

Locator

Version: 7.0

Issue Date: 26/10/2015

Document Version History

Version	Status	Approval Date	Issue Date	Modified by	Description
1.0	Approved: Recommended	24/11/2009	24/11/2009	ISB	New Standard.
2.0	Approved: Recommended	25/09/2012	25/09/2012	ISB	Updated to align to the AddressBase reference database of UK addresses.
3.0	Approved: Recommended	23/07/2013	23/07/2013	ISB	Updated to deal with issues found from use, including addition of Locator Identifier Type attribute.
4.0	Approved: Recommended	16/06/204	16/06/204	ISB	Re-inserted Locator Type embedded controlled list that was approved as part of version 2 Board submission.
5.0	Approved: Recommended	04/08/2014	04/08/2014	ISB	Removal of Locator Type embedded controlled list.
6.0	Approved: Recommended	18/11/2014	08/12/2014	ISB	Email address format restriction removed.

7.0	Approved: Recommended	19/08/2015	26/10/2015	ISB	<p>Changes in data type lengths to the Locator_Id, Email Address, URL and Telephone.</p> <p>Locator_Id amended to SimpleString (1,600).</p> <p>Additional attribute data types for Locator_Id amended to SimpleString (1,600).</p>
-----	--------------------------	------------	------------	-----	--

Contents

1	<i>Data Standard</i>	4
1.1	Introduction	4
1.1.1	Application	4
1.1.2	Compatibility with non-ISB standards	4
1.1.3	Terminology and notation	5
1.2	Entity Definition Model	6
1.3	Attribute Model	7
1.4	Data Definitions	8
1.4.1	Entity Supertype: Locator	8
1.4.2	Entity: Address Line	10
1.4.4	Entity Sub Type: URL	11
1.4.5	Entity Sub Type: Geographical Location	12
1.4.6	Entity Sub Type: Postal Address	13
1.4.7	Entity Sub Type: Email Address	14
1.4.8	Entity Sub Type: Telephone Number	15
2	<i>Changes from previous version</i>	16
3	<i>References</i>	16
4	<i>Notes</i>	17
5	<i>Copyright Notice</i>	18

1 DATA STANDARD

1.1 Introduction

1.1.1 Application

This standard can be used to store or exchange data that covers the various Locators such a Telephone, Addresses. The Locator data standard identifies the specific attributes of each type. Locators are not directly tied to a Party as the Locator exists regardless of the Party that uses it. The relationship between Parties and Locators is contained in the contacts models.

1.1.2 Compatibility with non-ISB standards

Addresses defined here allow compatibility with:

- The Post Office 5-line address format
- BS 7666
- The UK address gazetteer AddressBase

URLs and email addresses defined here are compatible with IETF internet standards.

Geographic location data is compatible with the UK address gazetteer AddressBase.

Telephone numbers defined here are compatible with ITU telephone numbering.

1.1.3 Terminology and notation

The following sections contain:

