



Business Message Standard (BMS) Cross Dock Despatch Advice Extension

BMS Release: 2.5.0, BRG Name: eCom

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20 – Aug -2008	John Ryu, GS1 Global office	08-000209
23-July-2004	Marco van der Lee,GS1 Netherlands Aart Koning Albert Heijn	04-000149

Business Requirements Document (BRAD) Reference

BRAD Title:	BRD Date:	BRAD Version
Cross Docking – Deliver	01-Sep-2005	0.0.6

Document Change History

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
18 – Oct-2005	0.1	Mark Van Eeghem	Initial Draft	Migration of BRAD to standard BMS/BSD format	Not Applicable
20 – Oct-2005	0.2	Mark Van Eeghem	Completed GDD section	Pasted in GDD report for the extension	Not Applicable
3- Nov-2005	0.3	Mark Van Eeghem	Incorporate changes from Deliver BRG session at GSMP Event San Mateo 10/2005	Removed CrossDockDespatchInformationExtension and incorporated all changes into a single extension. The ultimate consignee relationships have been modified to a cardinality of 1..*	Not Applicable

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
17 – Nov-2005	0.3.2	Mark Van Eeghem	Corrected typo	in Use Case Description: page 6---Related Rules...1 The party which makes the DESADV must make(s) and send(s)	BSD P4CL: 7755 MODEL P4CL: 7667
17-Jan-2006	0.3.3	Mark Van Eeghem	Added business example (Section 1.6)	Business example was missing	BSD P4CL: 7990 MODEL P4CL: 7956
8-Mar-2006	1.0.0	Mark Van Eeghem	Corrected error in model detected during TSD phase.	Updated model, GDD & business example.	BSD P4CL 8147 MODEL P4CL 8148
3-May-2006	1.0.1	Mark Van Eeghem	Corrected use case diagram and use case description	Updated BMS as per ITRG review comments	BSD P4CL 8301 MODEL P4CL 8148
3-Jul-2007	1.0.2	Andrew Hearn	Errata	Update BMS Version Number	
24 – Oct -2008	1.1.0	John Ryu	Release 2.5.0	Noted in Summary of Changes	MDL10644 BSD 10645
01-Dec -2008	1.1.1	Lisa Herrick	BMS Release 2.5.0 Final Public Review	Noted in summary of changes	Not Applicable
06-Feb-2009	Issue1.1.1	Lisa Herrick	eBallot Approved	Noted in summary of changes	Not Applicable

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1. Business Domain View

1.1. Problem Statement / Business Need

This change request is to request the development/adjustment of the GS1 standards in the delivering process for the cross dock scenario.

For the ordering process area, as part of the cross dock process as a whole, change re-quest are already issued and processed by the BRG Order.

The result is an adjusted BRD for the Order with cross dock requirements included. Standards for the delivering area will include: a communication standard to advise the receiver about the shipment of the goods in combination with AIDC applications, like barcode labels, to link in an efficient way the physical flow of goods with the flow of related information.

Currently the business scenario/process "Cross Docking" is not completely represented in the GS1 standards (XML message standard, UML models and pallet label).

For the cross dock scenario it's needed to include information in the information standard about:

- the cross dock and final destination of the delivery
- the requested delivery date/time on the cross dock and final destination

1.2. Objective

To supply the detail design of the Despatch Advice business transaction needed to meet the requirements of the referenced BRAD and Change Requests.

