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## A Scheme for UIDs and PLCS

### Abstract

*The document illustrates the use of PLCS can be used to carry the information required for and associated with the Unique Identifiers as proposed and used by the US Department of Defense.*

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## 1 An introduction to UIIs

The traditional approach to identifying assets has been through the use of identifiers assigned by each organization responsible for an asset during its lifetime. This process typically begins with a serial number from the manufacturer (and potentially additional serial numbers on subcomponents). Once passed to a customer, that organization often assigns its own number. If an item is put into the field, another number may be assigned. This approach clearly results in redundancy over the product life cycle and there is the possibility of confusion unless both the identifier and the assigning organization are known. Even then a requirement for mappings between the different identifiers arises.

In order to resolve this problem, a convention has been defined for Unique Item Identifiers (UIIs) such that a single identifier is assigned to an item that can be used throughout its life cycle<sup>8</sup>. Furthermore, the means to mark parts with their UII has also been defined<sup>5</sup> (See especially <http://www.acq.osd.mil/dpap/UID/howtomark.htm>).

Unique Item Identifiers provide precision and speed (through the use of automatic information data capture technologies) and facilitate unique item tracking in DoD business systems. They furnish reliable and accurate data for management, financial accountability and asset management purposes.

All items valued at or above \$5,000 supplied to the DoD must be marked with a UII. An end item may, in turn, be composed of embedded items, such as subassemblies, components and parts. The prime contractor will pass down appropriate specifications, including the UII marking requirements, to the vendors of subassemblies, components and parts. Whether spares are purchased directly from the vendors or through the prime, UII-qualifying spare items (subassemblies, components and parts) have to be marked appropriately with the UII data elements. In other words, when a prime contractor delivers an end item, it has a single UII. Any spares are delivered with their own UIIs. The Government has the option of asking the prime to deliver a list of all UIIs for UII-qualifying embedded items in the end item.

The UII identifies an item with a set of data elements that are unambiguous and globally unique in the defence industry context where they are employed. The UII (together with an error correction code) can also be encoded into a Data Matrix symbol (a kind of 2D barcode) using a software package developed for this purpose:



**Figure 1 Example Data Matrix**

The UII and / or the Data Matrix with the encoded UII are placed on items of equipment as labels or are etched directly on the items. If a Data Matrix is used, an imager can be used to retrieve the UII data elements from the item, and these data elements can then be assembled into a concatenated UII and transmitted to a database. Data and metadata relating to the item can then be associated with the concatenated UII.

There are different methods of constructing a UII. A Construct #1 UII comprises an enterprise identifier and serial number that is unique within the enterprise. A Construct #2 UII comprises an enterprise identifier; original part, lot or batch number; and serial number that is unique within the original part, lot or batch number. Other possible UIIs recognized by the DoD are: Global Individual Asset Identifier (GIAI), Global Returnable Asset Identifier (GRAI) with serialized assets, Vehicle Identification Number (VIN), and Electronic Serial Number (ESN) - for cell phones.

Within a UII, a data qualifier must identify each encoded data element that defines the UII.

## 2 Using PLCS to exchange information on parts with UIIs

The international Product Life Cycle Support (PLCS) project, sponsored by leading international organisations and Government departments, has delivered AP239 - a significant new extension to the ISO STEP standard (ISO 10303)<sup>7</sup>. AP239 is the internationally agreed information exchange standard for product support and is re-shaping IT integration across the product support domain.

PLCS employs an EXPRESS information model standardized under ISO 10303<sup>9</sup> together with reference data that is being standardized under OASIS<sup>7</sup> (see especially [PLCS OASIS Technical Subcommittee](#)).

As has been noted, the UII concept combines the notion of generating a unique sequence of characters for identification with the maintenance of a registry of metadata relating to a part identified by an UII. This registry (unlike the UII itself) will be updated over the lifetime of the product.

PLCS is a rich and flexible model under which an arbitrary number of identifiers and aliases can be assigned to a part. Such identifiers are qualified, at a minimum, by organisation, context and effectivity. An arbitrary number of properties can also be assigned to a part. These are qualified, at a minimum, by view, context and effectivity.

