

Naming and Defining

What is a Naming Convention?

- A semantic Naming Convention is a set rules for naming and defining data elements and structures.
- The key reason for employing a Naming Convention is to achieve consistency.
- Consistency in naming and defining is important to remove potential ambiguity by ensuring that separate data structures will not be defined with the same semantic meaning but with different names.
- The name of a data structure should ideally be derived from its definition and the name should also follow any naming rules laid out in the Naming Convention.
- **Therefore the most essential aspect of a data element naming convention is the provision of a good definition.**

Defining

CCTS Definition of 'Definition'

The textual description of the unique semantic meaning of a Core Component, Business Information Entity, Business Context or Data Type.

ISO 11179 states that: a data element definition should:

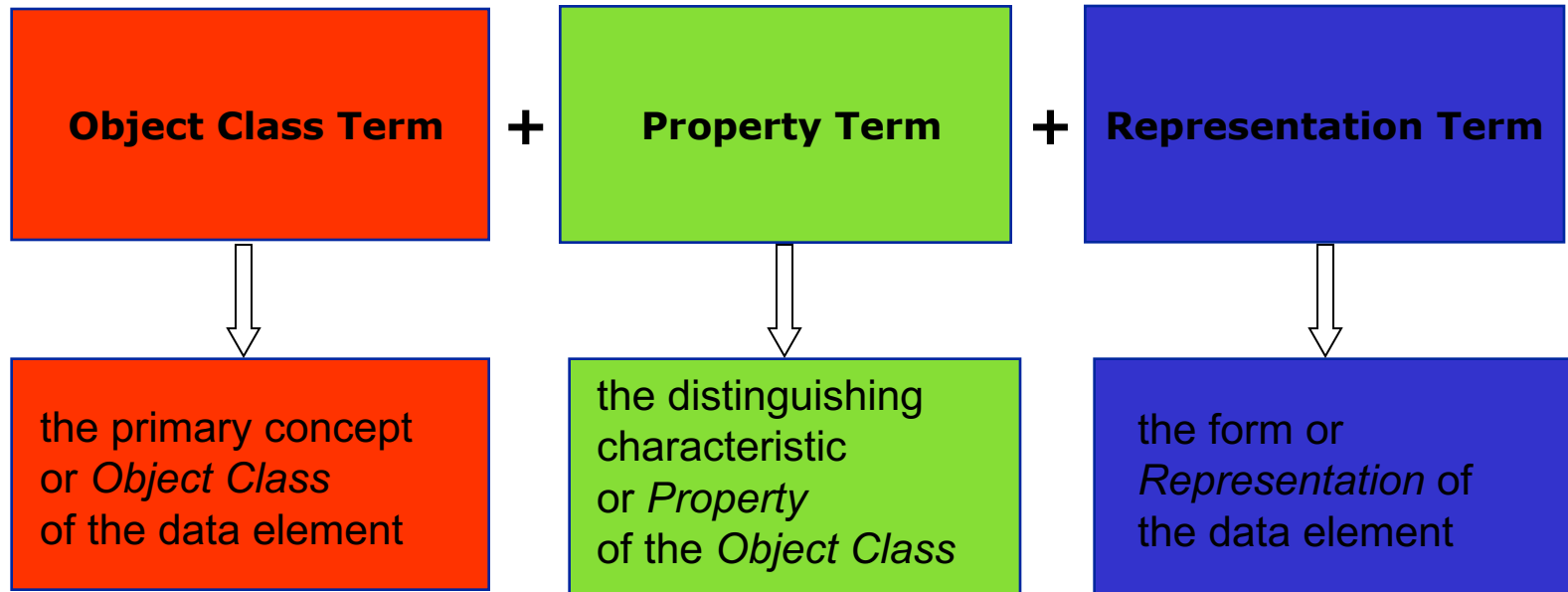
- state the essential meaning of the concept;
- be precise and unambiguous;
- be concise;
- be able to stand alone;
- be expressed without embedding rationale, functional usage, domain information, or procedural information;
- avoid circular reasoning;
- use the same terminology and consistent logical structure for related definitions.

