



# Business Message Standard (BMS) Align Basic Party Synchronisation

*BMS Release: 2.7, BRG Name: GDSN*

*Issue 0.0.4, 20-Feb-2010*



## Document Summary

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Align_Basic_Party_Synchronisation		0.0.4

## Document Change History

Date of Change	Version	Changed By	Reason for Change	Summary of Change	Model Build #
19-Apr-2005	0.0.1	Eric Kauz	Initial Draft		
03-May-2005	0.0.2	Eric Kauz	Update for comments made during public review.		
10-May-2005	0.0.3	Eric Kauz	Updated for comments made during final review.	Added partyDataPool to Basic Party Registration message. Changed step 3 on UC-2	
15-Oct-2008	0.0.4	Version Update for 2.3		Template Changes	

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## Table of Contents

1.	Business Domain View .....	6
1.1.	Problem Statement / Business Need .....	6
1.2.	Objective.....	6
1.3.	Audience.....	7
1.4.	References .....	7
1.5.	Acknowledgements.....	7
1.5.1.	BRG Work Group.....	7
1.5.2.	Design Team Members.....	7
2.	Business Context .....	8
3.	Additional Technical Requirements Analysis .....	9
3.1.	Technical Requirements (optional) .....	9
4.	Business Transaction View .....	9
4.1.	Business Transaction Use Case Diagram for Register Party.....	9
4.2.	Use Case Description for Register Party.....	9
4.3.	Business Transaction Activity Diagram for Register Party .....	10
4.4.	Business Transaction Sequence Diagram for Register Party .....	11
4.5.	Business Transaction Use Case Diagram for Change Registered Party.....	11
4.6.	Use Case Definition Change Registered Party.....	12
4.7.	Sequence Diagram Change Registered Party.....	13
4.8.	Structured Business Scenario for Distribute Party Data from GR to Data Pool .....	14
4.9.	Use Case Definition for Distribute Party Data from GR to Data Pool .....	14
5.	Information Model (Including GDD Report) .....	15
5.1.	GDD Report .....	15
5.2.	Class Diagrams.....	21
5.2.1.	Basic Party Registration.....	21
5.2.2.	Party Registration Response.....	21
5.2.3.	Registry Party Data Dump.....	22
5.2.4.	Registry Party .....	22
5.2.5.	Registry Party Information.....	23
5.2.6.	Process Capability Information.....	23
5.2.7.	Classes Diagrams Found In Common BSD.....	23
5.2.8.	Classes Diagrams Found In Common BSD.....	23
5.3.	Code Lists.....	23
6.	Business Document Example .....	24

7. Implementation Considerations ..... 24

8. Testing ..... 24

9. Appendices ..... 24

    9.1. Glossary..... 24

10. Summary of Changes ..... 25

# 1. Business Domain View

## 1.1. Problem Statement / Business Need

Substantial effort has been made to develop a Global Data Synchronisation process because master data sharing between partners is both complex and fundamental to all supply chain processes. Integrity and timeliness of master data is critical to the flow of goods, services and information throughout the chain. Sharing data effectively and efficiently relies on access to common data definitions, data accuracy and agreement on the processes used to exchange data. This process is termed Master Data Synchronisation.

The salient points for synchronisation are:

1. synchronisation is a process
2. it is auditable
3. the process must utilize EAN-UCC industry standards
4. the data exchanged must be compliant with these standards
5. the recipient must acknowledge the integration of the data
6. continuous updates must be applied

Party information is a part of Master Data. Trading Partner's involved with the Global Data Synchronisation Network (GDSN) require data regarding party (GLN) information to determine the unique identification, the role definition, the business process capability and the message capability required to function in the network defined to achieve Master Data Synchronisation.

Due to the complexities of full Party Synchronisation, there is a requirement to create an initial Basic Party Synchronisation process. The process requirements for basic party synchronisation within the Global Data Synchronisation Network should include:

Load and Update Party Data within the Global Registry

- Manage Party Data in the Global Registry
- Distribute Party Data

The data requirements for synchronisation of Party information within the Global Data Synchronisation Network for basic party synchronisation should include:

- GLN as mandatory choice for Party Identification
- At least one role of Party as mandatory, allowing additional roles
- At least one business process identification (party role) and one Message Identification used to define the capability of the party.

## 1.2. Objective

To supply the detail design of the (specific) business transaction needed to meet the re-quirements specified in the BRAD for Align\_Basic Party Sync. To populate the GS1 Global Registry and report to data pools and their registered trading partners up to date data source party information. .

