. For example "orderQuantity"	Valid value associated with the attribute. For example "5".

### 1.9 Appendices

#### 1.10 Summary of Changes

*(Details changes to BMS for each version by BMS Section)*

Change	BMS Version	Associated CR Number
Section 7.3 <ul style="list-style-type: none"><li>Added ACTUAL_PRODUCTION as code value to ReplenishmentProposalDocument-TypeList</li></ul>	1.2.0	CR04-000211
Section 7 <ul style="list-style-type: none"><li>Modified QuantitySpecification class (part of Common Library) to include an optional association to the AdditionalItemData class.</li></ul>	1.2.1	CR04-000211

<ul style="list-style-type: none"><li>• Replaced associations to TypedEntityIdentification with DocumentReference (+replenishmentRequest) and Reference (+additionalReference)</li><li>• Removed PackagingTypeList as a data type. Instead PackagingTypeDescription-CodeList will be used.</li></ul>	1.2.2	CR04-000211
Paragraph 1.5: <ul style="list-style-type: none"><li>• ReplenishmentProposalLineItem: Association to DocumentReference (+purchaseConditions) was changed into DocumentOrDocumentLineReference (+purchaseConditions).</li></ul>	1.2.4	CR04-000211

### 2 Technical Solution Design

This section provides the specifications for the standards content ITRG approves. It is called the Technical Solution Design (TSD).

The Technical Solution Design contains:

- TSD Zip file Table of Contents
- Business Message Standard Section Technical Level GDD Report
- XSD (XML Schema Documents)
- XML Instance File and HTML Form View (XML and HTML files containing sample data specified in Section 1.6)

In the process of approving the Technical Solution Design, the ITRG will be provided the following artefacts:

- Any relevant Business Requirements Analysis Document (BRAD)
- Any relevant Business Requirements Document (BRD)
- Section 1 of Business Message Standard (Business Solution Design)
- Comment Resolution Template from Technical Public Review
- XML Test Report
- Change Request
- Other informative or reference documents