

# **BDM Data Standard – Learning Opportunity Delivery**

**v0.3**

**09 November 2009**

## **Licence and IPR Statement**

### ***Use of Crown copyright material © Crown copyright 2009***

The Information Standards Board (ISB) is an internal advisory body to the Department for Children, Schools and Families (DCSF) and the Department for Business, Innovation and Skills (BIS) which are Crown bodies. The information we produce is subject to Crown copyright, which is administered by the Office of Public Sector Information. Unless otherwise stated on individual documents or pages, the following copyright statement applies to material found on this site.

Authorisation to reproduce any information in this standard which is identified as being the copyright of a third party must be obtained from the copyright holders concerned.

### ***Research and private study***

The Crown copyright protected information in this standard may be reproduced free of charge in any format or medium in order to carry out research for non-commercial purposes, for private study or for internal circulation within an organisation. This is subject to the material being reproduced accurately and not used in a misleading context. The material must be acknowledged as Crown copyright and you must give the title of the source document/publication.

### ***Licences***

Copying Crown copyright protected material for re-use, distribution or publication, requires a licence. You can apply for a Click-Use licence online, by email or by writing to:

Office of Public Sector Information  
Information Policy Team  
Kew  
Richmond  
Surrey  
TW9 4DU  
Email: [licensing@opsi.gsi.gov.uk](mailto:licensing@opsi.gsi.gov.uk)

**Document Version History**

<b>Version</b>	<b>Status</b>	<b>Date</b>	<b>Modified by</b>	<b>Change description</b>	<b>Section &amp; line Ref</b>	<b>Changed from</b>	<b>Changed to</b>	<b>Effects of change</b>
0.1	Draft	30/10/2009	LHogarth	Initial Draft	-	-	-	-
0.2	Draft	03/11/2009	TKnowles LHogarth	Additional attributes Definitions Amended Document Map updated to show Side Notes and Appendix replaced with a reference to new document				
0.3	Draft	09/11/2009	LHogarth	Definitions Amended				

## Contents

Introduction .....	2
Data Standard.....	4
Entity relationships .....	4
Diagram Notation.....	4
Entity and Attribute Naming Standards and Conventions used .....	4
Entity Definition Model .....	5
Attribute Model.....	6
Data definitions.....	7
Entity: Learning Opportunity Delivery .....	7
Entity: Learning Opportunity Delivery Cost .....	11
Entity: Learning Opportunity Delivery Contact .....	12

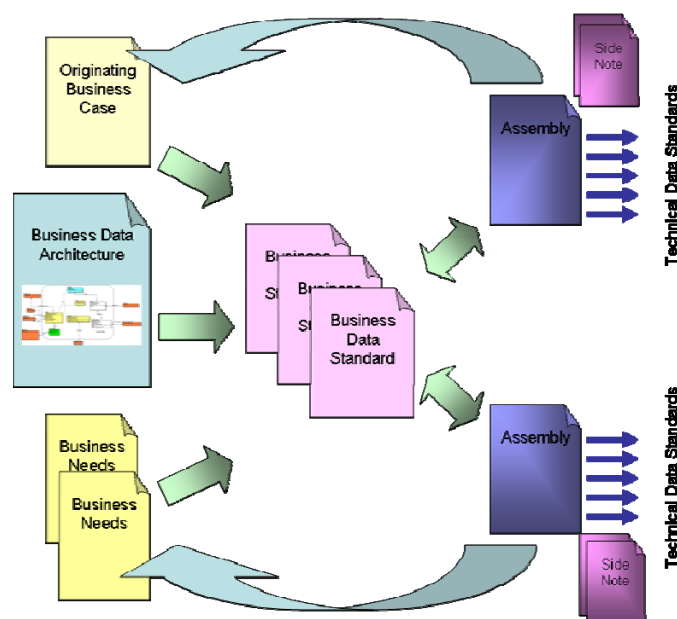
## Introduction

This Business Data Standard has been designed to satisfy all Education Skills and Children’s Services (ESCS) business needs to exchange information about learning opportunities.

It describes data that relates to a learning opportunity delivery. A learning opportunity delivery is defined as an offering of a COURSE or SUBJECT or other educational opportunity provided by a LEARNING PROVIDER via a LEARNING CHANNEL at a particular LOCATOR (PREMISE, URL etc).

