ISB Technical Data Standard

ISB-000303

PPA Plan RID

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Document Version History

Version	Status	BDS Approval Date	TDS Issue Date	Modified by	Description
1.0	Approved: Recommended	24/02/2015	27/03/2015	ISB	New Standard

Contents

1 DATA STANDARD

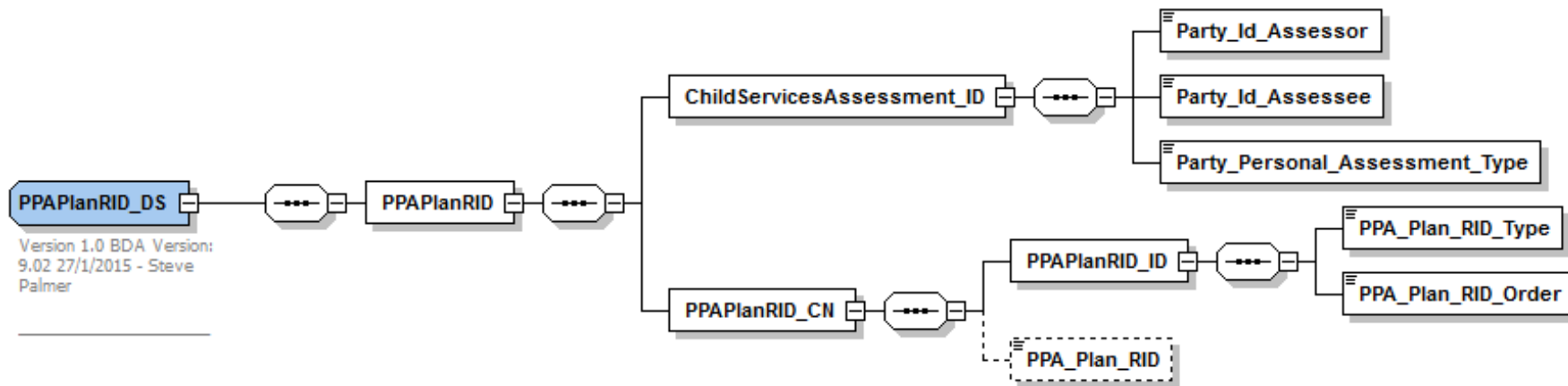## 1.1 Introduction

1.1.1 Application

This Technical Data Standard (TDS) binds the PPA Plan RID Business Data Standard (BDS) to an XML Schema (XSD) representation.

This standard can be used to store or exchange data that identifying the Risks, Issues and Dependencies (RID) of the PARTY PERSONAL ASSESSMENT - CHILD SERVICES ASSESSMENT plan.

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 PPA Plan RID

The Party Personal Assessment Plan RID 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 PPA Plan RID

The Party Personal Assessment Plan RID structure is a single entity with a dual primary key pair. It is optimised as follows:

- Under the ChildServicesAssessment_ID node there is primary key set (1) containing:
    - Party_Id_Assessor
    - Party_Id_Assessee
    - Party_Personal_Assessment_Type
- Under the above primary key set (1) there are multiple instances of PPAPlanRID_CN node that holds primary key set PPAPlanRID_ID (2) containing:
    - PPA_Plan_RID_Type
    - PPA_Plan_RID_Order
- Therefore
    - for one instance of primary key set (1) there are multiple instances of primary key set (2)

The Party Personal Assessment Plan RID model has one level of optimisation.

4.3   Applying the Optimisation within the Application Program Interface

When creating data for the Party Personal Assessment Plan RID primary keys there are two options available that both satisfy the xsd

- Option 1 – One ChildServicesAssessment_ID with many PPAPlanRID_ID

- Option 2 – One ChildServicesAssessment_ID with one instance of PPAPlanRID_ID

Option 1 utilises the optimisation as there will be one ChildServicesAssessment_ID with all of its PPAPlanRID_ID instances.

Option 2 does not use the optimisation and repeats the ChildServicesAssessment_ID against a single PPAPlanRID_ID instance.

Providing Option 1 is coded for in the application then either option 1 or 2 option can be supported. However, this is not true if option 2 only is coded for as the program will not hold the ChildServicesAssessment_ID in memory for use against each of its PPAPlanRID_ID nodes.

The recommendation is always to code for the optimisation method Option 1.

5   CHANGES FROM PREVIOUS VERSION

None.

6   REFERENCES

The following references are specific to this Technical Data Standard:

- ESCS ISB Consolidated XML (XSD) Schema, version 2.1

- ESCS ISB Business Data Architecture Entity Relationship Diagram, version 9.02

- ESCS ISB XML Content Model, version 1.0

- ESCS ISB, Business Data Standard, PPA Plan RID

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

None.

8 COPYRIGHT NOTICE