

Business Message Standard (BMS)

for

Align_Trade Item_ Extension_For_Electronic_Games

(Process/Sub-process/Industry and/or Product/Geopolitical)

BRG: Align (GDSN)

Version: 0.0.3

Date: 17.11.2005

(dd.mm.ccy example 27.10.2004)



Change Request Reference

Refer to Change Request (CR) Number(s):	04-000174
CR Submitter(s):	Grant Kille
Date of CR Submission to GSMP:	09.02.2004

Business Requirements Document (BRAD) Reference

BRAD Title:
BRAD Date:
BRAD Version:

BRAD Title:
BRAD Date:
BRAD Version:

Document Summary

Document Title:	BMS_ Align_ Trade Item_ Electronic_ Games
Document Version	0.0.3
Owner:	Eric Kauz
Status:	(Check one box) <input type="checkbox"/> DRAFT <input checked="" type="checkbox"/> Approved
BMS Template Version:	1.1
Targeted BMS Publication Version	2.0.2

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 #
19.07.2005	0.0.1	Eric Kauz	Initial Draft		
17.11.2005	0.0.2	Brian Bennett	Updated from Comment Resolution Sheet	Updated Code List	
20.04.2007	0.0.3	Giovanni Biffi	Editorial Changes	Minor Editorial Changes to the Document	

Business Message Standard

Table of contents

Chapter	Page
Business Solution	1
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	1
1.1.6 Acknowledgements	2
1.1.6.1 BRG Members	2
1.1.6.2 ITRG Members	2
1.1.6.3 Task/Project Group Participants (<i>where applicable</i>)	3
1.1.6.4 Design Team Members	4
1.2 Business Context	5
1.3 Additional Technical Requirements Analysis	5
1.3.1 Technical Requirements (optional).....	5
1.4 Business Transaction View	6
1.4.1 Business Transaction Use Case Diagram.....	6
1.4.2 Use Case Description.....	6
1.4.3 Business Transaction Activity Diagram(s)	7
1.4.4 Business Transaction Sequence Diagram(s) (optional)	7
NoneSEQ	7
1.5 Information Model (including GDD Report)	8
1.5.1 GDD Report :	8
1.5.2 Class Diagrams	12
1.5.3 Code Lists.....	14
1.6 Business Document Example	15
1.1 Error! Bookmark not defined.	
1.7 Implementation Considerations	15
1.8 Appendices.....	15
1.9 Summary of Changes.....	17
XML Technical Solution ITRG Packet.....	18

Business Solution Design

1 Business Solution

1.1 Business Domain View

1.1.1 Problem Statement / Business Need

The Entertainment Industry Team has reviewed the existing Trade Item Data Model and compared those attributes to current business process requirements for their industry. Industry unique materials and processes exist which require additional attributes to completely and properly convey the data supporting current business processes in this industry as well as facilitate participation on the Global Data Synchronization Network.

This document both defines and describes those additional attributes that have been identified as necessary to support current Entertainment industry business requirements.

1.1.2 Objective

The North American Entertainment industry has begun the process of data synchronization and these implementations necessitate the changes and additions to the EAN.UCC standards as documented to support these efforts. The objective is to create a business message standard supporting communication of trade item data attributes for the Entertainment industry.

1.1.3 Audience

The audience of the standards would be any participant in the global supply chain specifically the Entertainment Industry. This would include carriers, and their customers and partners.

1.1.4 Artefacts

Artefact name	State	Artefact / State description

1.1.5 References

Reference Name	Description
Business Requirement for Entertainment Item vertical BRW v0.0.1 Dated 08/30/2004	Attachment to CR 04-174.