A Business Data Standard is defined in response to a business need captured in a Business Case. In development, every effort is made to ensure that the Business Data Standard is capable to support all ESCS business needs for the same data. The Business Case may in fact give rise to a number of Business Data Standards, and the way that the standards are associated to meet the originating business need is shown via an “Assembly” document. Each Assembly may in addition need some guidance regarding Data Quality issues and implementation issues and these are contained in “Side Notes”.

The related documents are shown in the following diagram:



Many ESCS ICT systems will need to define Technical Data Standards that specify an encoding schema for data exchange and may include implementation-specific details. Such Technical Data Standards may conform to this and other ESCS ISB Business Data Standards. Those that do conform can be assured that their data will be interchangeable with any other conformant systems. A Technical Data Standard may indicate that within the scope of its use one or more attributes are Mandatory.

This Business Data Standard shows how information relating to Learning

Opportunities (advertising and presentation aspects of courses of study, apprenticeships, diplomas etc) shall be structured into entities and relationships according to the ESCS Business Data Architecture and enumerates and defines each information attribute in terms of:

- The relationships between entities in this standard and further entities defined in other standards
- The semantics, or meaning, of each entity and each attribute
- The data type, field length and construction rules for each attribute in an encoding-independent manner.
- Where the value of an attribute is to be defined by a list of permitted values (a “code list”), a reference to the relevant code list standard
- Where the standard relates to information defined by a standard from an external organisation (ISO, BSI, CEN etc) then this will also be noted.
- Any business rules (e.g. mandatory status) that are true for every business use of the standard.

Many ESCS ICT systems will need to define Technical Data Standards that specify an encoding schema for data exchange and may include implementation-specific details. Such Technical Data Standards may conform to this and other ESCS ISB Business Data Standards. Those that do conform can be assured that their data will be interchangeable with any other conformant systems. A Technical Data Standard may indicate that within the scope of its use one or more attributes are Mandatory.

## **Data Standard**

### **Entity relationships**

The following diagrams shows the entities covered in this standard and their relationships to each other. The diagrams are:

- Entity Definition Model – A high level diagram extracted from the ESCS Business Data Architecture showing just the entities, their descriptions and the relationships between the entities.
- Attribute Model – A lower level diagram also extracted from the ESCS Business Data Architecture showing the entities and the names of their attributes. Entities are divided into two sections. The top section contains only attributes that form the primary key of the entity and the remaining attributes are in the bottom section.