### 1.3. Audience

(Insert Content Here)

### 1.4. References

Reference Name	Description

### 1.5. Acknowledgements

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

#### 1.5.1. BRG Work Group

Function	Name	Company / organisation
BRG Work Group Chair	Jim Funk	SC Johnson
BRG Work Group Member	Bruce Hawkins	Wal-Mart
BRG Work Group Member	Hideki Ichihara	DCC Japan
BRG Work Group Member	Tan Jin Soon	EAN Singapore
BRG Work Group Member	Eric Kauz	GS1
BRG Work Group Member	Grant Kille	WWRE
BRG Work Group Member	Sean Lockheed	UCCNet
BRG Work Group Member	Brad Papietro	Wegmans
BRG Work Group Member	Peter Porri	Coca-Cola
BRG Work Group Member	Nadine Radomski	Dean Foods
BRG Work Group Member	William Rosenfeld	Sterling Commerce
BRG Work Group Member	Karen Spooner	Kraft
BRG Work Group Member	Gina Tomassi	Pepsi Cola
BRG Work Group Member	Chrystopher Vantine	Global eXchange Services
BRG Work Group Member	Steve Vazzano	Transora

#### 1.5.2. Design Team Members

##### 1.5.2.1. Task/Project Group Participants (*where applicable*)

Function	Name	Company
Participant	Sian Blackwell	Ocean Spray

Function	Name	Company
Participant	Tom Duffy	TDLinx
Participant	Michael Genoitt	Florida's Natural Growers
Participant	Joan Gietman	Kimberly Clark
Participant	Aaron Gottlieb	Daymon Worldwide
Participant	Lydia Henry	Hampton Affiliate
Participant	Ron Herman	Publix
Participant	Roxanne Hogendorn	Alberstons
Participant	Melanie Kudela	GS1
Participant	Richard Reinwart	Anheuser-Busch
Participant	Patrick Roy	UCCnet
Participant	Mike Sadiwnyk	ECC Canada
Participant	Don Swensen	Advance Sales and Marketing
Participant	Wayne Swogger	The Drummond Group
Participant	Milan Vacval	JDA
Participant	Ian Verhaegan	Click Commerce
Participant	Greg Zwanziger	Supervalu

### 1.5.2.2. Design Team Members

Function	Name	Company
Modeller	Eric Kauz	GS1
XML Technical Designer	Dipan Anarkat	GS1
Peer Reviewer	John Ryu	GS1

## 2. Business Context

Context Category	Value(s)
Industry	All
Geopolitical	All
Product	All
Process	Align_Basic Party Synchronisation
System Capabilities	EAN.UCC
Official Constraints	None



### 3. Additional Technical Requirements Analysis

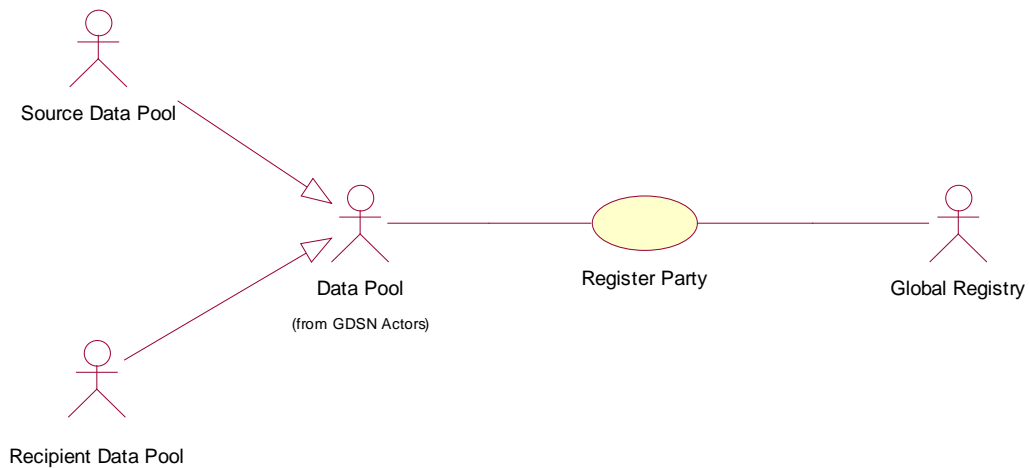
This section documents the analysis of additional technical requirements.