CCTS adds that in a definition:

- nouns should be expressed in the singular unless the concept is plural;
- articles should be expressed in the indefinite form except where the definite form is necessary to specify the required meaning;
- all significant words, their spelling and their definitions should be taken from a) the Oxford English Dictionary (OED) or from b) the TBG17/TC154 Controlled Vocabulary (CV) or c) if not found in either source then they should be submitted to TBG17 as candidates for addition to the Controlled Vocabulary.

ISO 11179

Tripartite Data Element Naming



Example: Country Name Text

CCTS Naming Convention

- The Dictionary Entry Name of any Core Component is unique
- Dictionary Entry Names consist of Object Class Terms, Property Terms, Representation Terms, Qualifiers and Special Terms (like "Details" or "Type")
- Dictionary Entry Names are ISO11179 compliant
- Terms are separated by a period (.) and a single space
- Qualifiers are separated by an underscore (_) and a space
- Multiple words are separated by spaces (no CamelCase!)

CCTS Dictionary Entry Names

**Object Class
(OC)**

**Property Term
(PT)**

**Representation Term
(RT)**

e.g. **Document**
Address
Event
Product
Process
Person
Country
Transport Means
Payment Terms

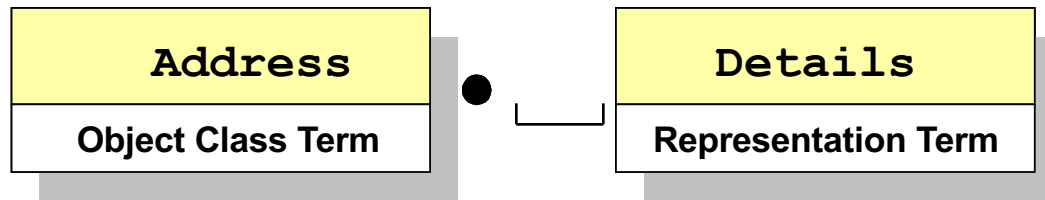
e.g. **Cost**
Delivery
Type
Estimated Arrival
Price
Status
Identification
Time
Volume

e.g. **Amount**
Code
Date Time
Identifier
Indicator
Measure
Numeric
Percent
Quantity
Text

Examples: **Product.** **Price.** **Amount**
Document. **Status.** **Code**
Address. **Identification.** **Identifier**
Transport Means. **Estimated Arrival.** **Date Time**

Naming rules – Aggregate Core Components

- Aggregate Core Components (**ACCs**) represent **Object Classes**
- Dictionary Entry Name (**DEN**) of an **ACC** = **OC** + “Details”



DEN: Address. Details

Naming rules – Basic Core Components

- Basic Core Components (**BCCs**) represent simple properties of **ACCs** or attributes of **Object Classes**
- Dictionary Entry Name (**DEN**) of a **BCC** = **OC** + **PT** + **RT**



DEN: Goods. Delivery. Date Time

Naming rules – Association Core Components

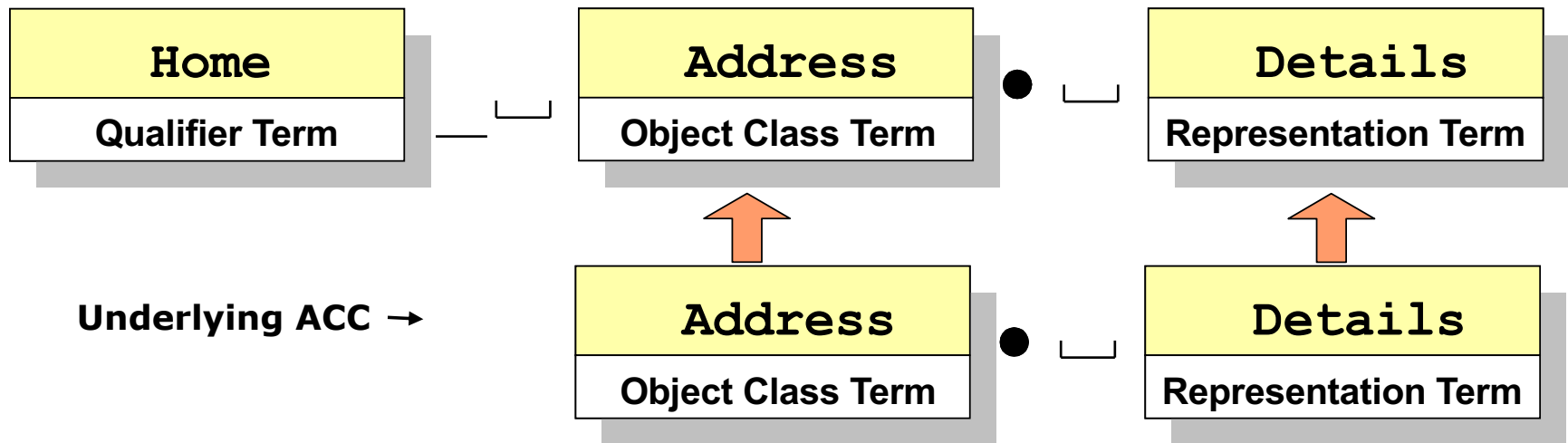
- Association Core Components (**ASCCs**) represent complex properties of **ACCs** or relationships between **Object Classes**
- Dictionary Entry Name (**DEN**) of a **ASCC** = **OC** + **PT** + **OC**