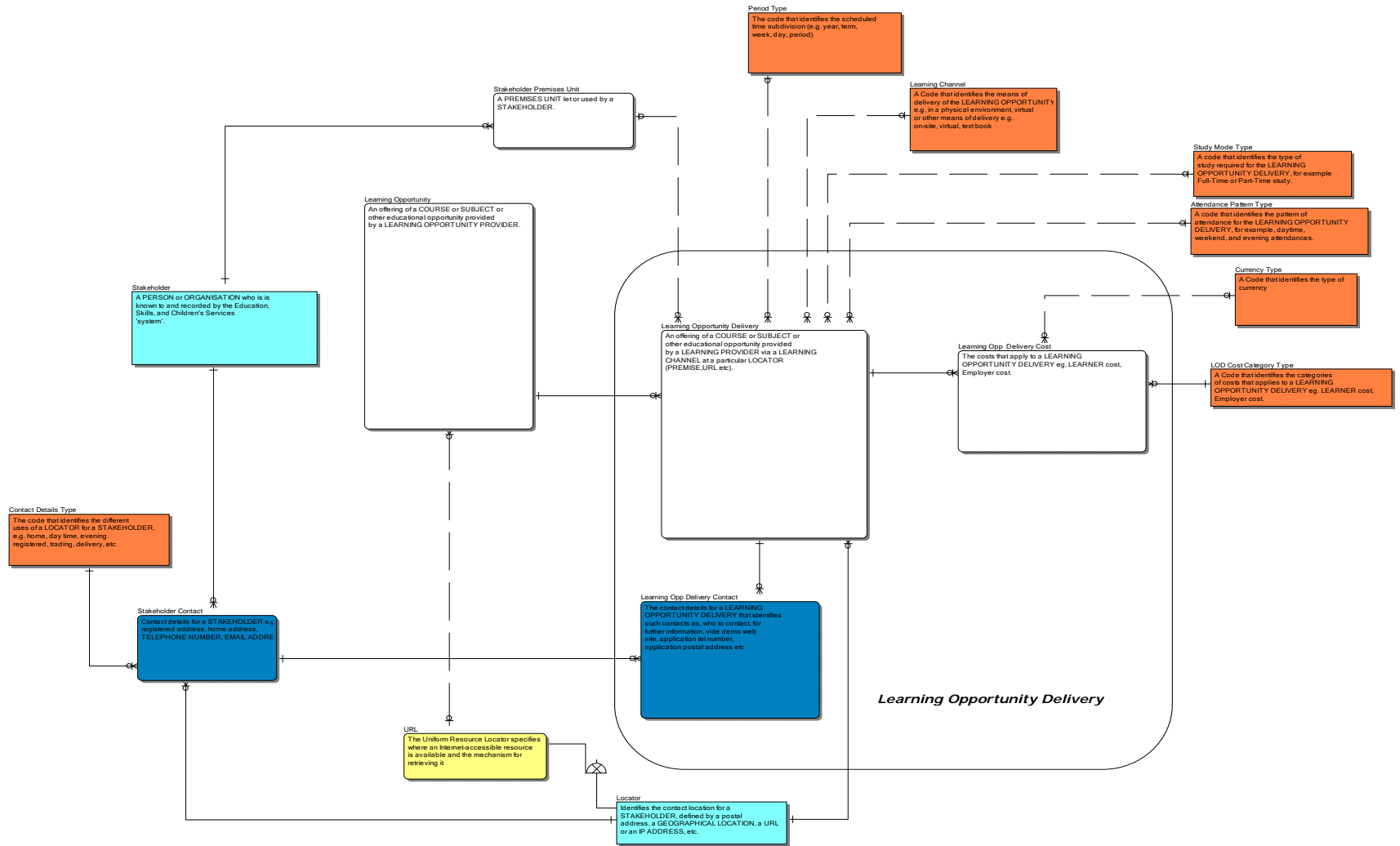
### ***Diagram Notation***

The notation used follows the Business Data Architecture Document notation (refer to ESCS Business Data Architecture document for further details). Only those entities within the boundary square are to be part of the particular data standard. Those entities outside of the boundary square are for context purposes only, or are separate reference data (orange coloured entities)

### ***Entity and Attribute Naming Standards and Conventions used***

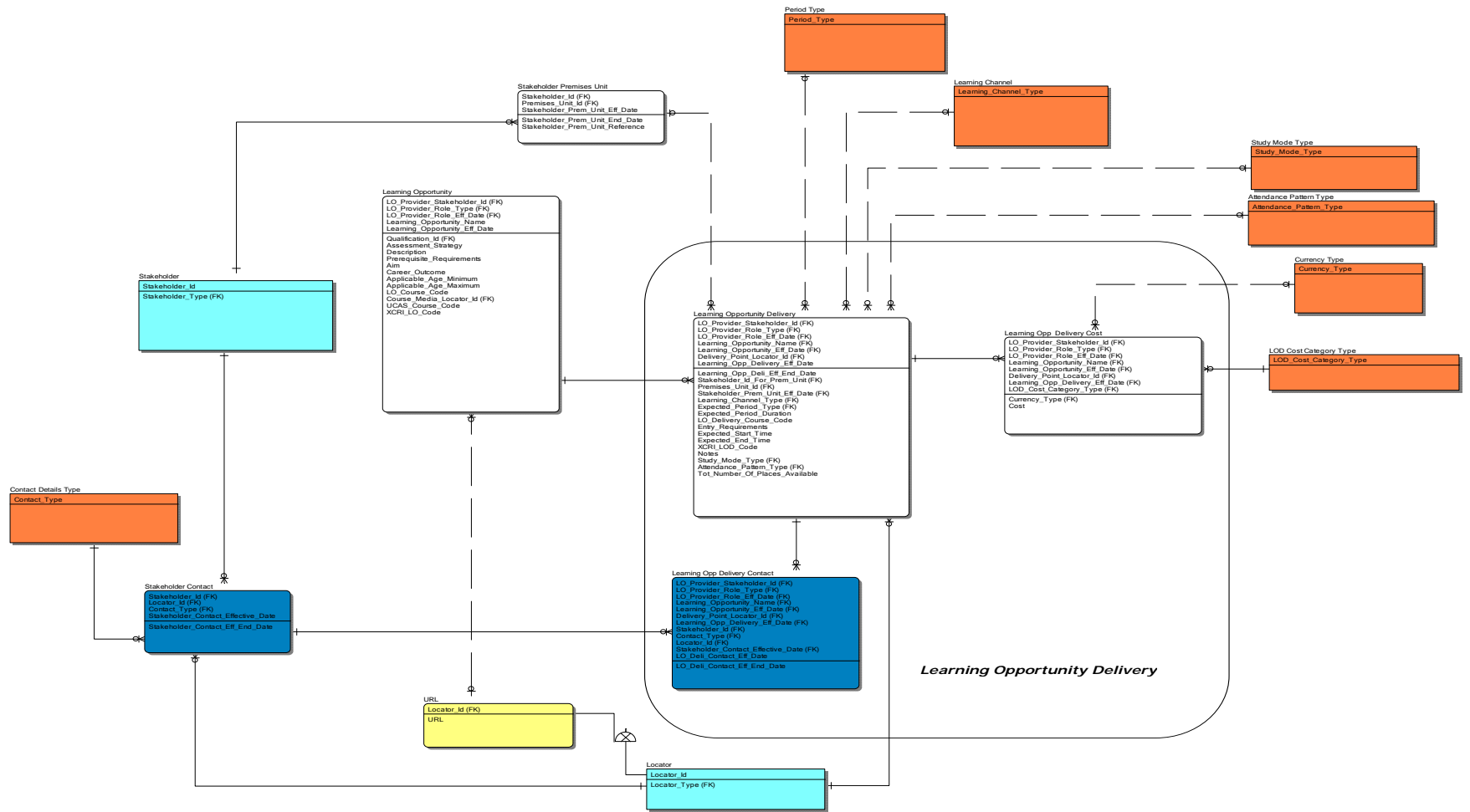
The standards for Business Data Architecture naming and conventions used for this development is Business Data Architecture Naming Standards and Conventions Vs 1.2 by Steve Palmer.