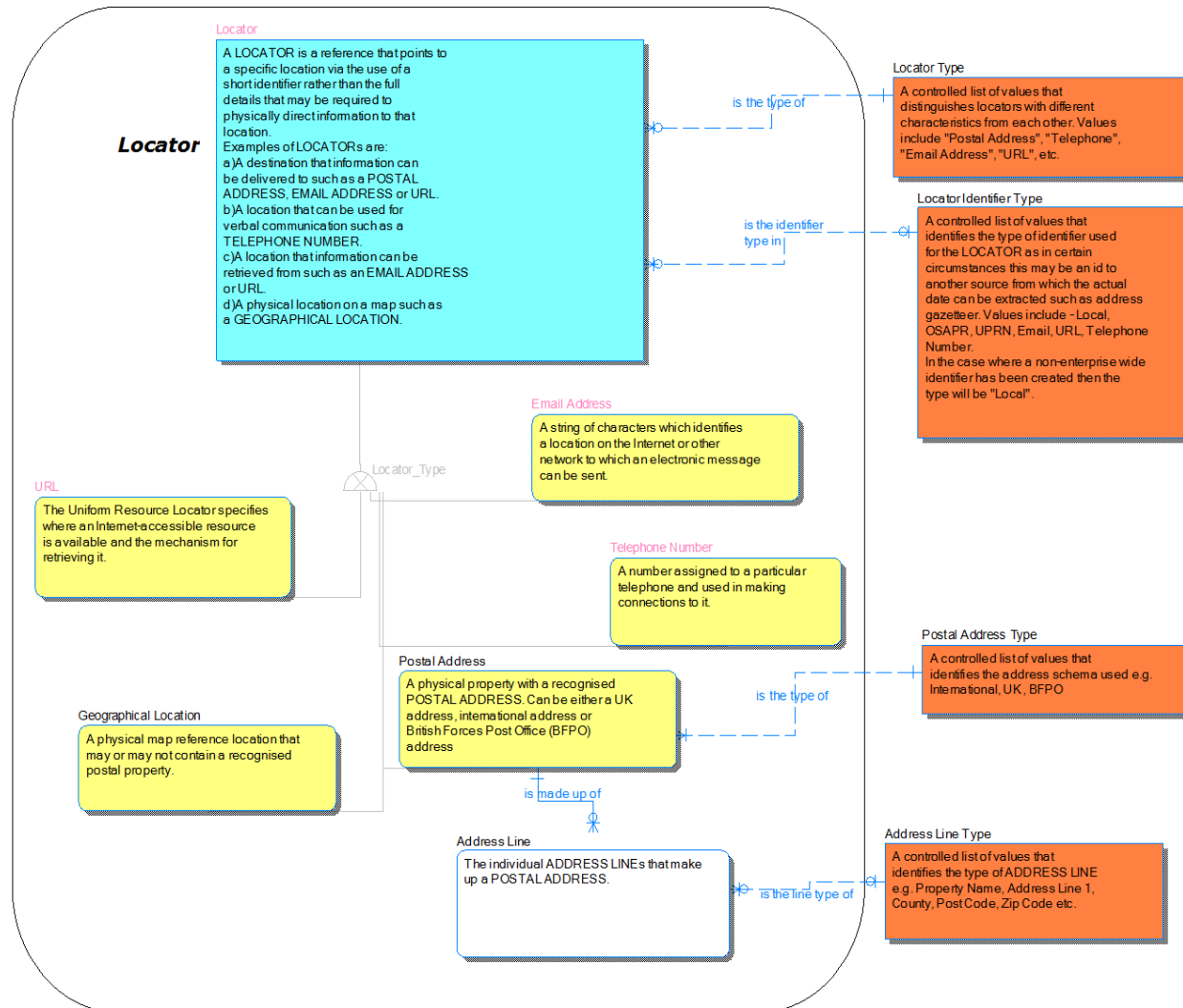
- **Entity Definition Model** – A high level diagram showing: entities; their descriptions and relationships
- **Attribute Model** – A lower level diagram showing the names of attributes making up entities. Attributes in the top section of an entities box are those making up its primary key
- **Data Definitions** – Detailed descriptions of each of the entities at an attribute level, showing attribute: name; definition; whether it is part of a key; whether it is mandatory; its data type and format; parent information and Controlled List association

Only those entities within the boundary square in the diagrams are part of this particular data standard, entities outside the boundary are shown for context purposes only (and can be found within other Business Data Standards), or separate Controlled List reference data.