#### 3.1. Technical Requirements (optional)

Number	Statement	Rationale

## 4. Business Transaction View

### 4.1. Business Transaction Use Case Diagram for Register Party



### 4.2. Use Case Description for Register Party

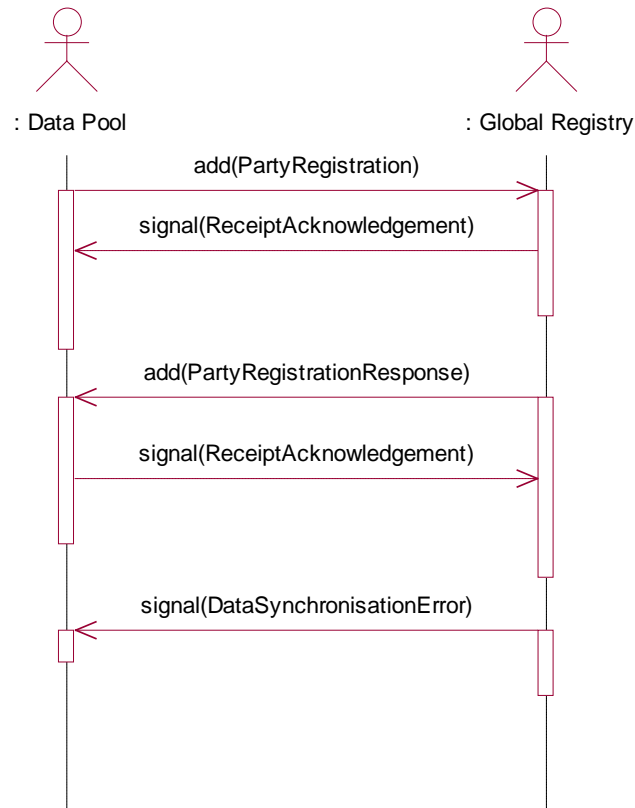
<b>Use Case ID</b>	UC-1
<b>Use Case Name</b>	Register Party
<b>Use Case Description</b>	Prior to registration, the party data must pass validations at the data pool and a uniqueness check at the Registry. The Global Registry ensures that valid, unique party data is available within the Global Data Synchronisation Network and that all valid GDSN parties must be registered in the Global Registry. This Use Case describes the registration process that is performed by the Global Registry.
<b>Actors (Goal)</b>	Data Pool (Source Data Pool or Recipient Data Pool) Global Registry (GR)
<b>Performance</b>	Data Pool: To have validated, registered Party data.

<b>Goals</b>	Global Registry: To ensure valid, unique Party data is registered.													
<b>Preconditions</b>	The data pool is a certified. The data pool has a profile that resides in the registry.													
<b>Post conditions</b>	The party data has been registered and retained by the Global Registry.													
<b>Scenario</b>	<p><b>Begins when.</b> the Global Registry receives validated Party Data from a data pool.</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>1</td> <td>GR</td> <td>ensures that the data pool is certified</td> </tr> <tr> <td>2</td> <td>GR</td> <td>verifies the uniqueness of the GLN.</td> </tr> <tr> <td>3</td> <td>GR</td> <td>stores the party data</td> </tr> </tbody> </table> <p><b>Ends when...</b> The Global Registry sends a registration response to the data pool.</p>		Step #	Actor	Activity Step	1	GR	ensures that the data pool is certified	2	GR	verifies the uniqueness of the GLN.	3	GR	stores the party data
Step #	Actor	Activity Step												
1	GR	ensures that the data pool is certified												
2	GR	verifies the uniqueness of the GLN.												
3	GR	stores the party data												
<b>Alternative Scenario</b>	<p>ad 1. Data Pool not certified:</p> <p>1.1. The GR sends an error message to the data pool</p> <p>1.2. Ends when, the data pool receives the error message.</p> <p>ad 2 The party already exists in the GR:</p> <p>2.1 GR sends an error message to the data pool.</p> <p>2.2 The data pool receives the error message.</p> <p>2.3 Ends when, the data pool receives the error message.</p>													
<b>Related Requirements</b>	1													
<b>Related Rules</b>	1	The secondaryGovernmentArea (e.g. State, Province, Department) must be populated in the Party Name and Address if the country associated with the address has a secondaryGovernmentArea.												
	2	The data pool submitting the Basic Party Registration message populates the isPartyActive flag in the GR through the Basic Party Registration message.												

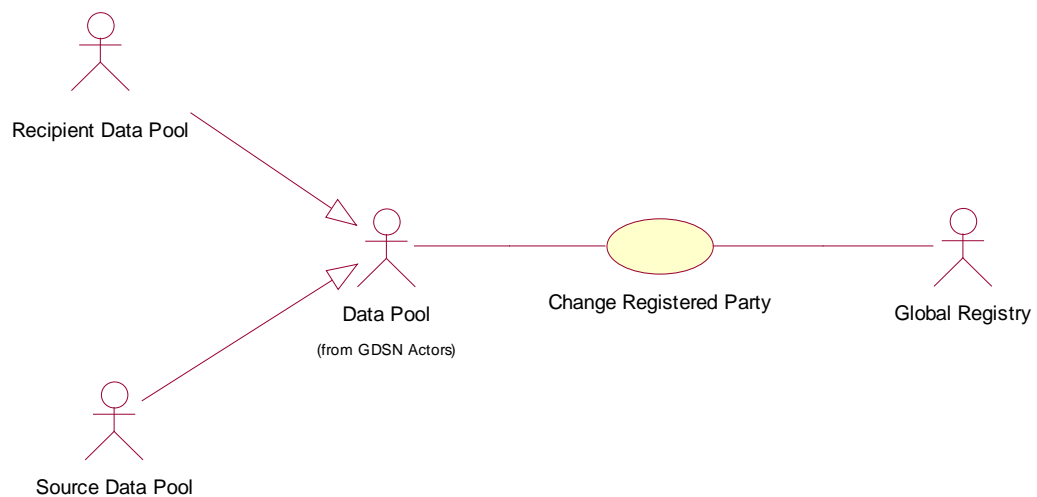
### 4.3. Business Transaction Activity Diagram for Register Party