### Entity Definition Model





### Attribute Model



### Data definitions

The following section further describes the entities and their attributes covered in this standard.

PK = Primary Key Attribute

FK =Foreign Key Attribute

M = Mandatory Attribute

**NOTE: Data Types are defined according to the conventions set out in the document “BDM Data Standard – Data Type Expressions”**

#### Entity: Learning Opportunity Delivery

An offering of a COURSE or SUBJECT or other educational opportunity provided by a LEARNING PROVIDER via a LEARNING CHANNEL at a particular LOCATOR (PREMISE,URL etc).

Attribute Name	Attribute Definition	P K	F K	M	Datatype	Parent Entity	Parent Attribute	Code List
LO_Provider_Stakeholder_Id	A value that denotes and distinguishes the STAKEHOLDER	Y	Y	Y	Simple_String (1, 32)	Leaning Opportunity	LO_Provider_Stakeholder_Id	
LO_Provider_Role_Type	A Code that identifies a specific role of a STAKEHOLDER.e.g. LEARNER, LEARNING OPPORTUNITY PROVIDER. This attribute may appear prefixed with the role that is currently being undertaken. In this event the role_type is that specifically named role	Y	Y	Y	Simple_String (1, 50)	Leaning Opportunity	LO_Provider_Role_Type	

LO_Provider_Role_Eff_Date	The date from which the STAKEHOLDER is ready and approved (if necessary) to act in the specific role. This attribute may appear prefixed with a role type. In this event the effective date is that of the prefixed role type.	Y	Y	Y	Simple_Date_Time	Leaning Opportunity	LO_Provider_Role_Eff_Date	
Learning_Opportunity_Name	A value that denotes the LEARNING OPPORTUNITY	Y	Y	Y	Simple_String (1, 255)	Leaning Opportunity	Learning_Opportunity_Name	
Learning_Opportunity_Eff_Date	The date and time from which the LEARNING OPPORTUNITY is offered to LEARNERS.	Y	Y	Y	Simple_Date_Time	Leaning Opportunity	Learning_Opportunity_Eff_Date	
Delivery_Point_Locator_Id	A value that denotes and distinguishes the LOCATOR.	Y	Y	Y	Simple_String (1,36)	Locator	Locator_Id	
Learning_Opp_Delivery_Eff_Date	The date and time from which the LEARNING OPPORTUNITY DELIVERY will take place.	Y	N	Y	Simple_Date_Time			
Learning_Opp_Deli_Eff_End_Date	The date and time on which the LEARNING OPPORTUNITY DELIVERY will finish.	N	N	N	Simple_Date_Time			
Stakeholder_Id_For_Prem_Unit	A value that denotes and distinguishes the STAKEHOLDER	N	Y	N	Simple_String (1, 32)	Stakeholder Premises Unit	Premises_Unit_Id	
Premises_Unit_Id	A value that denotes and uniquely distinguishes the PREMISES UNIT at which this LEARNING OPPORTUNITY will primarily be delivered if this is not virtual learning	N	Y	N	Simple_String (1, 50)	Stakeholder Premises Unit	Premises_Unit_Id	