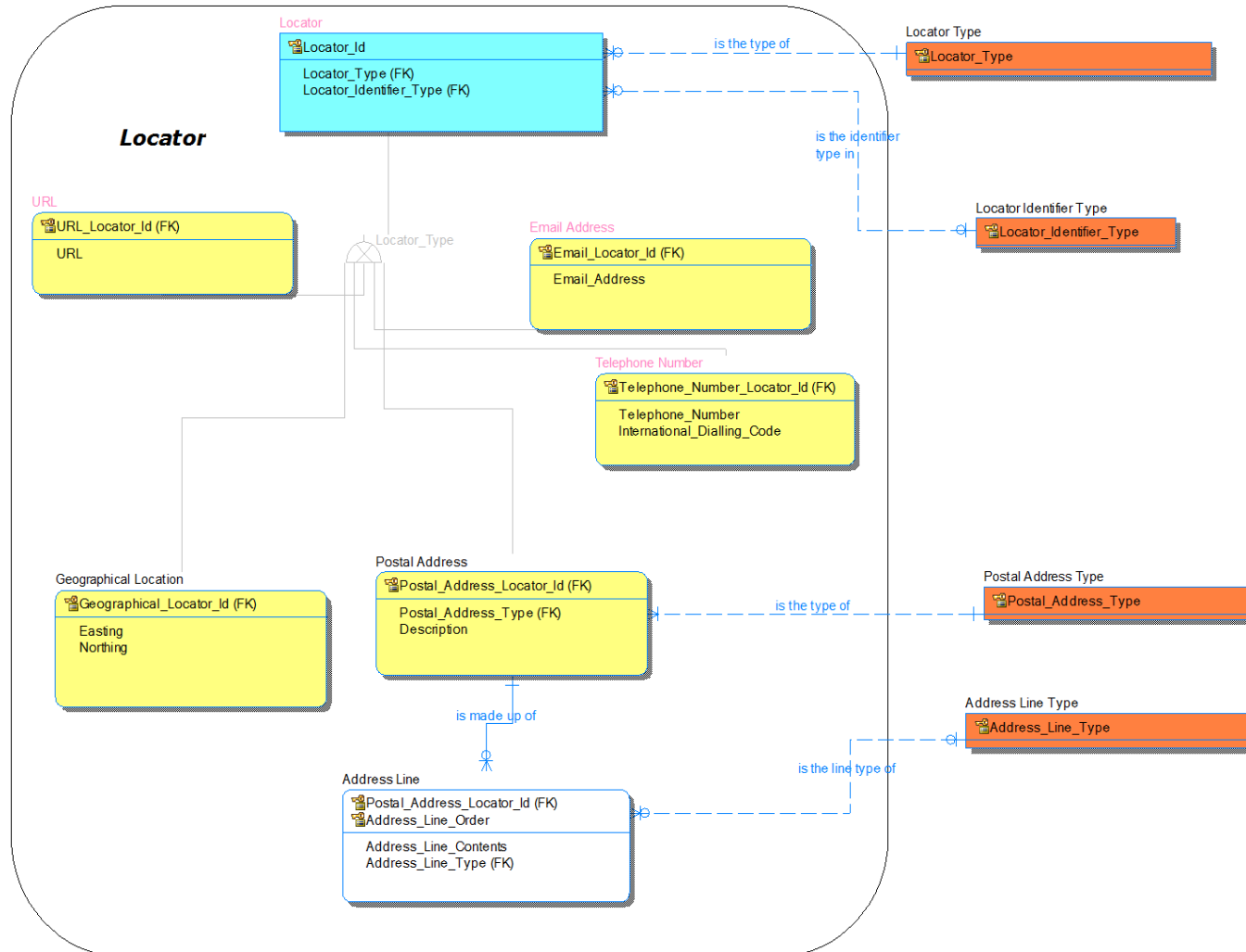
The standards for naming, notation and conventions used for this development can be found in the BDA Data Architecture Modelling Standards document. For convenience, a quick reference of the colours used in these diagrams is shown below.



1.2 Entity Definition Model



1.3 Attribute Model



1.4 Data Definitions

1.4.1 Entity Supertype: Locator

A LOCATOR is a reference that points to a specific location via the use of a short identifier rather than the full details that may be required to physically direct information to that location.

Examples of LOCATORs are:

- a) A destination that information can be delivered to such as a POSTAL ADDRESS, EMAIL ADDRESS or URL.
- b) A location that can be used for verbal communication such as a TELEPHONE NUMBER.
- c) A location that information can be retrieved from such as an EMAIL ADDRESS or URL.
- d) A physical location on a map such as a GEOGRAPHICAL LOCATION.

