

BDM Data Standard – Learning Event
v0.2
09 November

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Document Version History

Version	Status	Date	Modified by	Change description	Section & line Ref	Changed from	Changed to	Effects of change
0.1	Draft	24/09/2009	DFoster	Initial Draft	-	-	-	-
0.2	Draft	09/11/2009	LHogarth	Document Map updated to show Side Notes and Appendix replaced with a reference to new document Definition changes Linked to Learning Opportunity Delivery				

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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 events.

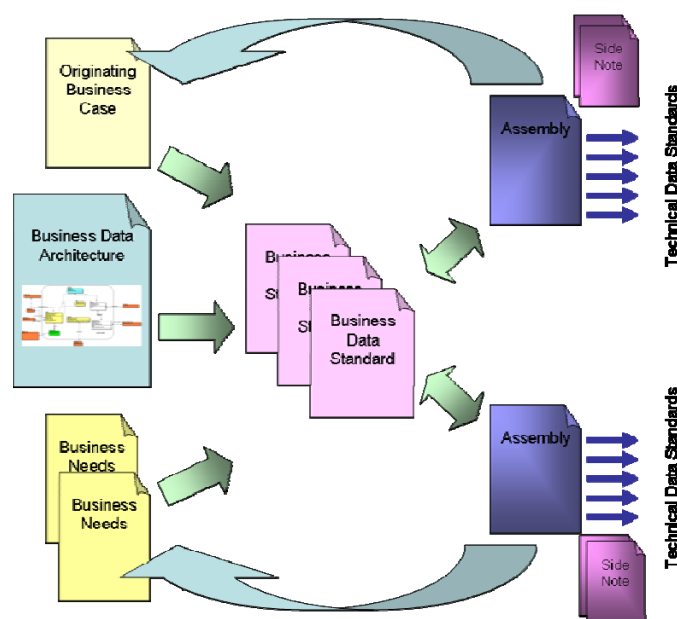
It describes data that relates to learning events, stakeholder periods and schedules. A learning event can either be from the perspective of provision or receipt, e.g.

- A) a consortium may plan for a learning opportunity (e.g. a diploma course) to take place on a set of dates and times.
- B) a learning provider may plan a learning event for a particular learning opportunity to take place at a particular date and time.
- C) a learner is scheduled to receive a learning event at a particular date and time.

Learning events can also have different statuses such as planned and actual.

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:



This Business Data Standard shows how information relating to learning events 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.

Important Note On Scope:

The work on this data standard has been split into two phases. Phase one considers the requirements for basic timetabling. This focuses on who provided a learning event, what is the learning opportunity that is being realised and when it is being provided.

Phase two relates to who is receiving the learning (i.e. the learner) and the resources required to facilitate the learning events (e.g. teachers, classrooms or equipment).

Currently this data standard only shows the entities for phase one. Phase two will require further investigation into resource planning and communication of resource constraints. This will be included in a subsequent release of this data standard and might require further data standards in the future.

Please note, it is possible to use the entities presented in phase one to create a rudimentary timetable for learners that describes the learning opportunity and when they will be receiving learning, but the entities cannot describe the precise location, or who will be presenting the learning event.

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.