Stakeholder_Prem_Unit_Eff_Date	The date and time from which the STAKEHOLDER starts being related to the PREMISES UNIT	N	Y	N	Simple_Date_Time	Stakeholder Premises Unit	Stakeholder_Prem_Unit_Eff_Date	
Learning_Channel_Type	A Code that identifies the means of delivery of the LEARNING OPPORTUNITY e.g. in a physical environment, virtual or other means of delivery e.g. on-site, virtual, text book	N	Y	N	Simple_String(1,35)			CL_Learning_Channel_Type
Expected_Period_Type	The code that identifies the duration of the schedule period (e.g. year, term, week, day, period)	N	Y	N	Simple_String(1,50)			CL_Expected_Period_Type
Expected_Period_Duration	The period of time through which the LEARNING OPPORTUNITY continues e.g. 6 sessions, 1 year etc	N	N	N	Simple_Integer(1, 9999)			
LO_Delivery_Course_Code	The Learning Provider Delivery Course Code	N	N	N	Simple_String(1,50)	Learning Opportunity	LO_Delivery_Course_Code	
Entry_Requirements	A description of conditions that a Learner must meet before being enrolled on a LEARNING OPPORTUNITY DELIVERY	N	N	N	Simple_String(1, 2000)			
Expected_Start_Time	The time at which the LEARNING OPPORTUNITY is expected to start	N	N	N	Simple_Date_Time			
Expected_End_Time	The time at which the LEARNING OPPORTUNITY is expected to end	N	N	N	Simple_Date_Time			
XCRI_LOD_Code	The XCRI Code that identifies this LEARNING OPPORTUNITY DELIVERY	N	N	N	Simple_String(1,300)			

Notes	Any general additional information about the LEARNING OPPORTUNITY DELIVERY that is not already covered by another attribute and is not related to any other entity.	N	N	N	Simple_String(1,2000)			
Study_Mode_Type	A code that identifies the type of study required for the LEARNING OPPORTUNITY DELIVERY, for example Full-Time or Part-Time study.	N	Y	N	Simple_String(1,50)			CL_Study_Mode_Type
Attendance_Pattern_Type	A code that identifies the pattern of attendance for the LEARNING OPPORTUNITY DELIVERY, for example, daytime, weekend, and evening attendances.	N	Y	N	Simple_String(1,50)			CL_Attendance_Pattern_Type
Tot_Number_Of_Places_Available	A value that defines the Total number of LEARNER places available on the LEARNING OPPORTUNITY DELIVERY	N	N	N	Simple_Integer(1,4)			

**Entity: Learning Opportunity Delivery Cost**

The costs that apply to a LEARNING OPPORTUNITY DELIVERY eg. LEARNER cost, Employer cost.

Attribute Name	Attribute Definition	P K	F K	M	Datatype	Parent Entity	Parent Attribute	Code List
LO_Provider_Stakeholder_Id	A value that denotes and distinguishes the STAKEHOLDER	Y	Y	Y	Simple_String (1, 32)	Learning Opportunity Delivery	LO_Provider_Stakeholder_Id	
LO_Provider_Role_Type	A Code that identifies a specific role of a STAKEHOLDER.e.g. LEARNER, LEARNING OPPORTUNITY PROVIDER. This attribute may appear prefixed with the role that is currently being undertaken. In this event the role_type is that specifically named role	Y	Y	Y	Simple_String (1, 50)	Learning Opportunity Delivery	LO_Provider_Role_Type	
LO_Provider_Role_Eff_Date	The date from which the STAKEHOLDER is ready and approved (if necessary) to act in the specific role. This attribute may appear prefixed with a role type. In this event the effective date is that of the prefixed role type.	Y	Y	Y	Simple_Date_Time	Learning Opportunity Delivery	LO_Provider_Role_Eff_Date	
Learning_Opportunity_Name	A value that denotes the LEARNING OPPORTUNITY	Y	Y	Y	Simple_String (1, 255)	Learning Opportunity Delivery	Learning_Opportunity_Name	
Learning_Opportunity_Eff_Date	The date and time from which the LEARNING OPPORTUNITY is offered to LEARNERS.	Y	Y	Y	Simple_Date_Time	Learning Opportunity Delivery	Learning_Opportunity_Eff_Date	