Attribute Name	Attribute Definition	P K	F K	M	Datatype	FK Source Entity	FK Source Attribute	Controlled List
Locator_Id	A value that denotes and distinguishes the LOCATOR.	Y	N	Y	Simple_String(1,600)			
Locator_Type ¹	A controlled list of values that distinguishes locators with different characteristics from each other e.g. POSTAL ADDRESS, TELEPHONE, EMAIL ADDRESS, URL etc.	N	Y	Y	Unicode_String(1,25)	Locator Type		Locator_Type
Locator_Identifier_Type	"A controlled list of values that identifies the type of identifier used for the LOCATOR as in certain circumstances this may be an id to another source from which the actual date can be extracted such as address gazetteer. Values include - Local, OSAPR, UPRN, Email, URL, Telephone Number.	N	Y	N	Unicode_String(1,50)	Locator Identifier Type		Locator_Identifier_Type

¹ The Locator_Type is mandatory as it identifies the subtypes. Usually it would be part of the Primary key but as the primary key is the locator itself in many instances then it does not require the Locator_Type within it. However, it needs the Locator_Type within any message to understand what type of Locator the supertype is as it may not require the accompanying subtype if there are no additional attributes on the subtype.

1.4.2 Entity: Address Line

The individual ADDRESS LINES that make up a POSTAL ADDRESS.

Attribute Name	Attribute Definition	P K	F K	M	Datatype	FK Source Entity	FK Source Attribute	Controlled List
Postal_Address_Locator_Id	A value that denotes and distinguishes the LOCATOR.	Y	Y	Y	Unicode_String(1,600)	Postal Address	Postal_Addresses_Locator_Id	
Address_Line_Order	The sequence order the ADDRESS LINE appears within the set of POSTAL ADDRESS.	Y	N	Y	Simple_Integer(1,2)			
Address_Line_Contents	The contents of the ADDRESS LINE.	N	N	N	Unicode_String(1,200)			
Address_Line_Type	A controlled list of values that identifies the type of ADDRESS LINE e.g. Property Name, Address Line 1, County, Post Code, Zip Code etc.	N	Y	N	Unicode_String(1,50)	Address Line Type		Address_Line_Type

1.4.4 Entity Sub Type: URL

The Uniform Resource Locator specifies where an Internet-accessible resource is available and the mechanism for retrieving it.

Attribute Name	Attribute Definition	P K	F K	M	Datatype	FK Source Entity	FK Source Attribute	Controlled List
URL_Locator_Id	A value that denotes and distinguishes the LOCATOR.	Y	Y	Y	Simple_String(1,600)	Locator	URL_Locator_Id	
URL	The Uniform Resource Locator specifies where an Internet-accessible resource is available and the mechanism for retrieving it	N	N	N	Unicode_String(1,225)			

1.4.5 Entity Sub Type: Geographical Location

A physical map reference location that may or may not contain a recognised postal property.

Attribute Name	Attribute Definition	P K	F K	M	Datatype	FK Source Entity	FK Source Attribute	Controlled List
Geographical_Locator_Id	A value that denotes and distinguishes the LOCATOR.	Y	Y	Y	Simple_String(1,600)	Locator	Geographical_Locator_Id	
Easting	The distance in metres in an easterly grid direction from a specific origin. In a co-ordinate description of a location the Easting value would be given first.	N	N	N	Simple_Decimal(9,2)			
Northing	The distance in metres in a northerly grid direction from a specific origin. In a co-ordinate description of a location the Northing value would be given last.	N	N	N	Simple_Decimal(9,2)			

1.4.6 Entity Sub Type: Postal Address

A physical property with a recognised POSTAL ADDRESS. Can be either a UK address, international address or British Forces Post Office (BFPO) address.