None

## 4.4. Business Transaction Sequence Diagram for Register Party



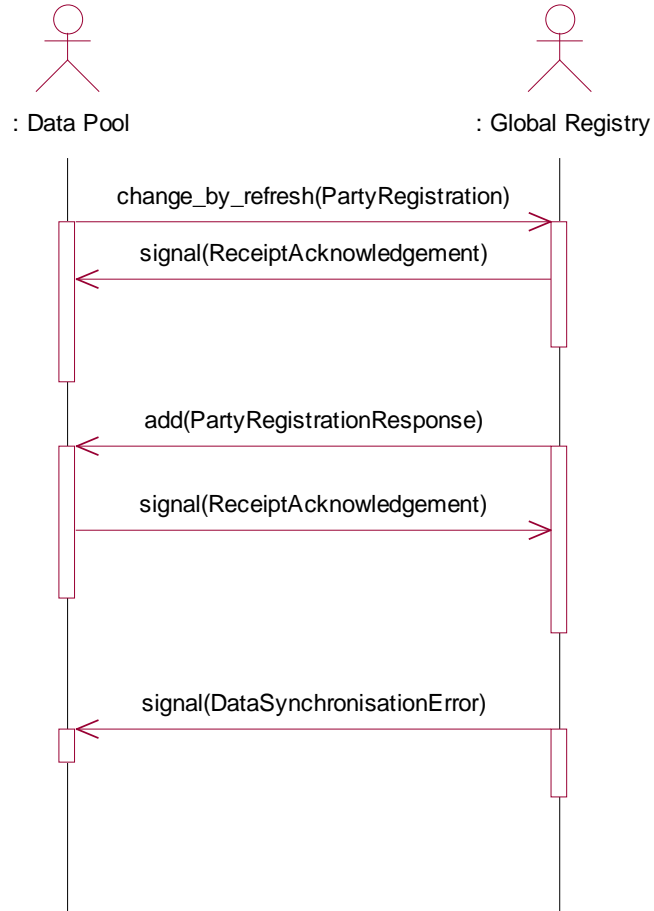
## 4.5. Business Transaction Use Case Diagram for Change Registered Party



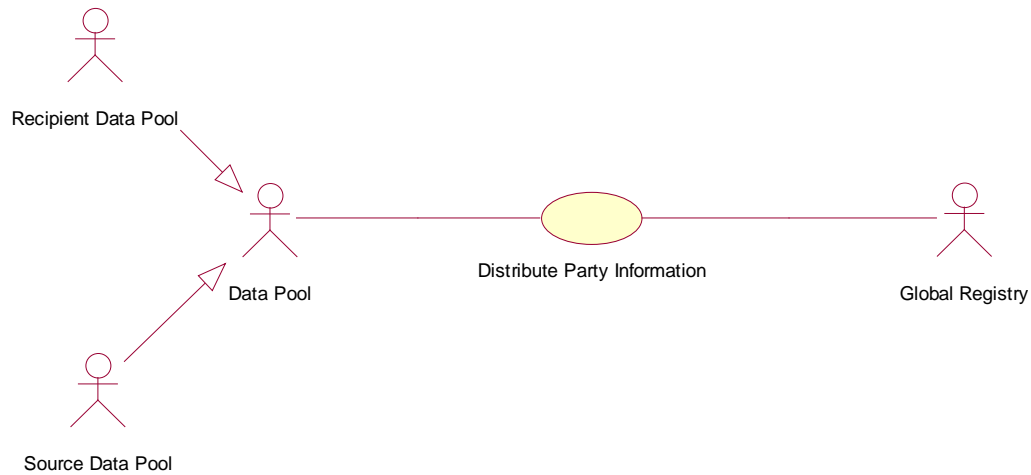
## 4.6. Use Case Definition Change Registered Party