Delivery_Point_Locator_Id	A value that denotes and distinguishes the LOCATOR.	Y	Y	Y	Simple_String (1,36)	Learning Opportunity Delivery	Delivery_Point_Locator_Id	
Learning_Opp_Delivery_Eff_Date	The date and time from which the LEARNING OPPORTUNITY DELIVERY will take place.	Y	Y	Y	Simple_Date_Time	Learning Opportunity Delivery	Learning_Opp_Delivery_Eff_Date	
LOD_Cost_Category_Type	A Code that identifies the categories of costs that applies to a LEARNING OPPORTUNITY eg. LEARNER cost, Employer cost.	Y	Y	Y	Simple_String(1,50)			CL_LOD_Cost_Category_Type
Currency_Type	A Code that identifies the type of currency	N	Y	N	Simple_String(1,25)			CL_Currency_Type
Cost	The cost value for the LEARNING OPPORTUNITY VENUE COST for a particular cost category	N	N	N	Simple_Long(1,15)			

**Entity: Learning Opportunity Delivery Contact**

The contact details for a LEARNING OPPORTUNITY DELIVERY that identifies such contacts as, who to contact, for further information, vide demo web site, application tel number, application postal address etc

Attribute Name	Attribute Definition	P K	F K	M	Datatype	Parent Entity	Parent Attribute	Code List
LO_Provider_Stakeholder_Id	A value that denotes and distinguishes the STAKEHOLDER	Y	Y	Y	Simple_String (1, 32)	Learning Opportunity Delivery	LO_Provider_Stakeholder_Id	

LO_Provider_Role_Type	A Code that identifies a specific role of a STAKEHOLDER.e.g. LEARNER, LEARNING OPPORTUNITY PROVIDER. This attribute may appear prefixed with the role that is currently being undertaken. In this event the role_type is that specifically named role	Y	Y	Y	Simple_String (1, 50)	Learning Opportunity Delivery	LO_Provider_Role_Type	
LO_Provider_Role_Eff_Date	The date from which the STAKEHOLDER is ready and approved (if necessary) to act in the specific role. This attribute may appear prefixed with a role type. In this event the effective date is that of the prefixed role type.	Y	Y	Y	Simple_Date_Time	Learning Opportunity Delivery	LO_Provider_Role_Eff_Date	
Learning_Opportunity_Name	A value that denotes the LEARNING OPPORTUNITY	Y	Y	Y	Simple_String (1, 255)	Learning Opportunity Delivery	Learning_Opportunity_Name	
Learning_Opportunity_Eff_Date	The date and time from which the LEARNING OPPORTUNITY is offered to LEARNERS.	Y	Y	Y	Simple_Date_Time	Learning Opportunity Delivery	Learning_Opportunity_Eff_Date	
Delivery_Point_Locator_Id	A value that denotes and distinguishes the LOCATOR.	Y	Y	Y	Simple_String (1,36)	Learning Opportunity Delivery	Delivery_Point_Locator_Id	
Learning_Opp_Delivery_Eff_Date	The date and time from which the LEARNING OPPORTUNITY DELIVERY will take place.	Y	Y	Y	Simple_Date_Time	Learning Opportunity Delivery	Learning_Opp_Delivery_Eff_Date	
Stakeholder_Id	A value that denotes and distinguishes the STAKEHOLDER	Y	Y	Y	Simple_String (1, 32)	Stakeholder Contact	Stakeholder_Id	



Contact_Type	The code that identifies the different uses of a LOCATOR for a STAKEHOLDER, e.g. home, day time, evening, registered, trading, delivery, etc	Y	Y	Y	Simple_String (1, 50)	Stakeholder Contact	Contact_Type	
Locator_Id	A value that denotes and distinguishes the LOCATOR.	Y	Y	Y	Simple_String (1,36)	Stakeholder Contact	Locator_Id	
Stakeholder_Contact_Effective_Date	The date and time from which the locator starts being related to the stakeholder. I.e. When a person moves into a new residence, or acquires a telephone number or email address etc.	Y	Y	Y	Simple_Date_Time	Stakeholder Contact	Stakeholder_Contact_Effective_Date	
LO_Deli_Contact_Eff_Date	The date and time from which the contact is available to be used in connection with the LEARNING OPPORTUNITY DELIVERY	Y	N	Y	Simple_Date_Time			
LO_Deli_Contact_Eff_End_Date	The date and time from which the contact is no longer available to be used in connection with the LEARNING OPPORTUNITY	N	N	N	Simple_Date_Time			