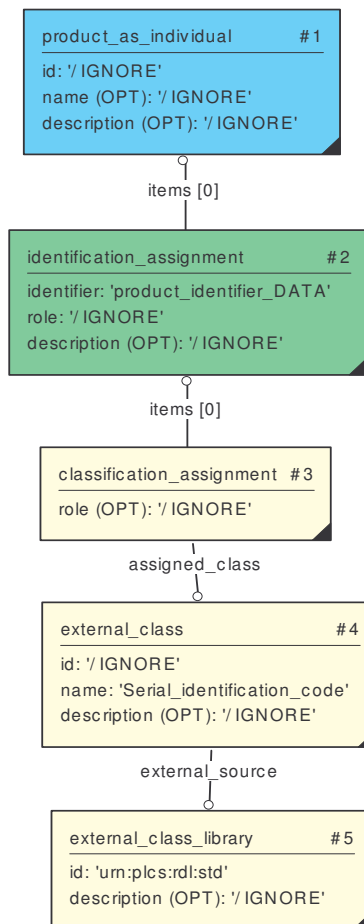
Since effectivity can be assigned to most objects in PLCS, traceability over time is assured. The properties of parts may change but the model allows backtracking through the history of a part.

There is extensive use of reference data to populate data files based on the model with agreed semantics. Reference Data Libraries (RDL) cover taxonomies, terminology, classification, nomenclature, and other areas<sup>7</sup>(see especially RDL Server).

This document assumes some knowledge of the following technologies and modelling paradigms: EXPRESS and EXPRESS-G<sup>9</sup>, EXPRESS-I<sup>14</sup>, Part 21<sup>10</sup>, Part 28<sup>11</sup>, XMLschema<sup>12</sup>, and “OWL”[sic] (Web Ontology Language)<sup>13</sup>. The use of these technologies in the context of PLCS is fully documented on the PLCS website<sup>7</sup>.

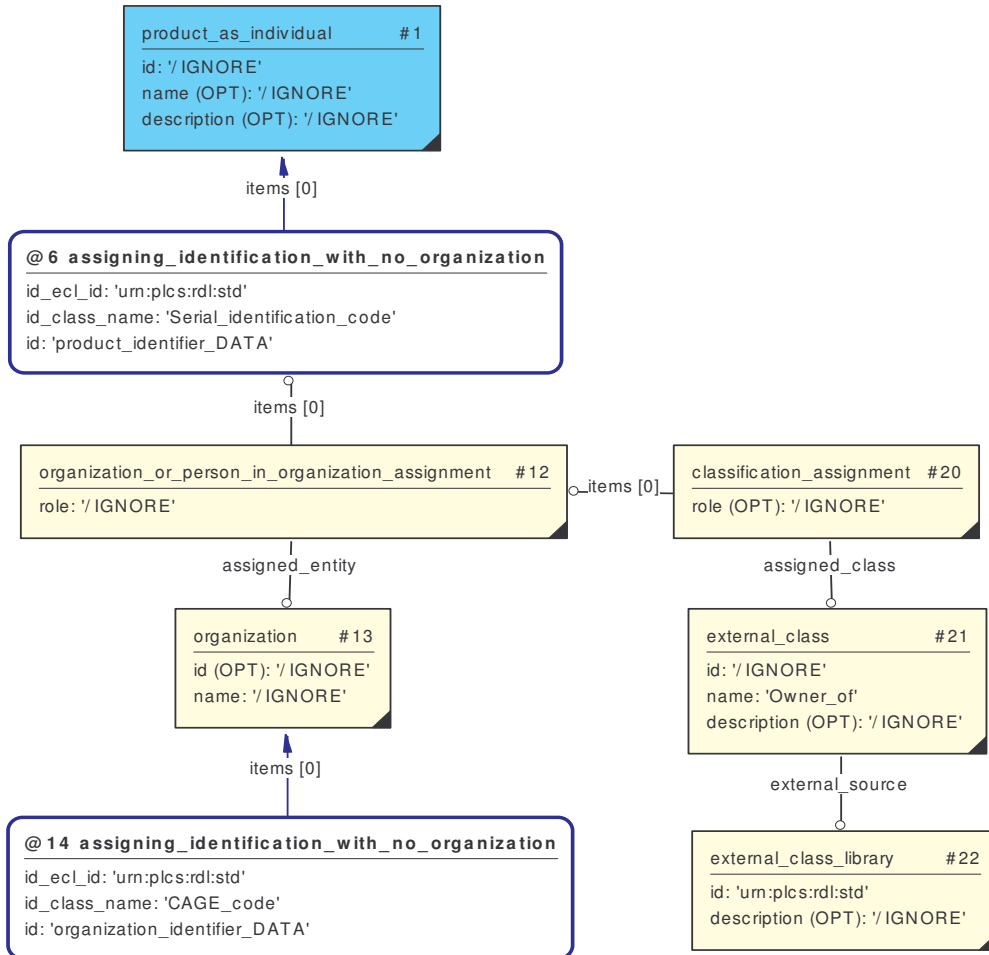
## 2.1 Assigning identifiers to individual product data in PLCS