<b>Use Case ID</b>	UC-2																
<b>Use Case Name</b>	Change Registered Party																
<b>Use Case Description</b>	In the event that party data changes in a data pool, the changes must be reflected in the Global Registry.																
<b>Actors (Goal)</b>	Data Pool (Source Data Pool or Recipient Data Pool) Global Registry (GR)																
<b>Performance Goals</b>	Data Pool: To have validated, registered Party data. Global Registry: To ensure valid, unique Party data is registered.																
<b>Preconditions</b>	The data pool is certified. The data pool has a profile that resides in the registry. The data pool has received a "Change Registered Party" message from their trading partner. The data pool has validated party data received and has sent that Party data to the Global Registry. The Party data has been previously registered.																
<b>Post conditions</b>	The party data changes have been applied and retained in the Global Registry.																
<b>Scenario</b>	<p><b>Begins when.</b> the Global Registry receives a validated Change Registered Party message from a data pool.</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>1</td> <td>GR</td> <td>ensures that the data pool is certified.</td> </tr> <tr> <td>2</td> <td>GR</td> <td>validates the party data from the data pool.</td> </tr> <tr> <td>3</td> <td>GR</td> <td>ensures that the party data already exists in the Global Registry and that the transmittingParty (GLN) of the Basic Party Registration Change equals the partyDataPool GLN on the party record in the Global Registry.</td> </tr> <tr> <td>4</td> <td>GR</td> <td>updates the party data.</td> </tr> </tbody> </table> <p><b>Ends when...</b> The Global Registry sends a registration response to the data pool.</p>		Step #	Actor	Activity Step	1	GR	ensures that the data pool is certified.	2	GR	validates the party data from the data pool.	3	GR	ensures that the party data already exists in the Global Registry and that the transmittingParty (GLN) of the Basic Party Registration Change equals the partyDataPool GLN on the party record in the Global Registry.	4	GR	updates the party data.
Step #	Actor	Activity Step															
1	GR	ensures that the data pool is certified.															
2	GR	validates the party data from the data pool.															
3	GR	ensures that the party data already exists in the Global Registry and that the transmittingParty (GLN) of the Basic Party Registration Change equals the partyDataPool GLN on the party record in the Global Registry.															
4	GR	updates the party data.															
<b>Alternative Scenario</b>	<p>ad 1. Data Pool not certified: 1.1. The GR sends an error message to the data pool. <b>Ends when</b>, the data pool receives the error message</p> <p>ad 2. The Party data does not exist in the GR: GR sends an error message to the data pool <b>Ends when</b>, the data pool receives the error message</p>																
<b>Related Requirements</b>	1																
<b>Related Rules</b>	1	The transmittingParty (GLN) of the Basic Party Registration Change equals the partyDataPool GLN on the party record in the Global Registry.															
	2	The informationProviderOfParty GLN cannot be changed through a Change Registered Party message.															

## 4.7. Sequence Diagram Change Registered Party



## 4.8. Structured Business Scenario for Distribute Party Data from GR to Data Pool



## 4.9. Use Case Definition for Distribute Party Data from GR to Data Pool

<b>Use Case ID</b>	UC-4						
<b>Use Case Name</b>	Distribute Party Information						
<b>Use Case Description</b>	This use case describes the process of sending party information from the Global Registry to the data pool (DP)						
<b>Actors (Goal)</b>	Data Pool (Source Data Pool or Recipient Data Pool) Global Registry (GR)						
<b>Performance Goals</b>	Data Pool: To receive updated and validated party data from the Global Registry. Global Registry: To send updated, validated and registered party data.						
<b>Preconditions</b>							
<b>Post conditions</b>	Data Pool has received Party Data.						
<b>Scenario</b>	<p><b>Begins when...</b>the GR sends party data to DP via AS2.</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>1</td> <td>DP</td> <td>receives the party data.</td> </tr> </tbody> </table> <p><b>Ends when...</b>the data pool filters the Party Data to validate Party Data.</p>	Step #	Actor	Activity Step	1	DP	receives the party data.
Step #	Actor	Activity Step					
1	DP	receives the party data.					
<b>Alternative Scenario</b>	Not Applicable						
<b>Related Requirements</b>	Not Applicable						
<b>Related Rules</b>	Not Applicable						

## 5. Information Model (Including GDD Report)

### 5.1. GDD Report

Basic Party Registration						
Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
BasicPartyRegistration						
	transmittingDataPool				The data pool that is transmitting the party information to the Global Registry.	1..1
	partyDataPool				The Global Location Number of the data pool responsible for registering the party record in the GS1 Global Registry.	1..1
		None	Document		None	1..1
		basicPartyRegistrationIdentification	EntityIdentification		None	1..1
		None	RegistryParty		None	1..1
		None	ProcessCapabilityInformation		None	1..*

Party Registration Response						
Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
PartyRegistrationInformation						
	lastChangedDate				Not Available	1..1
	registrationDate				Not Available	1..1

Party Registration Response						
Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
	removedDate				Not Available	0..1
PartyRegistrationResponse						
	partyReference					1..1
		None	PartyRegistrationInformation		None	1..1
		None	Response		None	1..1

CL: Process Capability Information						
Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
ProcessCapabilityInformation						
	processCapabilityCode				Not Available	1..1
	processCapabilityEffectiveStartDateTime				Not Available	1..1
	ProcessCapabilityEffectiveEndDateTime				Not Available	0..1