Business Solution Design

1.1.6 Acknowledgements

1.1.6.1 BRG Members

Function	Name	Company / organisation
BRG Chair	Jim Funk	S.C. JOHNSON & SON, INC.
BRG Chair	Vic Hansen	UNLIVER – LEVER FABERGE LTD.
BRG Chair	Eduardo Tovar	PROCTER & GAMBLE COMPANY
BRG Member	Javier Arias	GS1 SPAIN
BRG Member	Neale Austen	EAN AUSTRALIA
BRG Member	Michael Bammer	CVS PHARMACY, INC.
BRG Member	Giovanni Biffi	IAC – EAN COLOMBIA
BRG Member	Loek Boortman	GS1 NEDERLAND
BRG Member	Benjamin Couty	GS1 FRANCE
BRG Member	MaryAnn Goodrich	UNILVER HOME & PERSONAL CARE NA
BRG Member	Hideki Ichihara	EAN JAPAN
BRG Member	Nancy Laskero	SEARS, ROEBUCK AND CO
BRG Member	Hanjoerg Lerch	METRO GROUP BUYING GMBH
BRG Member	Markus Mathar	SINFOS GMBH
BRG Member	Roberto Matsubayashi	EAN BRASIL
BRG Member	Alistair McArthur	ALLIED DOMECQ SPIRITS & WINE LTD
BRG Member	Michael Moise	NESTLE AG
BRG Member	Olivier Mouton	CARREFOUR
BRG Member	Barbara Munro	KRAFT FOODS, INC
BRG Member	Anakaryna Palacios	EAN VENEZUELA
BRG Member	Hector German Piñeros	IBC SOLUTIONS COLOMBIA
BRG Member	Paul Povey	PROCTER & GAMBLE COMPANY
BRG Member	Rebecca Quigley	COCA-COLA BOTTLERS SALES AND SERVICES
BRG Member	Julie Rodriguez	LEVI STRAUSS & CO
BRG Member	Joy Schneck	GENERAL MILLS, INC.
BRG Member	Peggy Spofford	3M COMPANY
BRG Member	Steve Vazzano	TRANSORA
BRG Member	Lionel Tussau	GEORGIA-PACIFIC CORPORATION
BRG Member	Patricia Vessey	BEST BUY COMPANY, INC.
BRG Member	Marcel Yska	AHOLD NV
BRG Member	Greg Zwanziger	SUPERVALU, INC.

1.1.6.2 ITRG Members

Function	Name	Company / organisation
ITRG Chair		

Business Solution Design

ITRG Member		
ITRG Member		
ITRG Member		
...		

1.1.6.3 Task/Project Group Participants (*where applicable*)

Function	Name	Company / organisation
Participant	Ajay Malhotra	20th Century Fox
Participant	Joanie Wallace	20th Century Fox
Participant	John Herbert	20th Century Fox
Participant	Jose Gomez	Activision
Participant	Keith Small	Activision
Participant	Vivian Underwood	Anderson Merchandisers
Participant	Steve Bakker	Baker & Taylor
Participant	Donna Ahron	Best Buy
Participant	Kishore Kumar	Best Buy
Participant	Patricia Vessey	Best Buy
Participant	Teresa Gordon	Buena Vista Home Entertainment
Participant	Carol Pirsztuk	Columbia Tri-Star
Participant	Gary Aubin	Columbia Tri-Star
Participant	Mike Thielen	Columbia Tri-Star
Participant	Neil Soon	Columbia Tri-Star
Participant	Suzanne Tamargo	Columbia Tri-Star
Participant	Myrna Castillo	Columbia Tri-Star
Participant	Jacob Ahmu	EMI
Participant	Julie Wan	EMI/NA
Participant	Jim James	Handleman Company
Participant	Lois Taylor	Handleman Company
Participant	Bruce Hamblin	Internet Commerce Corporation
Participant	Warner Music	Julio Del Rio
Participant	Michelle Chen	Memorex
Participant	Eric Jacobsen	MGM
Participant	Jay Ou	MGM
Participant	Renee Fedak	MGM
Participant	Roberta Delia	MGM
Participant	Vicki Smith	MGM
Participant	Richard Langford	Movie Gallery
Participant	Debbie Itamura	Paramount Pictures
Participant	Edmund DaSilveira	Paramount Pictures
Participant	Kathy Scheid	Paramount Pictures
Participant	Winnie Leung	Paramount Pictures
Participant	Tim Meester	Toys R Us
Participant	Linda Leighton	Universal Studios
Participant	David Almada	Universal Studios
Participant	Karen Mika	Universal Studios
Participant	Hugh Lynch	Ventura

Business Solution Design

Participant	Mark Paulsen	Ventura
Participant	Tim Hennesy	Ventura
Participant	Bo Anderson	VSDA
Participant	Mark Fisher	VSDA
Participant	Bruce Hawkins	Wal-Mart Stores
Participant	Garrett Gauthier	Warner Home Video
Participant	Pat Riley	Warner Home Video
Participant	Isadora Tran	Warner Music
Participant	Pamelyn Smith	Warner Music
Participant	Haris Kamal	WorldWide Retail Exchange
Participant	Nick Parnaby	WorldWide Retail Exchange
Participant	W. Grant Kille	WorldWide Retail Exchange