The following figure illustrates the association of an identifier with a individual part using the PLCS data model. A graphical notation (based on ISO 10303-12<sup>14</sup>) for EXPRESS *instances* (“Graphical Instance”) is used. Each “box” corresponds to an EXPRESS entity instance. The entity instance corresponding to the item that is identified with a UII is highlighted in blue. The entity instance corresponding to identifier itself is highlighted in green. *This diagram is incomplete, because the organization responsible for the identification is not shown (see Figure 3 below).*



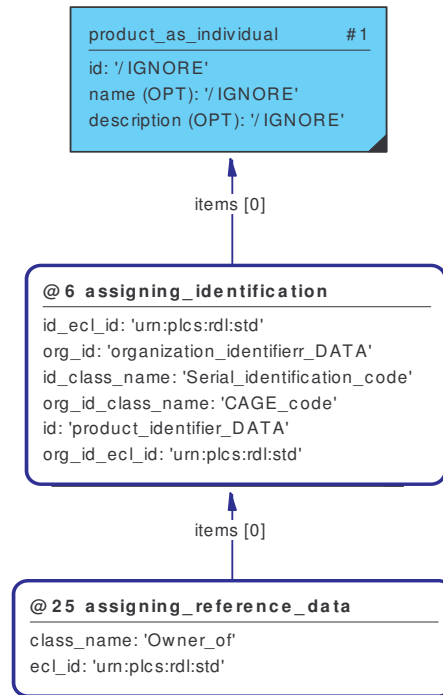
**Figure 2 Part with assigned identifier (incomplete)**

The following figure illustrates the association of an organization with the identification of an individual part using the PLCS data model. In this diagram, some groups of entity instances represented as separate boxes in Figure 2 above are represented as single *template* boxes. The entity instance corresponding to the item that is identified with a UII is highlighted in blue. The organization responsible for the identification of an individual part is itself identified (though that identification does not require an assigned organization) and is classified using reference data.



**Figure 3 Part with assigned identifier and (identified and classified) organization assigned to the identification assignment**

The following figure illustrates the same situation as Figure 3 above except that all of the entity instances (other than the product\_as\_individual entity instance) are represented using *template* boxes.



**Figure 4 Part with assigned identifier and (identified and classified) organization assigned to the identification assignment (fully condensed diagram)**

To summarize: In PLCS, an identifier is assigned to a product, and that assignment is classified (using reference data) as the assignment of (say) a *Serial\_identification\_code*. The library containing the reference data is also identified with a URN<sup>3</sup> – in this case “urn:plcs:rdl:std” which identifies the PLCS standard reference data. The identifier assigned to the to the product has an organization assigned and that organization is classified (using reference data) as the “Owner\_of” the identifier. The identifier of the organization (which in this case is a CAGE code) is assigned, and that identification is classified (again using reference data) as (in this case) a “CAGE\_code”.





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## 2.2 Assigning a Ull that is concatenated from three components

The following figure illustrates the association of three identifiers with an individual part *token* and the relevant part *type* and; the use of those three identifiers to generate a Ull that is also assigned to the individual part token. Again the notation is EXPRESS Graphical Instance and the representation is that prescribed by the PLCS standard.