Registry Party Data Dump						
Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
RegistryPartyDataDump						
	informationProvider				The Global Location Number of the originator of the data. This could either be a data source or a data recipient.	1..1
	informationRecipient				Party which is authorized to view, use, download a set of Master Data provided by an Information Provider.	1..1
		None	Document		None	1..1
		registryPartyDataDumpIdentification	EntityIdentification		None	1..1
		None	RegistryPartyDataDumpDetail			1..*
RegistryPartyDataDumpDetail						
		None	RegistryParty		None	1..1
		None	ProcessCapabilityInformation		None	1..*
		None	RegistryPartyDates		None	1..1
RegistryPartyDates						
	registeringParty				The GLN of the data pool responsible for creating the party record in the GS1 Global Registry.	1..1

Registry Party Data Dump						
Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
	registrationDateTime				The date and time when the party record is initiated / created in the GS1 Global Registry.	1..1
	lastUpdateParty				The Global Location Number of the data pool responsible for modifying / updating the party record in the GS1 GR.	0..1
	lastUpdateDateTime				The date and time when the party record is modified/ updated in the GS1 GR.	0..1

Registry Party Information						
Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class		Definition	Multiplicity
RegistryPartyNameAndAddress					Information on a party's name and address.	
	associatedLanguage				An attribute in the Address which provides a textual identification of the party's Language description of physical location. It is presented as an ISO Code 639.	0..*
	city				Free form text for city name.	1..1
	countryCode				ISO Country Code associated with consignee address.	1..1
	name				The textual identification of the party.	1..1
	poBoxNumber				Not Available	0..1
	postalCode				Code defining international postal zone code.	0..1
	secondaryGovernmentArea				Free form text for providing State/Province/Department of party address.	0..1

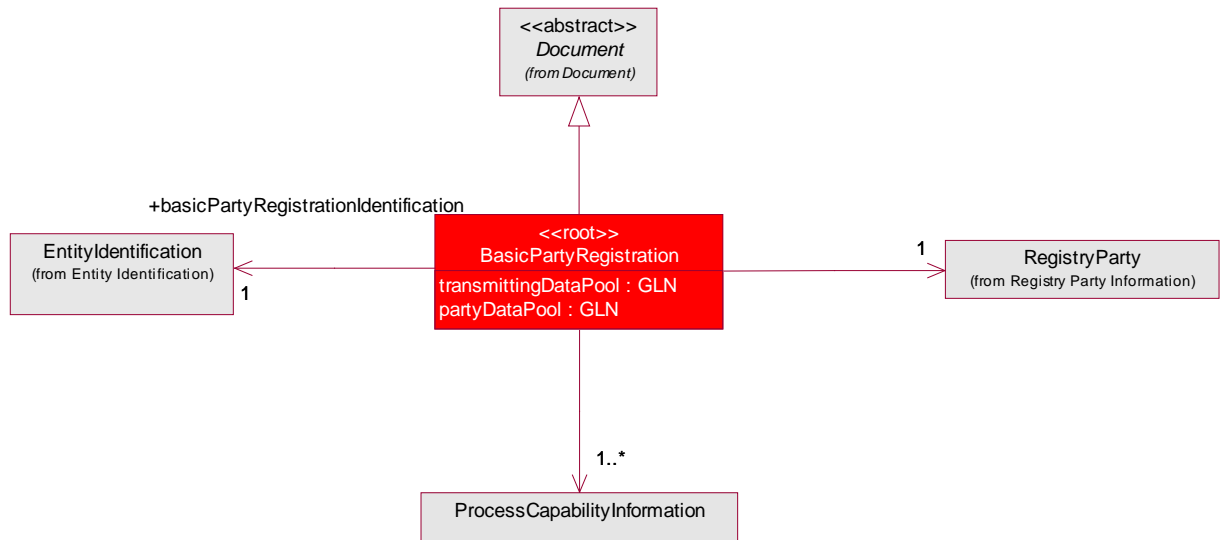
Registry Party Information						
Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class		Definition	Multiplicity
	streetAddressOne				Not Available	0..1
	streetAddressTwo				Not Available	0..1
PartyIdentification					Unique location number identifying the Party for which the rest of the message defines.	
	globalLocationNumber				The Global Location Number (GLN) is a structured Identification of a physical location, legal or functional entity within an enterprise. The GLN is the primary party identifier. Each party identified in the trading relationship must have a primary party Identification.	1..1
		None	AdditionalPartyIdentification		None	0..*
RegistryPartyInformation					This class contains all party related information as described in this section.	
			partyRoleInformation			1..*
		None	Contact		None	1..*
		None	NameAndAddress		None	1..1
partyRoleInformation					None	
	partyOrDepartmentName				The name of the party or department associated with the party role.	1..1
	partyRole				An attribute which defines the relationships of the Party.	1..1

Registry Party Information						
Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class		Definition	Multiplicity

Registry Party						
Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class		Definition	Multiplicity
RegistryParty						
	isPartyActive				A Boolean field used to express whether the party is active or inactive used for tracking billing.	1..1
		informationProviderOfParty	PartyIdentification		The party identification of the party who owns the party data.	1..1
		None	RegistryPartyInformation		None	1..1