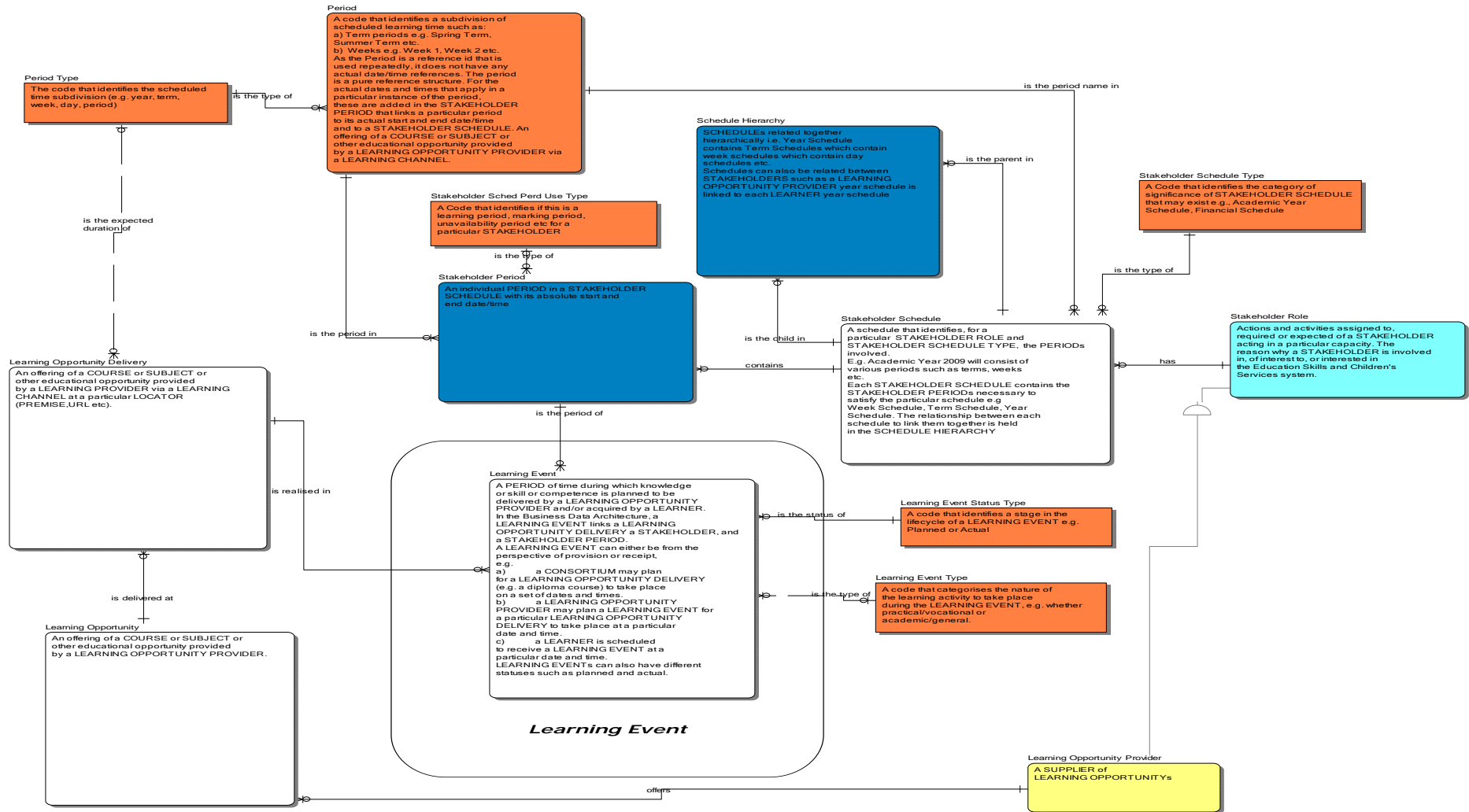
Diagram Notation

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)

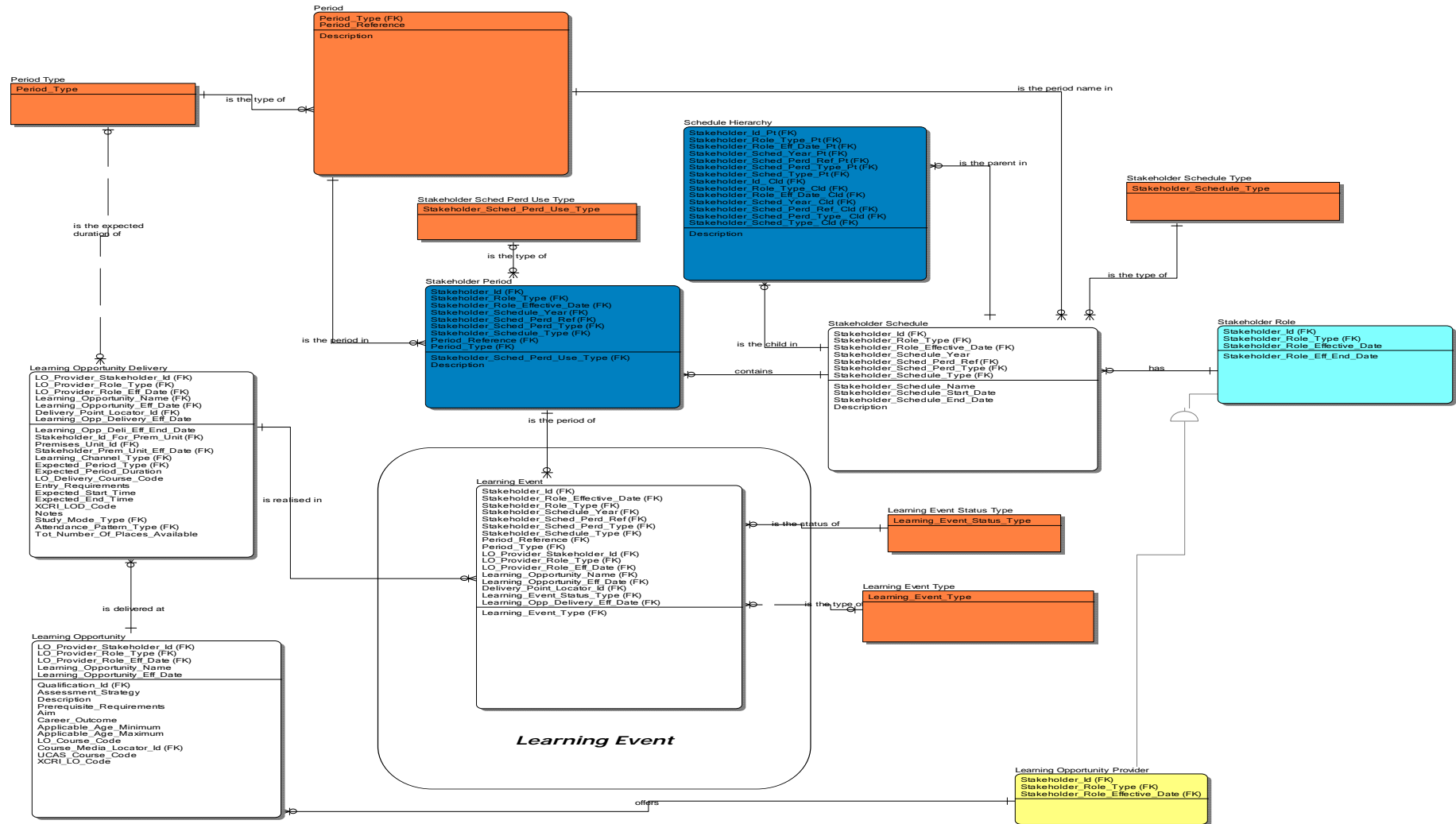
Entity and Attribute Naming Standards and Conventions used