1.3. Audience

- Retailers / Wholesalers
- Suppliers
- Carriers
- Logistic Service Providers

1.4. References

Reference Name	Description
Cross Docking: How to use the GS1 standards	EAN.UCC International brochure, 2000
Guide to Use XML GS1 Standards for Cross Docking Ordering v 0.4.doc	Document of Order BRG

1.5. Acknowledgements

1.5.1. eCom BRG

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1.5.2. Design Team Members

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EANCOM Technical Designer	Not Applicable	
Peer Reviewer	Brian Bennett	GS1 Global Office

2. Business Context

Context Category	Value(s)
Industry	All
Geopolitical	All
Product	All
Process	Deliver
System Capabilities	GS1 System
Official Constraints	Cross Docking

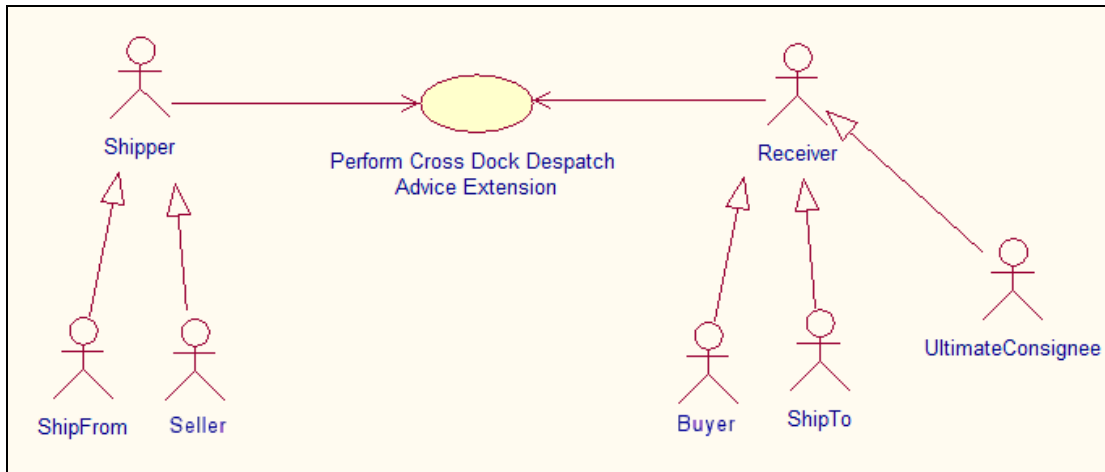
3. Additional Technical Requirements Analysis

3.1. Technical Requirements

Not Applicable

4. Business Transaction View

4.1. Business Transaction Use Case Diagram



4.2. Use Case Description

Use Case ID	UC-1																		
Use Case Name	Perform Cross Dock Despatch Advice Process																		
Use Case Description	Cross Dock Despatch Advice Extension																		
Actors (Goal)	Buyer: Party to which merchandise is sold. (i.e. retailer, wholesaler, store). Seller: Party selling merchandise to a buyer. (i.e. supplier, LSP). Shipper: Party from where goods will be or have been shipped. (i.e. supplier, LSP, retailer). Receiver: Party to where goods will be or have been shipped. (i.e. LSP, retailer, store). Ultimate Consignee: Party which is the final destination of where the goods will be or have been shipped to.																		
Performance Goals	To perform and execute the despatch Advice within the specific context of Cross docking.																		
Preconditions																			
Post conditions																			
Scenario	<p>Begins when: the Ship From Party closed the doors of the delivery vehicle</p> <table border="1"> <thead> <tr> <th>Step</th> <th>Actor</th> <th>Activity Step</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>ShipFrom /Shipper</td> <td>Sends Despatch Advice to the ShipToParty on the CrossDock Station</td> </tr> <tr> <td>2</td> <td>ShipTo/Receiver</td> <td>Receives Despatch Advice from the Ship From part and checks the delivered goods through scanning the SSCCs</td> </tr> <tr> <td>3</td> <td>ShipFrom/Shipper</td> <td>Picks the goods per final destinations and sends a Despatch Advice to the ShipTo party of the final destination (Ultimate consignee)</td> </tr> <tr> <td>4</td> <td>ShipTo/Receiver</td> <td>Receives the Despatch Advice from the ShipFrom party and checks the delivered goods.</td> </tr> <tr> <td>5</td> <td></td> <td></td> </tr> </tbody> </table> <p>Ends when... the ShipTo Party/Receiver on the final destination accepts the delivered goods.</p>	Step	Actor	Activity Step	1	ShipFrom /Shipper	Sends Despatch Advice to the ShipToParty on the CrossDock Station	2	ShipTo/Receiver	Receives Despatch Advice from the Ship From part and checks the delivered goods through scanning the SSCCs	3	ShipFrom/Shipper	Picks the goods per final destinations and sends a Despatch Advice to the ShipTo party of the final destination (Ultimate consignee)	4	ShipTo/Receiver	Receives the Despatch Advice from the ShipFrom party and checks the delivered goods.	5		
Step	Actor	Activity Step																	
1	ShipFrom /Shipper	Sends Despatch Advice to the ShipToParty on the CrossDock Station																	
2	ShipTo/Receiver	Receives Despatch Advice from the Ship From part and checks the delivered goods through scanning the SSCCs																	
3	ShipFrom/Shipper	Picks the goods per final destinations and sends a Despatch Advice to the ShipTo party of the final destination (Ultimate consignee)																	
4	ShipTo/Receiver	Receives the Despatch Advice from the ShipFrom party and checks the delivered goods.																	
5																			