## 5.2. Class Diagrams

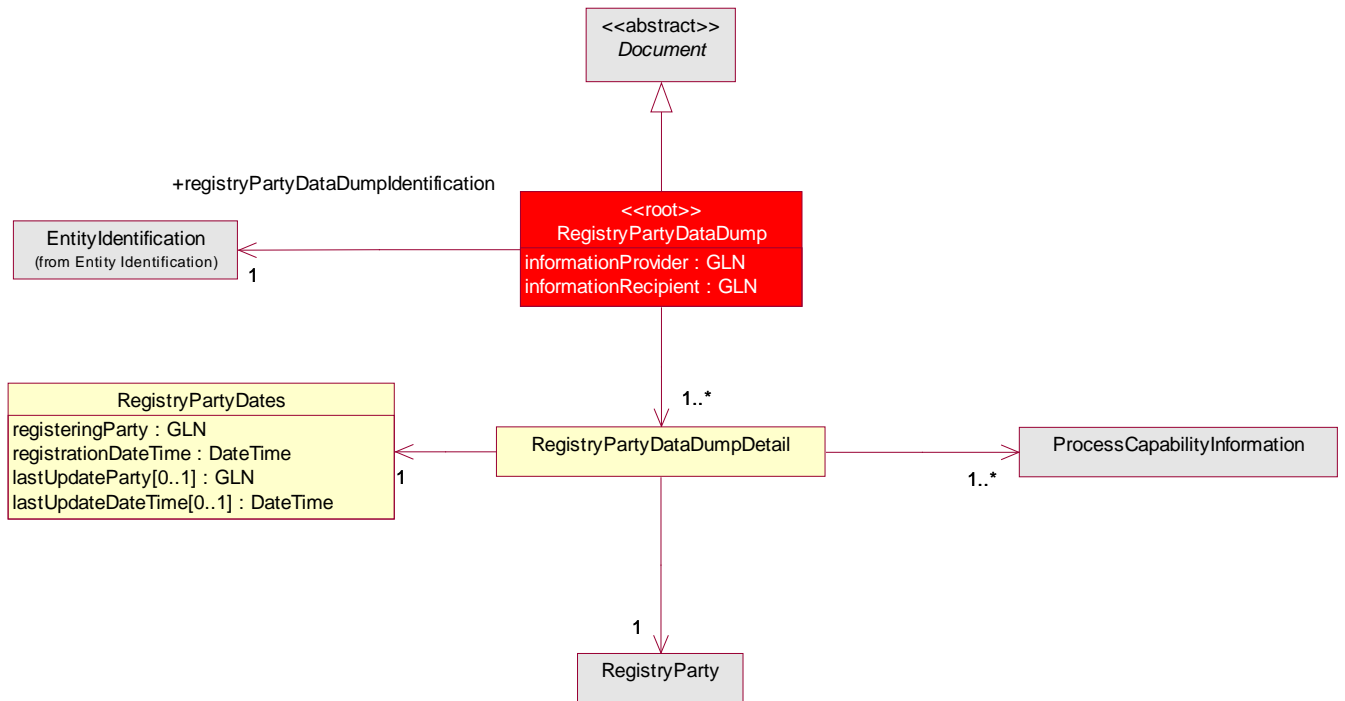
### 5.2.1. Basic Party Registration



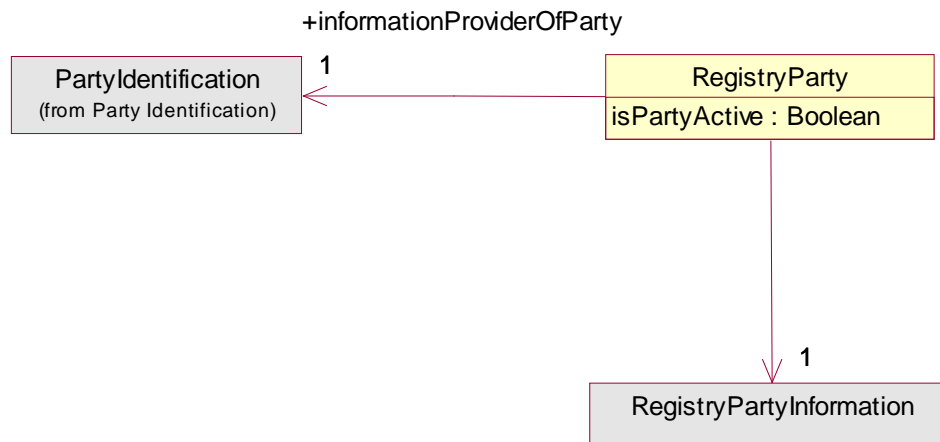
### 5.2.2. Party Registration Response



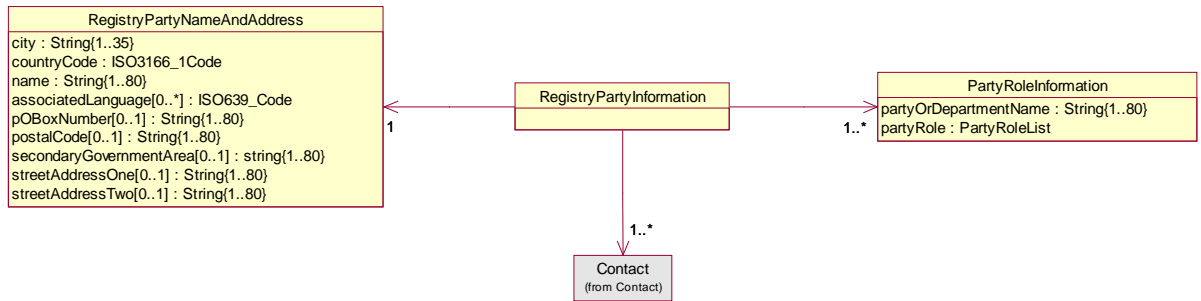
### 5.2.3. Registry Party Data Dump



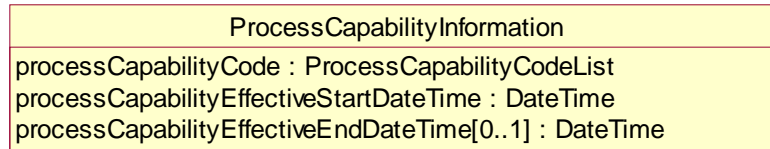
### 5.2.4. Registry Party



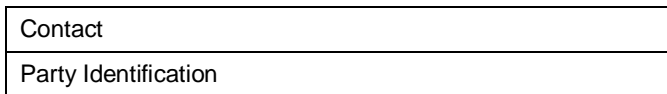
### 5.2.5. Registry Party Information



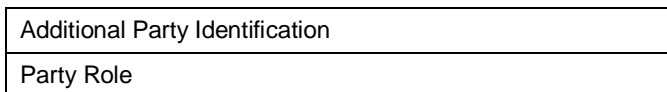
### 5.2.6. Process Capability Information



### 5.2.7. Classes Diagrams Found In Common BSD



### 5.2.8. Classes Diagrams Found In Common BSD



## 5.3. Code Lists

Code List Name	Code List Description
Process Capability Code	
Code Name	Code Description
DATA_SYNCHRONISATION	The process of continuous harmonisation of information between all trading partners ensures that the master data is the same in all trading partners systems. This process uses the EAN.UCC standards developed by the Align Data BRG.

## 6. Business Document Example

N/A

## 7. Implementation Considerations

N/A

## 8. Testing

Attribute	Value
isPartyActive	true
partyOrDepartmentName	Shipping
partyRole	DISTRIBUTOR
city	Atlanta
countryCode	123
languageOfTheParty	en
name	Mondial Distribution
pOBoxNumber	15
postalCode	07654
secondaryGovernmentArea	Georgia
streetAddressOne	1 Peachtree Avenue
streetAddressTwo	Suite 911
registeringParty	0012345000010
registrationDateTime	2006-12-31T10:00:00.000
processCapabilityCode	DATA_SYNCHRONISATION

## 9. Appendices

### 9.1. Glossary

Term	Description
Additional Party Identification Number.	Same as EAN.UCC XML Party Identification Additional Identification. An identifier that allows a progression of existing id's that may be used to identify organizations (for example in the U.S. companies frequently use Duns+4, Retailer Assigned Store #, etc. to identify locations)