DEN: Person. Residence. Address

Naming rules – Aggregate Business Information Entities

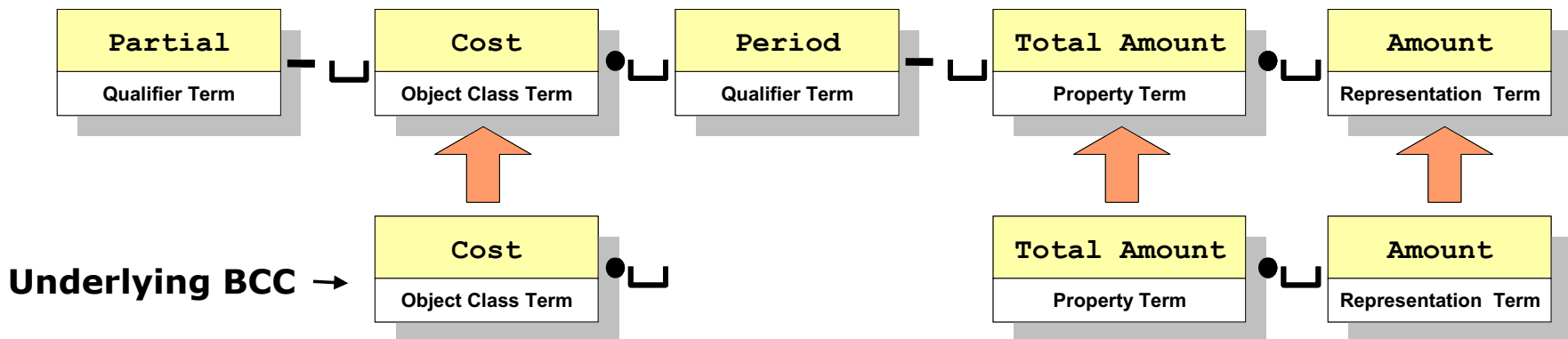
- Aggregate Business Information Entities (**ABIEs**) are reuses of **ACCs**
- Dictionary Entry Name (**DEN**) of an **ABIE** = Qualifier Term(s) + **ACC OC** + “Details”)



DEN: Home_Address.Details

Naming rules – Basic Business Information Entities

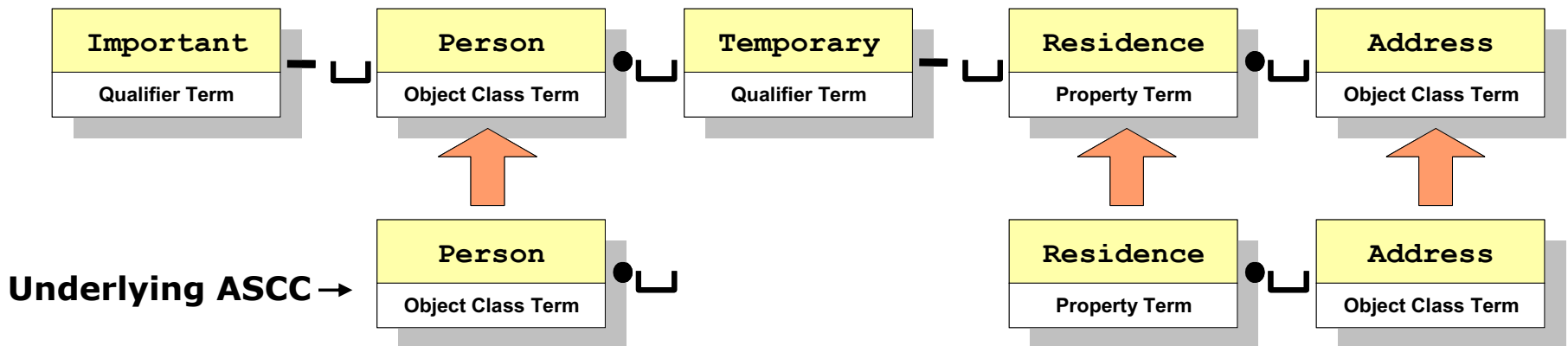
- Basic Business Information Entities (**BBIEs**) are reuses of **BCCs**
- Dictionary Entry Name (**DEN**) of a **BBIE** = Qualifier Term(s) + **BCC** **OC** + Qualifier Term(s) + **BCC PT** + Qualifier Term(s) + **BCC RT**