Alternative Scenario	<i>(any alternatives to the above scenario)</i>	
Related Requirements		
Related Rules	1	
	1	The party which makes the DESADV must make and send the Despatch Advice to the Ship To Party/Receiver after the moment that the doors of the delivery vehicle are closed.
	2	<p>By a cross dock delivery a Ship From Party/Shipper can send a Despatch Advice per final destination (Ultimate Consignee) or one Despatch Advice with the information for all the final destinations.</p> <p>For example: Delivery of a consignment (more shipments) to a Cross Dock Station. The consignment contains a shipment with 2 pallets for destination A and a shipment with 3 pallets for destination B. The Ship From Party can send 2 separate despatch advice (one for destination A and one for destination B) or only one despatch advice with the information for destination A and destination B).</p>
	3	If all the information for all the final destinations are sent in the same despatch advice, the message will be structured by final location.

4.3. Business Transaction Activity Diagram

Not Applicable

4.4. Business Transaction Sequence Diagram

Not Applicable

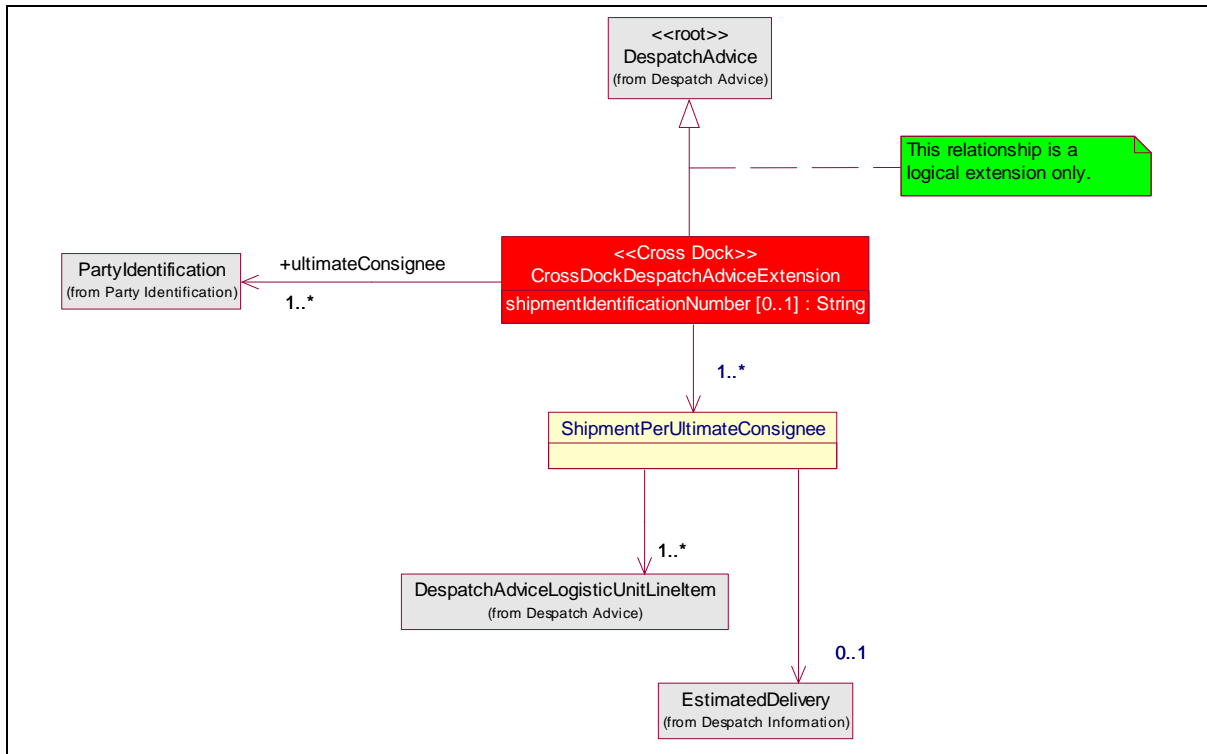
5. Information Model (Including GDD Report)