Additional Party Identification Number Type	Same as EAN.UCC XML Party Identification Additional Party Identifier Type.
City	An attribute in the Address which provides a textual identification of the party's City description of physical location.
Communication Channel Code	The identifiers used for communicating with a party, for example, their telephone number, email address, physical address etc.
Contact Number	The primary telephone number for a party's contact.
Contact Email	The e-mail address for a party's contact.



Term	Description
Country Code	An attribute in the Address which provides a textual identification of the party's Country Code description of physical location. It is presented as a 3-digit ISO Code 3166-1.
Information Provider GLN	The Global Location Number of the originator of the data. This could either be a data source or a data recipient.
Language	An attribute in the Address which provides a textual identification of the party's Language description of physical location. It is presented as an ISO Code 639.
Party	A business entity.
Party Name	The textual identification of the party.
Party Role	An attribute which defines the relationships of the Party.
Postal Code	An attribute in the Address which provides a textual identification of the party's Postal Code description of physical location.
Primary Contact Name	Attributes which identify and detail the textual identification of a person name or department name and their communication channels. There could be one or more for a party.
Registration Date	The date and time when the party record is initiated / created in the GS1 GR.
Secondary Government Area	Free form text for providing State/Province/Department of party address.
Street Address	An attribute in the Address which provides a textual identification of the party's street description of physical location.

## 10. Summary of Changes

Change	BSD Version	Associated CR Number