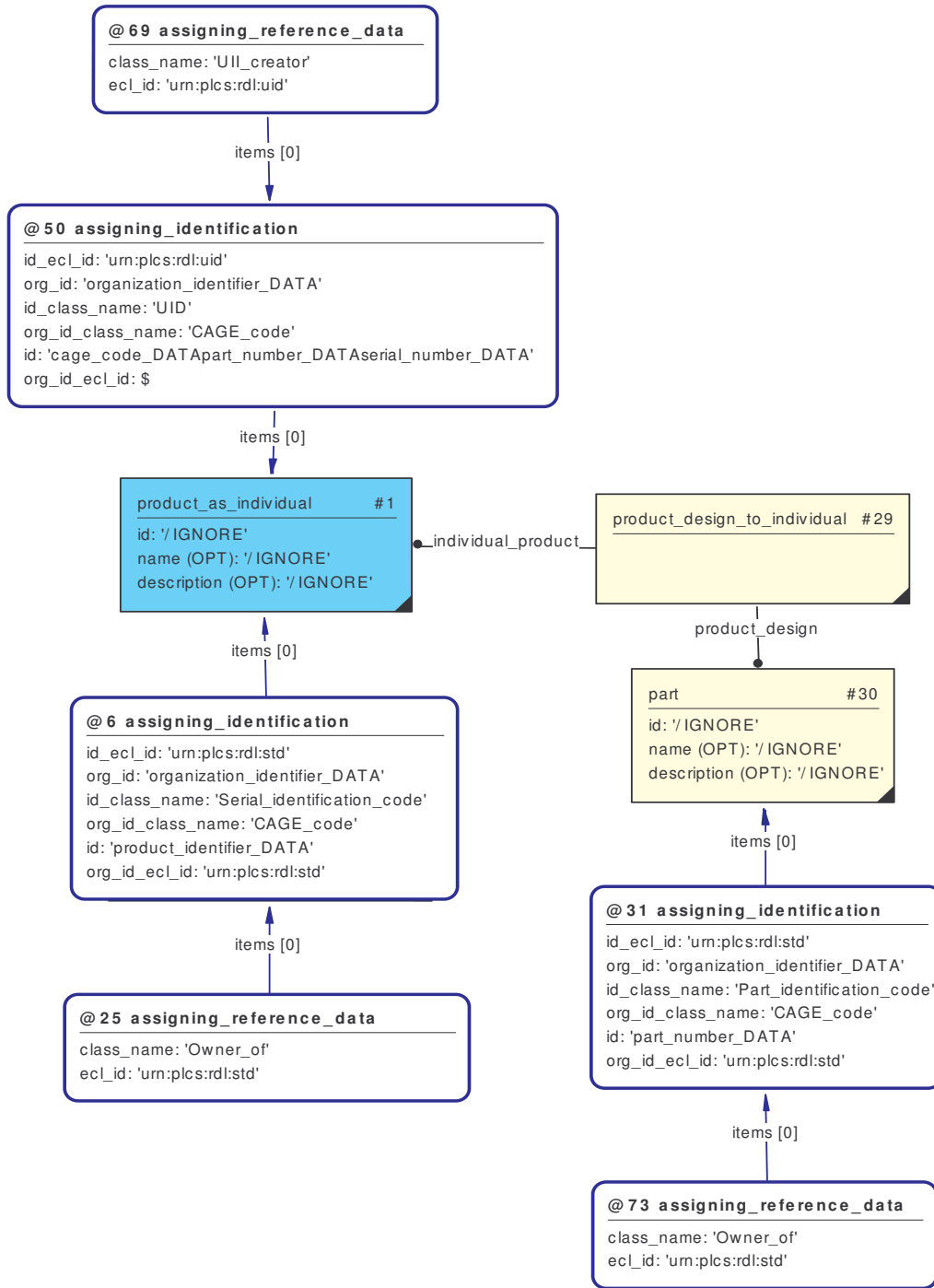


Figure 5 Organization, part, and serial identifiers; and Ull assignment

Here, the individual product is identified twice: once with an identification assignment that is classified as a serial number; and once with an identification assignment that is classified as an UID. The organizations that assign the UII, the serial number and the part number are identified with identification assignments that are classified as CAGE\_codes. The assignments of the complete UII (which, in this case of course, is, in fact, a concatenation of the CAGE code, part number, and the serial number) and of the serial and part numbers alone are individually (and respectively) classified in terms of the roles played by the relevant organizations in assigning the UII and the part and serial numbers. All the external classes relate either to an external\_class\_library which has the id attribute set to the URN: "urn:plcs:rdl:std" (where existing PLCS reference data is used) or to an external\_class\_library which has the id attribute set to the URN: "urn:plcs:rdl:uid" (where the PLCS reference data has been extended to reflect the needs of the UID community).

