

## Locator Geographical Unit

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### Document Version History

Version	Status	BDS Approval Date	TDS Issue Date	Modified by	Description
1.0	Approved: Recommended	06/03/2013	07/04/2014	ISB	New TDS
2.0	Approved: Recommended	18/11/2014	08/12/2014	ISB	See changes at section 5

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## 1 DATA STANDARD

### 1.1 Introduction

#### 1.1.1 Application

This Technical Data Standard (TDS) binds the Locator Geographical Unit Business Data Standard (BDS) to an XML Schema (XSD) representation.

This standard can be used to exchange data describing the deliverables produced as a result of delivery of a Locator Geographical Unit, where:

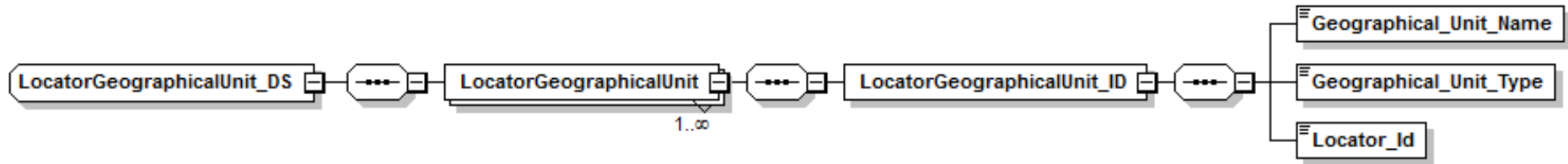
Locator Geographical Unit identifies the particular Geographical Unit(s) that a Locator such as Postal Address is contained within.

The Locator Geographical Unit is linked to the Locator super type as it can apply to multiple Locator sub types. Currently the sub types that can be linked to a Locator Geographical Unit are Postal Address and Geographical Location.

#### 1.1.2 Compatibility with non-ISB standards

There are no known compatibility issues related to this standard.

## 2 XSD



### **3 XSD NORMALISATION**

#### **3.1 Introduction**

This section defines normalisation that has been applied. The Business Data Standard data model may contain multiple entities that inherit primary keys from a parent entity. In this situation the same primary keys will occur in multiple entities. If this pattern was translated directly to the xsd then the same primary key element(s) would be repeated within the xsd. When parsing the xml, if the element was referenced without xpath then the particular instance of the repeated primary key element could not be determined.

If all instances of the repeated primary key element(s) contained the same value then there would not be an issue. However, if there were different values in the repeated primary key element(s) then the value to be returned would be indeterminate. To prevent this situation the conversion from the Entity Relationship Diagram (ERD) model to the xsd involved normalisation to remove the repetition. This results in nodes being created in the xsd to define primary keys once and sub-nodes created that inherit those keys. This section will identify any normalisation that has taken place and how it has been implemented in the schema.

#### **3.2 Details of Normalisation specific to Locator Geographical Unit**

The Locator Geographical Unit model consists of a single entity and therefore no normalisation is required.

## 4 XSD OPTIMISATION

### 4.1 Introduction

This section defines optimisation that has been applied to the xsd. The Business Data Standard data model may contain compound keys made up from a number of attributes. The sequence of the attributes in the Business Data Standard data model is defined to identify any opportunities for optimisation in encodings that can accommodate that capability.

An example is where the primary key contains the values of Party\_Id and then Event\_Id. This implies that a single Party\_Id may have many Event\_Ids. Encodings that can accommodate optimisation can define the Party\_Id once and then under that have many Event\_Ids. For xml encoding, a single Party\_Id element node can be defined with an unbounded list under that node for the Event\_Ids. This reduces the amount of data redundancy.

### 4.2 Details of Optimisation specific to Locator Geographical Unit

The Locator Geographical Unit structure has not had any optimisation requirement identified for it. The primary key attributes are held under the LocatorGeographicalUnit\_ID node.

## 5 CHANGES FROM PREVIOUS VERSION

Rename element LocatorGeographicalAdminUnit_DS to LocatorGeographicalUnit_DS
Rename element LocatorGeographicalAdminUnit to LocatorGeographicalUnit
Rename element LocatorGeographicalAdminUnit_ID to LocatorGeographicalUnit_ID
Rename element Geographical_Admin_Unit_Name to Geographical_Unit_Name
Add element Geographical_Unit_Type to sequence following LocatorGeographicalUnit_ID type xs:string mandatory

## 6 REFERENCES

The following references are specific to this Technical Data Standard:

- ESCS ISB Consolidated XML (XSD) Schema, version 1.19
- ESCS ISB Business Data Architecture Entity Relationship Diagram, version 8.01
- ESCS ISB XML Content Model, version 1.1
- ESCS ISB Business Data Standard, Locator Geographical Unit

The following references apply to all Technical Data Standards:

- 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

## 7 NOTES

Version 1.0 of this standard was named Locator Geographical Admin Unit technical data standard.



## 8 COPYRIGHT NOTICE

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