DEN: Partial_Cost.Period_Total Amount.Amount

Naming rules – Association Business Information Entities

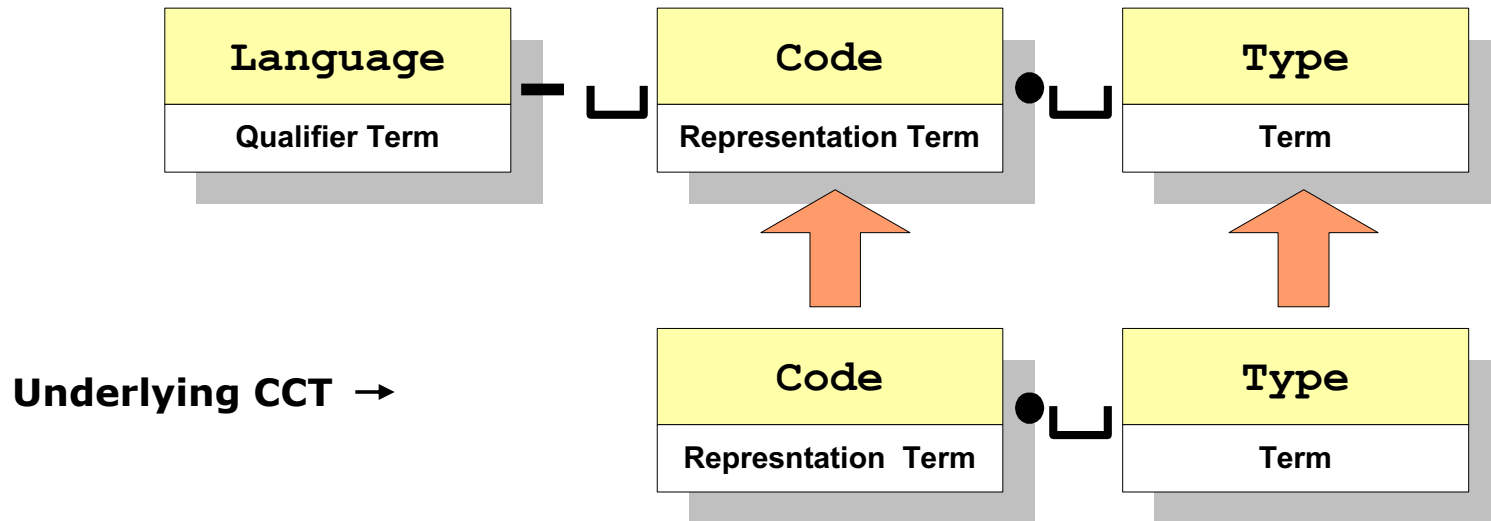
- Association Business Information Entities (**ASBIE**'s) are reuses of **ASCCs**
- Dictionary Entry Name (**DEN**) of an **ASBIE** = Qualifier Term(s) + **ACC OC** + Qualifier Term(s) + **ACC PT** + Qualifier Term(s) + **ACC OC**



DEN: Important_Person.Temporary_Residence.Address

Naming rules – Data Types

- CCTS Data Types (**DTs**) are reuses of **C**ore **C**omponent **T**ypes
- Dictionary Entry Name (**DEN**) of a **DT** = Qualifier Term(s) + Name of Core Component Type (**CCT**) + “Type”



DEN: Language_Code.Type