1.1.6.4 Design Team Members

Function	Name	Organisation
Modeller	Eric Kauz	GS1
XML Technical Designer		
EANCOM Technical Designer		
Peer Reviewer		

Business Solution Design

1.2 Business Context

(Note: The business context of the business)

Context Category	Value(s)
Industry	Entertainment
Geopolitical	All
Product	Electronic Games
Process	Align Trade Item
System Capabilities	EAN.UCC
Official Constraints	None
Roles	All

1.3 Additional Technical Requirements Analysis

1.3.1 Technical Requirements (optional)

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

Number	Statement	Rationale

1.4 Business Transaction View

1.4.1 Business Transaction Use Case Diagram

1.4.2 Use Case Description

Covered in Align Trade Item Use Cases.

Business Solution Design

1.4.3 Business Transaction Activity Diagram(s)

None

1.4.4 Business Transaction Sequence Diagram(s) (optional)

None

Business Solution Design

1.5 Information Model (including GDD Report)

1.5.1 GDD Report :

Electronic Game Trade Item Extension v1.0

Class (ABIE)	Attribute (BBIE)	Association (ASBIE)	Secondary Class	Official Dictionary Entry Name	Definition	Multiplicity
ElectronicGame-BatteryInformation				Electronic Game Battery Information. Details	Logical grouping of information regarding the electronic game battery.	
	areBatteriesIncluded			Electronic Game Battery Information. Are Batteries Included_ Batteries. Indicator	Indicates if batteries are either included or not included with the game.	1..1
	areBatteriesRequired			Electronic Game Battery Information. Are Batteries Required_ Batteries. Indicator	Indicates if batteries are required to operate the electronic game.	1..1
	batteryType			Electronic Game Battery Information. Battery Type. Battery Type	A code that identify the type of batteries required to operate the trade item.	0..1
	quantityOfBatteriesRequired			Electronic Game Battery Information. Quantity Of Batteries Required. Integer_ Numeric	The number of batteries required to operate the electronic game	0..1
ElectronicGame-PlayerInformation				Electronic Game Player Information. Details	Logical grouping of information regarding electronic game player information.	
	ageRangeDescription			Electronic Game Player Information. Age	Description of the recommended age range of participating players.	0..1

Business Solution Design

				Range_ Description. Language_ Text		
	maximumNum- berOfPlayers			Electronic Game Player Information. Maximum_ Number Of Players. Integer_ Numeric	Maximum number of players that can participate in the gam.	0..1
	maximumPlayer- Age			Electronic Game Player Information. Maximum_ Player Age. Measure	Recommended oldest age for a player partici- pating in the game.	0..1
	minimumNum- berOfPlayers			Electronic Game Player Information. Minimum_ Number Of Players. Integer_ Numeric	Minimum number of players that can participate in the game.	0..1
	minimumPlayer- Age			Electronic Game Player Information. Minimum_ Player Age. Measure	Recommended youngest age for a player par- ticipating in the game.	0..1
ElectronicGameT- radeItemExtension				Electronic Game Trade Item Extension. Details	Provides a logical grouping of information on the extension of "Trade Item" specific for the Electronic Games Industry.	
	electronicGameTi- tle			Electronic Game Trade Item Extension. elec- tronic Game Title_ electronic Game Title. Text	The name of an electronic game.	1..1
	gamePlatform			Electronic Game Trade Item Extension. Game Platform. Game Plat- form Code	Code that identifies the electronic environment or system needed to use the electronic game. For example: X-Box, Game Cube, PS2.	1..1
	LastManufacture- rUpdateDateTime			Electronic Game Trade Item Extension. Last Manufacturer Update Date Time_ Last Manu- facturer Update D	The last date on which the manufacturer has made a change to the trade item.	1..1
		None	OrderableReturn-	Electronic Game Trade	None	1..1

