4 Core Component Framework

4.1 General

Specified in ISO 15000-5 4.1

4.2 Core Components

Core Components are building blocks for the development and publication of a library of standard Core Components and Business Information Entities containing the information pieces needed to describe a specific concept. There are six categories of Core Components:

— Basic Core Component;

— Association Core Component;

— Core Component Type;

— Aggregate Core Component;

— Identifier Core Component; and

— Reference Core Component.

Identifier Core Component and Reference Core Component is extended in this standard and are detailed definitions of Basic Core Component. Another Core Components are from ISO 15000-5.

The following general rules shall be followed in discovering and documenting the four types of Core Components:

[C1] Each Core Component Type, Basic Core Component, Association Core Component or Aggregate Core Component, Identifier Core Component, and Reference Core Component shall have its own unique semantic definition within the library of which it is a part.

NOTE 1 Comments can be used to further clarify the definition, to provide examples and/or to reference a recognized standard.

[C5] An Aggregate Core Component shall contain at least one Core Component Property. A Core Component Property shall be a Basic Core Component Property, Association Core Component Property, an Identifier Core Component or a Reference Core Component.

Rule [C2], [C3], [C4], [C6], [C7], [C8] and [C9] are specified in ISO 15000-5 4.2.

4.3 Data Types

Data Types are specified in ISO 15000-5 4.3.

4.4 Business Information Entities

A Business Information Entity is a piece of business data or a group of pieces of business data with a unique Business Semantic definition in a specific Business Context. A Business Information Entity can be a Basic Business Information Entity (BBIE), an Association Business Information Entity (ASBIE), an Aggregate Business Information Entity (ABIE), an Identifier Business Information Entity (IDBIE), or a Reference Business Information Entity (REBIE).

A Basic Business Information Entity is based on a Basic Core Component (BCC).

An Association Business Information Entity is based on an Association Core Component (ASCC).

An Aggregate Business Information Entity is a re-use of an Aggregate Core Component (ACC).

An Identifier Business Information Entity is a re-use of an Identifier Core Component (IDCC).

A Reference Business Information Entity is a re-use of a Reference Core Component (RFCC) in a specified Business Context.

[B1] A Business Information Entity shall be a Basic Business Information Entity, an Association

Business Information Entity, an Aggregate Business Information Entity, an Identifier Business Information Entity or Reference Business Information Entity.

[B6] An Aggregate Business Information Entity shall contain at least one Business Information Entity Property. A Business Information Entity Property shall either be a Basic Business Information Entity Property, an Association Business Information Entity Property, an Identifier Business Information Entity Property or Reference Business Information Entity Property.

Rule [B2], [B3], [B4], [B5], [B7], [B8], [B9] and [B10] are specified in ISO 15000-5 4.4.

4.5 Naming Convention

4.5.1 General

Specified by ISO 15000-5.

4.5.2 Core Component Naming Rules

4.5.2.1 General

The naming rules for Core Components are specified in ISO 15000-5 1.5.2.1.

4.5.2.2 Core Component Dictionary Information

The naming rules for Core Components are specified in ISO 15000-5 1.5.2.2.

4.5.2.3 Core Component General Rules

The naming rules for Core Components are specified in ISO 15000-5 1.5.2.3.

4.5.2.4 Core Component Rules for Definitions

The naming rules for Core Components are specified in ISO 15000-5 1.5.2.4.

4.5.2.5 Core Component Rules for Dictionary Entry Names

[C17+1] The Dictionary Entry Name of an Identifier Core Component shall consist of the following parts in the order specified:

— the Object Class Term of the Aggregate Core Component owning the corresponding Association Core Component Property;

— the Property Term is "Identify";

— the Object Class Term is "Identifier".

[C17+2] The Dictionary Entry Name of an Relation Core Component shall consist of the following parts in the order specified:

— the Object Class Term of the Aggregate Core Component owning the corresponding Association Core Component Property;

— the Property Term of the corresponding Association Core Component Property;

— the Object Class Term of the Aggregate Core Component on which the referenced Association Core Component Property is based.

Rule [C10], [C11], [C12], [C13], [C14], [C15], [C16] and [C17] are specified in ISO 15000-5 4.5.2.5.

4.5.2.7 Core Component Business Terms

Core Component Business Terms are specified in ISO 15000-5 4.5.2.7.

4.5.3 Rules for Business Information Entities

4.5.3.1 General

The naming rules for Business Information Entities are specified in ISO 15000-5 4.5.3.1.

4.5.3.2 Business Information Entity Dictionary Information

Business Information Entity Dictionary Information are specified in ISO 15000-5 4.5.3.2.

4.5.3.3 Business Information Entity Rules for Definitions

Business Information Entity Rules for Definitions are specified in ISO 15000-5 4.5.3.3.

4.5.3.4 Rules for Business Information Entity Dictionary Entry Names

[B13+1] The Dictionary Entry Name of an Association Business Information Entity shall consist of the following components in the specified order:

— the Object Class Term of the associating Business Information Entity, and possibly additional

Qualifier Term(s);

— the Property Term that reflects the nature of the association between object classes, and possibly additional Qualifier Term(s);

— the Object Class Term of the associated Business Information Entity, and possibly additional

Qualifier Terms(s).

[B13+1] The Dictionary Entry Name of an Association Business Information Entity shall consist of the following components in the specified order:

— the Object Class Term of the associating Business Information Entity, and possibly additional

Qualifier Term(s);

— the Property Term that reflects the nature of the association between object classes, and possibly additional Qualifier Term(s);

— the Object Class Term of the associated Business Information Entity, and possibly additional

Qualifier Terms(s).

Rule [B12], [B13], [B14], [B15], [B16], [B17] and [B18] are specified in ISO 15000-5 4.5.3.4.

4.5.3.5 Rules for Business Information Entity Cardinality

[B19] Each BBIE, ASBIE, IDBIE and RFBIE shall have a cardinality expressed.

[B20] BBIE, ASBIE, IDBIE and RFBIE cardinalities shall consist of a pair of values consisting of a minimum occurrence and a maximum occurrence.

[B21] BBIE, ASBIE, IDBIE and RFBIE minimum cardinality values shall be zero or greater, maximum cardinality values shall be one or greater than the minimum or the word “unbounded” if no limit applies.

[B22] BBIE, ASBIE, IDBIE and RFBIE minimum cardinality values shall be either equal to or greater than the minimum cardinality of the underlying base (BCC, BBIE, ASCC, ASBIE, IDCC, IDBIE, RFCC, or RFBIE).

[B23] BBIE and ASBIE maximum cardinality values shall be either equal to or less than the maximum cardinality of the underlying base (BCC, BBIE, ASCC, ASBIE, IDCC, IDBIE, RFCC, or RFBIE).