Attribute Name	Attribute Definition	P K	F K	M	Datatype	FK Source Entity	FK Source Attribute	Controlled List
Postal_Address_Locator_Id	A value that denotes and distinguishes the LOCATOR.	Y	Y	Y	Simple_String(1,600)	Locator	Postal_Addresses_Locator_Id	
Postal_Address_Type	A controlled list of values that identifies the address schema used e.g. International, UK , BFPO	N	Y	Y	Unicode_String(1,25)	Postal Address Type		Postal_Address_Type
Description	The description of the POSTAL ADDRESS	N	N	N	Unicode_String(1,100)			

1.4.7 Entity Sub Type: Email Address

A string of characters which identifies a location on the Internet or other network to which an electronic message can be sent.

Attribute Name	Attribute Definition	P K	F K	M	Datatype	FK Source Entity	FK Source Attribute	Controlled List
Email_Locator_Id	A value that denotes and distinguishes the LOCATOR.	Y	Y	Y	Simple_String(1,600)	Locator	Locator_Id	
Email_Address	A string of characters which will allow the Internet or other network to deliver an email.	N	N	N	Unicode_String(1,225)			

1.4.8 Entity Sub Type: Telephone Number

A number assigned to a particular telephone and used in making connections to it.

Attribute Name	Attribute Definition	P K	F K	M	Datatype	FK Source Entity	FK Source Attribute	Controlled List
Locator_Id	A value that denotes and distinguishes the LOCATOR.	Y	Y	Y	Unicode_String(1,600)	Locator	Locator_Id	
Telephone_Number	The telephone number in national format (national prefix, trunk code and local number)	N	N	N	Unicode_String(1,15)			
International_Dialling_Code	International Dialling Code as per the International Telecommunication Union E.164 Assigned Country Code. E.g. for UK = 44.	N	N	N	Unicode_String(1,10)			

2 CHANGES FROM PREVIOUS VERSION

Changes to the following attributes have been made:

- URL – change Locator_Id to URL_Locator_Id
- Email Address – change Locator_Id to Email_Locator_Id
- Geographical Location – change Locator_Id to Geographical_Locator_Id
- Telephone Number – change Locator_Id to Telephone_Number_Locator_Id
- Postal Address – change Locator_Id to Postal_Address_Locator_Id
- Address Line – change Locator_Id to Postal_Address_Locator_Id

All of the above should be a data type of SimpleString (1,600).

3 REFERENCES

The following references are specific to this Business Data Standard:

- ESCS ISB Business Data Architecture Entity Relationship Diagram, version 11.2
- ESCS ISB, Controlled List, Locator Identifier Type
- ESCS ISB, Controlled List, Address Line Type
- ESCS ISB, Controlled List, Postal Address Type
- ESCS ISB, Controlled List, Locator Type

The following references apply to all Business Data Standards:

File: BDS-Locator	Page 16 of 18	Version: 7.0 Status: Approved: Recommended	Issue Date: 26/10/2015 BDA Version: 11.2
-------------------	---------------	---	---

- ESCS ISB Standards Overview and Context
- ESCS ISB “System“ Enterprise Architecture - Business Data Architecture
- ESCS ISB Business Data Architecture Data Types
- ESCS ISB BDA Data Architecture Modelling Standards
- ESCS ISB Management Process

4 NOTES

None.

5 COPYRIGHT NOTICE

© [Crown copyright 2015](#)

The Information Standards Board (ISB) is an advisory body to the Department for Education (DfE) and the Department for Business, Innovation and Skills (BIS). The information it produces is subject to Crown copyright, which is administered by the National Archives.

The Crown copyright protected information in this document (other than ISB or Departmental logos) may be reproduced free of charge in any format or medium under the terms of the Open Government Licence, available from the National Archives website.

Any reuse is subject to the material being reproduced accurately and not used in a misleading context. It must be acknowledged as being protected by Crown copyright and the title of the source material must be supplied with the ISB named as the corporate author.

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

File: BDS-Locator	Page 18 of 18	Version: 7.0 Status: Approved: Recommended	Issue Date: 26/10/2015 BDA Version: 11.2
-------------------	---------------	---	---