Business Solution Design

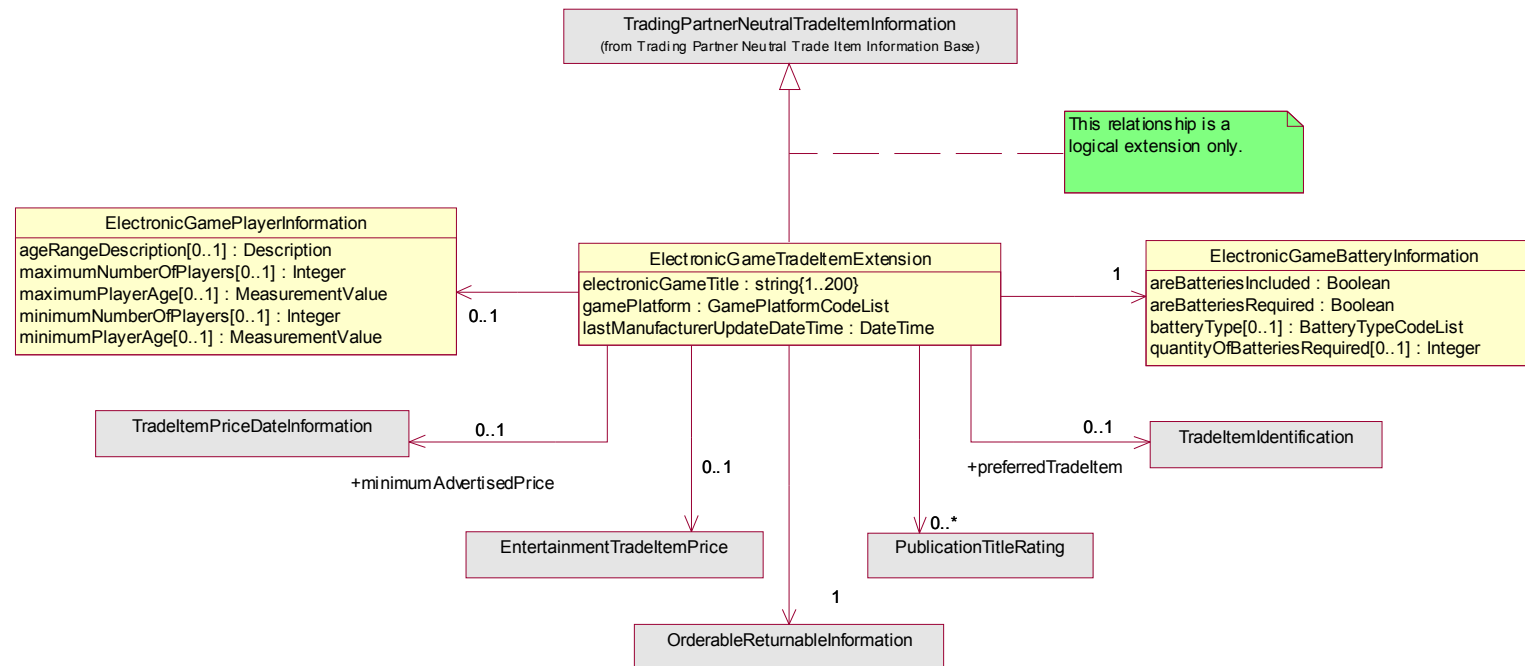
			ableInformation	Item Extension. Association. Orderable Returnable Information		
		None	Publication-TitleRating	Electronic Game Trade Item Extension. Association. Publication Title Rating	None	0..*
		None	ElectronicGame-BatteryInformation	Electronic Game Trade Item Extension. Association. Electronic Game Battery Information	None	1..1
		None	ElectronicGame-PlayerInformation	Electronic Game Trade Item Extension. Association. Electronic Game Player Information	Logical link between Electronic Game Player Information and Electronic Game Trade Item	0..1
		None	Entertainment-TradeItemPrice	Electronic Game Trade Item Extension. Association. Entertainment Trade Item Price	None	0..1
		preferredTrade-Item	TradeItemIdentification	Electronic Game Trade Item Extension. Preferred Trade Item Association. Non GTIN_ FMCG_ Trade Item Identification	An identification assigned by the manufacturer for the purpose of grouping multiple versions of the same trade item (e.g. limited edition, wide screen, etc.).	0..1
		minimumAdvertisedPrice	TradeItemPrice-DateInformation	Electronic Game Trade Item Extension. Minimum Advertised Price Association. Trade Item Price	Minimum consumer price at which the trade item may be advertised	0..1
Entertainment-TradeItemPrice				Entertainment Trade Item Price. Details	None	