The recording of other identifiers that may contribute to a UII and of other relevant metadata related to UII identified parts is illustrated below in section 4 Fully worked examples.

### 3 UII Submission formats (Flat file and XML) to PLCS p21/p28

There are currently two alternative formats for UII registry data: a flat file format and an XML format.

The flat file format is presented as a series of tables: File Header Record; Item Record; Custody Record; Mark Record; Part Number Change Record; Parent Record; and File Trailer Record. The rows of these tables correspond to the individual data items: such as the UII itself, or the CAGE code of the organization that assigned the UII.

Header Record				
Field Name	Format	Min/Max	Req	Description
Phone	AN	1/25	M	Phone number of the contact person or office.

The actual flat data file that is (stored or exchanged) in accordance with this specification, uses an ASCII syntax and presents each record on a single line – using separator characters between the data items:

```
A^100^D99207PN1SN1^END^PPC^N^UID2^D^99207^PN1^SN1^ENGINE, ASSEMBLY^^^^^^50000^USD^^^^D^99207
```

The resulting format is terse, but not easily interpreted by human readers.

The UII XML file format is, as might be expected, far more verbose. It is specified by a DTD, and, more rigorously, by an XML schema.

```
<xs:element name="Phone">
  <xs:annotation>
    <xs:documentation>Phone number as a component of contact information.</xs:documentation>
  </xs:annotation>
  <xs:simpleType>
    <xs:restriction base="xs:string">
      <xs:maxLength value="25"/>
      <xs:whiteSpace value="preserve"/>
    </xs:restriction>
  </xs:simpleType>
</xs:element>
```

The resulting data is far easier for human readers to interpret:

```
<Phone>+44 1745582008</Phone>
```

And has the added advantage that it may be readily converted to other XML formats using XSL.

ISO 10303 specifies two exchange/storage formats: 10303-21 and 10303-28.

Part 21 specifies an ASCII data stream which employs parentheses and commas as data separators and # numbers as identifiers:

```
#5 = PERSON('Smith',,$,$,$);
```

Part 28 is an XML format constrained by an XML schema:

```
<ap239:Person id="id-005">  
  <Last_name>Smith</Last_name>  
</ap239:Person>
```

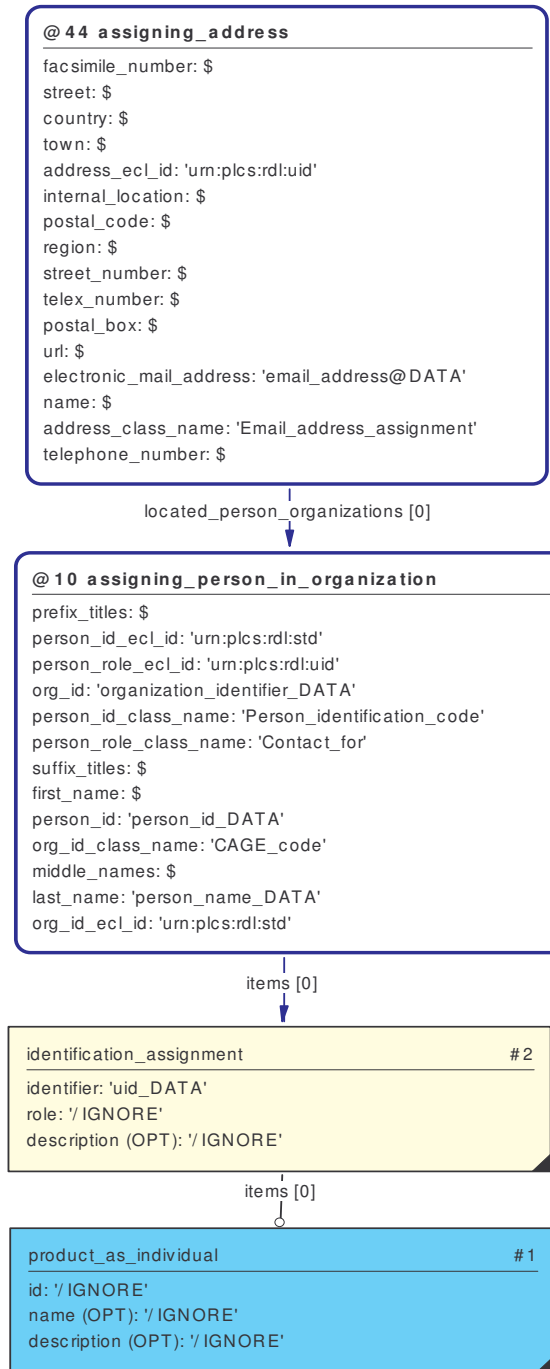
As with the UII XML format, the advantages of this approach are human readability and (relatively straightforward) conversion between rival XML formats using XSL.