5.1. GDD Cross Dock Despatch Advice Extension

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity	Data Type Components	Related Requirements	Facets
CrossDockDespatchAdviceExtension				Cross Dock Despatch Advice Extension. Details	Extension on the Despatch Advice message, specifically for the Cross Docking scenarios.			BRAD Cross Docking Deliver V 0.0.6 Requirements	
	shipmentIdentificationNumber			Cross Dock Despatch Advice Extension. Shipment Identification Number. Text	A globally unique number assigned by a Shipper to a shipment, identifying a logical grouping of physical units for the purpose of a transport shipment.	0..1	Text. Content	BRAD Cross Docking Deliver V 0.0.6 Requirement 1	Unbounded
			DespatchAdvice	Cross Dock Despatch Advice Extension. Inheritance. Despatch Advice	Provides the Despatch Advice Information.	1..1		BRAD Cross Docking Deliver V 0.0.6 Requirement 3	
			ShipmentPerUltimateConsignee	Cross Dock Despatch Advice Extension. Association. Entity Reference	Definition for unnamed associations not required	1..*		BRAD Cross Docking Deliver V 0.0.6 Requirement 3	
		ultimateConsignee	PartyIdentification	Cross Dock Despatch Advice Extension. Ultimate Consignee. Party Identification	The final destination identified by the Global Location Number or an alternate identification	1..*		BRAD Cross Docking Deliver V 0.0.6 Requirement 2	
ShipmentPerUltimateConsignee				Entity Reference. Details	The shipment per final destination identified per line item of logistic units.			BRAD Cross Docking Deliver V 0.0.6 Requirement 3	
			DespatchAdviceLogisticUnitLineItem	Entity Reference. Association. Despatch Advice Logistic Unit Line Item	Definition for unnamed associations not required	1..*		BRAD Cross Docking Deliver V 0.0.6 Requirement 3	
			EstimatedDelivery	Entity Reference. Association. Estimated Delivery	The estimated delivery time/date for the final destination within the Cross Docking Scenario	0..1		BRAD Cross Docking Deliver V 0.0.6 Requirement 3	

5.2. Class Diagram

Figure 5-1 Class Diagram: Cross Dock Despatch Advice Extension



- ✔ **Note:** Reference Common Library Business Message (BMS) Release 2.5.0 for all common information.

5.3. Code Lists

- ✔ **Note:** Reference Common Library Business Message Release 2.5.0 for all Code Lists

6. Business Document Example

The following is an example of a despatch advice message with the crossdock extension. The message is sent out on February 9th at 11 AM. The message is identified with the unique identifier 200540001. The content owner is the sending party, in this case the material supplier (Shipper 8812345678903).