Business Solution Design

	bulkPrice			Entertainment Trade Item Price. Bulk_ Price. Amount	The amount of money for which the trade item is bought or sold when buying or selling a standard configuration.	0..1
	loosePrice			Entertainment Trade Item Price. loose_ Price. Amount	The amount of money for which the trade item is bought or sold when buying or selling individual units that are not in a standard configuration.	0..1
OrderableReturnableInformation						
	orderableReturnableCondition- sCode			Orderable Returnable Information. Orderable_ Returnable Conditions Code. Code	A code that indicates if the trade item can be ordered and returned if non-sold.	1..1
	lastReturnable- DateTime			Orderable Returnable Information. Last_ Returnable Date Time. Date Time	The last date AND time when a non sold trade item must be received by the manufacturer to receive credit.	0..1
Publication- TitleRating						
	titleRating			Publication Title Rating. Title_ Rating. Text	Code that identifies one or several elements in a game that have triggered a particular rating and/or may be of interest or concern.	1..1
	titleRatingEntity			Publication Title Rating. Title_ Rating Entity. Text	The name of an organization that defined the rating and attributed the rating content descriptor(s) to an electronic game.	1..1
	ratingContentDescriptor			Publication Title Rating. rating_ Content Descriptor. Text	A code that identifies one or several elements in a game that have triggered a particular rating and/or may be of interest or concern.	0..*

Business Solution Design

1.5.2 Class Diagrams



Note: The relationship between the extension and the Trading Partner Neutral Trade Item Information class is logical only and does not designate the physical location of the extension tag in the Schema. This relationship states that, logically, the information contained in the extension belongs with other Trading Partner Neutral Trade Item Information such as packaging marking and item dimensions. The physical placement of the extension tag is a technical decision as long as it allows the implementers to relate the extensions to a specific trade item.

Business Solution Design

Entertainment Trade Item Price

EntertainmentTradeItemPrice
bulkPrice[0..1] : Amount
loosePrice[0..1] : Amount

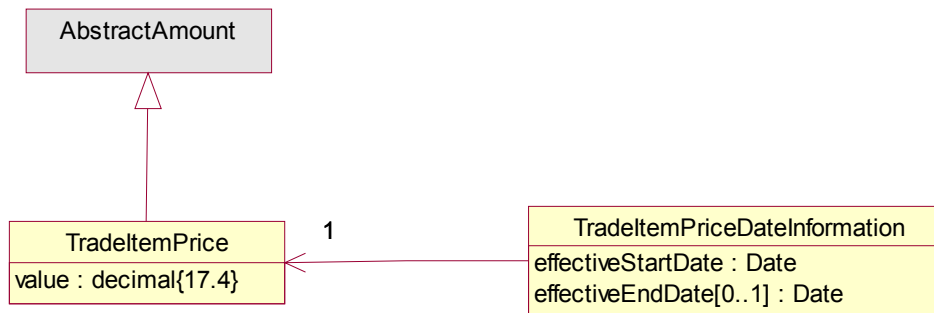
Orderable Returnable Information

OrderableReturnableInformation
orderableReturnableConditionsCode : OrderableReturnableConditionsCodeList
lastReturnableDateTime[0..1] : DateTime

Publication Title Rating

PublicationTitleRating
titleRating : String{1..35}
titleRatingEntity : String{1..35}
ratingContentDescriptor[0..*] : String{1..70}

Trade Item Price Date Information



Business Solution Design

1.5.3 Code Lists

Code List Name	Code List Description
Battery Type Code List	
Code Name	Code Description
A	N/A
AA	N/A
AAA	N/A
B	N/A
C	N/A
D	N/A
9_VOLT	N/A

Code List Name	Code List Description
Game Platform Code List	
Code Name	Code Description
AT	Atari
DRE	Dreamcast
GBA	Game Boy Advanced
GN	Sega Genesis
JG	Jaguar
LX	Lynx
N64	Nintendo 64
NG	Neo Geo
NGC	Nintendo Game Cube
NN	8-bit Nintendo
PC	PC Games
PS2	PlayStation 2
PSX	PlayStation
SN	16-bit Super Nintendo
XBX	Xbox