The standards for Business Data Architecture naming and conventions used for this development is Business Data Architecture Naming Standards and Conventions Vs 1.4 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 Event

A period of time during which knowledge or skill or competence is planned to be delivered by a LEARNING OPPORTUNITY PROVIDER and/or acquired by a LEARNER.

In the Business Data Architecture, a LEARNING EVENT links a LEARNING OPPORTUNITY DELIVERY, a STAKEHOLDER, and a STAKEHOLDER PERIOD.

A LEARNING EVENT can either be from the perspective of provision or receipt, e.g.

a) a CONSORTIUM may plan for a LEARNING OPPORTUNITY DELIVERY (e.g. a diploma course) to take place on a set of dates and times.

b) a LEARNING OPPORTUNITY PROVIDER may plan a LEARNING EVENT for a particular LEARNING OPPORTUNITY DELIVERY to take place at a particular date and time.

c) a LEARNER is scheduled to receive a LEARNING EVENT at a particular date and time.

LEARNING EVENTS can also have different statuses such as planned and actual.

Attribute Name	Attribute Definition	P K	F K	M	Datatype	Parent Entity	Parent Attribute	Code List
Stakeholder_Id	A value that denotes and distinguishes the STAKEHOLDER	Y	Y	Y	Simple_String (1, 32)	Stakeholder Period	Stakeholder_I d	
Stakeholder_Role_Effective_D ate	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_Ti me	Stakeholder Period	Stakeholder_ Role_Effectiv e_Date	
Stakeholder_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)	Stakeholder Period	Stakeholder_ Role_Type	
Stakeholder_Schedule_Year	The Year for which this STAKEHOLDER SCHEDULE is applicable. The type of year (Calendar, Academic, Financial) is identified by the STAKEHOLDER SCHEDULE TYPE	Y	Y	Y	Simple_Date_Ti me	Stakeholder Period	Stakeholder_ Schedule_Ye ar	
Stakeholder_Sched_Perd_Ref	A code that denotes and distinguishes the time period that will be used in a schedule. e.g. Period 1, Week 1, Spring Term, etc	Y	Y	Y	Simple_String(1 ,50)	Stakeholder Period	Stakeholder_ Sched_Perd_ Ref	

Stakeholder_Sched_Perd_Type	The code that identifies the type of period (e.g. year, term, week, day, period)	Y	Y	Y	Simple_String(1,50)	Stakeholder Period	Stakeholder_Sched_Perd_Type	
Stakeholder_Schedule_Type	A Code that identifies the category of significance of STAKEHOLDER SCHEDULE that may exist e.g., Academic Year Schedule, Financial Schedule	Y	Y	Y	Simple_String(1,50)	Stakeholder Period	Stakeholder_Schedule_Type	
Period_Reference	A code that denotes and distinguishes the time period that will be used in a schedule. e.g. Period 1, Week 1, Spring Term, etc	Y	Y	Y	Simple_String(1,50)	Stakeholder Period	Period_Reference	
Period_Type	The code that identifies the duration of the schedule period (e.g. year, term, week, day, period)	Y	Y	Y	Simple_String(1,50)	Stakeholder Period	Period_Type	
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_Event_Status_Type	A code that identifies the administrative stage of a LEARNING EVENT e.g. Planned or Actual	Y	Y	Y	Simple_String(1,25)	Learning Opportunity Delivery	Learning_Event_Status_Type	CL_Learning_Event_Status_Type
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	
Learning_Event_Type	A code that categorises the nature of the learning activity to take place during the LEARNING EVENT, e.g. whether practical/vocational or academic/general.	N	Y	N	Simple_String(1,50)			CL_Learning_Event_Type