The ultimate consignee is 8812347678903

The despatch advice is sent by the material supplier (Shipper 8812345678903) to the manufacturer (Receiver 8712345678913).

The reported despatch consists of

CrossDockDespatchAdviceExtension	
- creationDateTime	2005-02-09T11:00:00
- documentStatus	ORIGINAL
EntityIdentification (+despatchAdviceIdentification)	
- uniqueCreatorIdentification	200540001
PartyIdentification (+contentOwner)	
- gLN	8812345678903
PartyIdentification (+shipper)	
- gLN	8812345678903
PartyIdentification (+receiver)	
- gLN	8712345678913
PartyIdentification (+shipTo)	
- gLN	8712345678921
PartyIdentification (+inventoryLocation)	
- gLN	8712345678922
DocumentReference (+purchaseConditions)	
EntityIdentification	
- uniqueCreatorIdentification	2004000012
PartyIdentification (+contentOwner)	
- gLN	8812345678903
Reference (+billOfLadingNumber)	
- referenceDateTime	2005-02-09T10:00:00
- referenceIdentification	88021
DespatchInformation	
ActualShipping	
- actualShipDateTime	2005-02-09T11:10:00
DespatchAdviceLogisticUnitLineItem *1	
- packageType	PE (pallet, modular)
LogisticUnitIdentification	
serialShipmentContainerCode	881234567000010112
DespatchAdviceItemContainmentLineItem *1.1	
- lineItemNumber	1
- quantityContained (value, unitOfMeasure)	700
TradeItemIdentification (+containedItemIdentification)	
- gTIN	08712345678906
DetailLevelReference (+deliveryNote)	
- lineItemNumber	001

CrossDockDespatchAdviceExtension	
Reference	
- referenceDateTime	2005-02-09T11:00:00
- referenceIdentification	2400021
TransactionallItemData	
- lotNumber	ASD00012
- bestBeforeDate	2005-08-01
CrossDockDespatchAdviceExtension	
- shipmentIdentificationNumber	GS12006156969
PartyIdentification (+ultimateConsignee) *1.*	
- gLN	8812347678903
ShipmentPerUltimateConsignee	
DespatchAdviceLogisticUnitLineItem *1.*	
- packageType	PE (pallet, modular)
EstimatedDelivery *0.1	
- actualShipDateTime	2005-02-09T11:45:00

7. Implementation Considerations

Not Applicable

8. Testing

8.1. Pass / Fail Criteria

Not Applicable

8.2. Test Data

Attribute	Value
- creationDateTime	2005-02-09T11:00:00
- documentStatus	ORIGINAL
- uniqueCreatorIdentification	200540001
- gLN	8812345678903
- referenceDateTime	2005-02-09T10:00:00
- referenceIdentification	88021
- actualShipDateTime	2005-02-09T11:10:00
- packageType	PE (pallet, modular)
serialShipmentContainerCode	881234567000010112

Attribute	Value
- lineNumber	1
- quantityContained (value, unitOfMeasure)	700
- gTIN	08712345678906
- lineNumber	001
- referenceDateTime	2005-02-09T11:00:00
- referenceIdentification	2400021
- lotNumber	ASD00012
- bestBeforeDate	2005-08-01
- shipmentIdentificationNumber	GS12006156969
- gLN	8812347678903

9. Appendices

Not Applicable

10. Summary of Changes

Change	BMS Version	Associated CR Number
Section 1.6 Business Example added.	V 0.3.3	CR 04-00149
Release for 2.5.0 Carry over from BMS Release 2.1.1 No Changes for BMS Release 2.5.0	1.1.0	CR 08-209
For BMS Release 2.5.0 <ul style="list-style-type: none"> • Prep document for public review on 01-Dec-2008 • Remove Code Lists & Add notes to reference Common Library BMS for Code Lists and Common Information. 	1.1.1	Not Applicable
Updated BMS to Approved Status eBallot Approved Release 2.5.0	Issue 1.1.1	Not Applicable