Business Solution Design

Code List Name	Code List Description
Orderable Returnable Conditions Code List	
Code Name	Code Description
ACTIVE	Is orderable and returnable unless "Is Trade Item Returnable" = "FALSE"
CUTOUT	Is not orderable and is returnable unless the one-way flag is set to "yes"
DELETED	Not orderable and not returnable
HOLD	Temporarily unavailable but is still returnable unless the one-way flag is set to "yes"

1.6 Business Document Example

1.7 Implementation Considerations

1.8 Appendices

Appendix A

Rating list of codes

Ratings defined by ESBR (Entertainment Software Rating Board – US)

Code	Description	Definition
EC	Early Childhood	The game has content that may be suitable for ages 3 and older. Contains no material that parents would find inappropriate.
T	Teen	The game has content that may be suitable for ages 13 and older. May contain violence, suggestive theme, crude humour, minimal blood and/or infrequent use of strong language.
AO	Adults Only	The game has content that should only be played by persons ages 18 years and older. May include prolonged scenes of intense violence, blood and gore, sexual content and/or strong language.
EG	Everyone	The game has content that may be suitable for ages 6 and older. May contain minimal cartoon, fantasy or mild violence and/or infrequent use of mild language.
M	Mature	The game has content that may be suitable for persons ages 17 and older. May contain intense violence,

Business Solution Design

		blood and gore, sexual content and/or strong language.
RP	Rating Pending	The game has been submitted to the ESRB and is awaiting final rating.
E10+	Everyone 10 and older	The game has content that may be suitable for ages 10 and older. May contain more cartoon, cartoon, fantasy or mild violence, mild language, and/or minimal suggestive themes.

Appendix B Rating content descriptor

Rating content descriptors defined by ESRB (Entertainment Software Rating Board – US)

ESRB Descriptor	Definition
Alcohol_Reference	Reference to and/or images of alcoholic beverages
Animated_Blood	Discoloured and/or unrealistic depictions of blood
Blood	Depictions of blood
Blood_and_Gore	Depictions of blood and mutilated body parts
Cartoon_Violence	Violent actions involving cartoon-like situations and characters. May include violence where a character is unharmed after the action has been inflicted
Comic_Mischief	Depictions or dialogue involving slapstick or suggestive humour
Crude_Humor	Depictions or dialogue involving vulgar antics, including “bathroom” humour
Drug_Reference	Reference to and/or images of illegal drugs
Edutainment	Content of product provides user with specific skills development or reinforcement learning within an entertainment setting. Skill development is an integral part of the product
Fantasy_Violence	Violent actions of a fantasy nature, involving human or non-human characters in situations easily distinguishable from real life
Informational	Overall content of product contains data, facts, resource information, reference materials or instructional text
Intense_Violence	Graphic and realistic-looking depictions of physical conflict. May involve extreme and/or realistic blood, gore, weapons, and depictions of human injury and death
Language	Mild to moderate use of profanity
Lyrics	Mild references to profanity, sexuality, violence, alcohol, or drug use in music
Mature_Humor	Depictions or dialogue involving “adult” humor, including sexual references
Mild_Violence	Mild scenes depicting characters in unsafe and/or violent situations

Business Solution Design

Nudity	Graphic or prolonged depictions of nudity
Partial_Nudity	Brief and/or mild depictions of nudity
Real_Gambling	Player can gamble, including betting or wagering real cash or currency
Sexual_Themes_	Mild to moderate sexual references and/or depictions. May include partial nudity
Sexual_Violence	Depictions of rape or other sexual acts
Simulated_Gambling	Player can gamble without betting or wagering real cash or currency
Some_Adult_Assistance_May_Be_Needed	Intended for very young ages
Strong_Language	Explicit and/or frequent use of profanity
Strong_Lyrics	Explicit and/or frequent references to profanity, sex, violence, alcohol, or drug use in music
Strong_Sexual_Content	Graphic references to and/or depictions of sexual behavior, possibly including nudity
Suggestive_Themes	Mild provocative references or materials
To-bacco_Reference	Reference to and/or images of tobacco products
Use_of_Drugs	The consumption or use of illegal drugs
Use_of_Alcohol	The consumption of alcoholic beverages
Use_of_Tobacco	The consumption of tobacco products
Violence	Scenes involving aggressive conflict

Appendix C Rating agency

ESBR = Entertainment Software Rating Board - US

1.9 Summary of Changes

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

Change	BMS Version	Associated CR Number
•		

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