## 4 Fully worked examples

These examples continue the use of PLCS “templates” (illustrated above). Templates conflate the display of information items contained in constellations of separate entities. This provides for more succinct diagrams and imposes the correct use of the underlying entities on the user.

## 4.1 Contact email (Header Record.Email)

### 4.1.1 Instance diagram



**Figure 6 Email address of contact person for ULL information**

The email address of the contact person is held in @44.assigning\_address.electronic\_mail\_address. The assumption in PLCS is that a person in the PLCS context always belongs to at least one organization of some kind. An assumption here is



```
<External_source>
  <ap239:External_class_library ref="i15" xsi:nil="true"/>
</External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i13">
  <Assigned_class>
    <ap239:External_class ref="i14" xsi:nil="true"/>
  </Assigned_class>

  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i11" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization_or_person_in_organization_assignment id="i11">
  <Assigned_entity>
    <ap239:Person_in_organization ref="i16" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i2" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Product_as_individual id="i1">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
</ap239:Product_as_individual>
<ap239:Identification_assignment id="i2">
  <Identifier>uid_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i29">
  <Assigned_class>
    <ap239:External_class ref="i42" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i27" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i27">
  <Identifier/>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i25" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Organization id="i25">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:External_class id="i22">
  <Id>/IGNORE</Id>
  <Name>Person_identification_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i42" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
```

```
</External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i21">
  <Assigned_class>
    <ap239:External_class ref="i22" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i19" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
```

```
<ap239:Identification_assignment id="i19">
  <Identifier>person_id_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Person ref="i17" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Person id="i17">
  <Last_name>person_name_DATA</Last_name>
</ap239:Person>
<ap239:Person_in_organization id="i16">
  <Concerned_person>
    <ap239:Person ref="i17" xsi:nil="true"/>
  </Concerned_person>
  <Containing_organization>
    <ap239:Organization ref="i37" xsi:nil="true"/>
  </Containing_organization>
  <Role>/IGNORE</Role>
</ap239:Person_in_organization>
<ap239:Classification_assignment id="i47">
  <Assigned_class>
    <ap239:External_class ref="i48" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Address_assignment ref="i45" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Address_assignment id="i45">
  <Address_type>/IGNORE</Address_type>
  <Assigned_address>
    <ap239:Address ref="i50" xsi:nil="true"/>
  </Assigned_address>
  <Located_person_organizations>
    <ap239:Person_in_organization ref="i16" xsi:nil="true"/>
  </Located_person_organizations>
</ap239:Address_assignment>
<ap239:External_class_library id="i43">
  <id>urn:plcs:rdl:std</id>
</ap239:External_class_library>
<ap239:External_class id="i42">
  <id>/IGNORE</id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i43" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i41">
```

```
<Assigned_class>
  <ap239:External_class ref="i42" xsi:nil="true"/>
</Assigned_class>
<Items>
  <ap239:Identification_assignment ref="i39" xsi:nil="true"/>
</Items>
<Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i39">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i37" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>

<ap239:Organization id="i37">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:External_class_library id="i36">
  <Id>urn:plcs:rdl:std</Id>
</ap239:External_class_library>
<ap239:External_class id="i35">
  <Id>/IGNORE</Id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i36" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i34">
  <Assigned_class>
    <ap239:External_class ref="i35" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i32" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization_or_person_in_organization_assignment id="i32">
  <Assigned_entity>
    <ap239:Organization ref="i25" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i19" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Address id="i50">
  <Electronic_mail_address>email_address@DATA</Electronic_mail_address>
</ap239:Address>
<ap239:External_class id="i48">
  <Id>/IGNORE</Id>
  <Name>Contact_address_assignment</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i15" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
```



## 4.2 Contact name (Header Record.Name)

### 4.2.1 Instance diagram

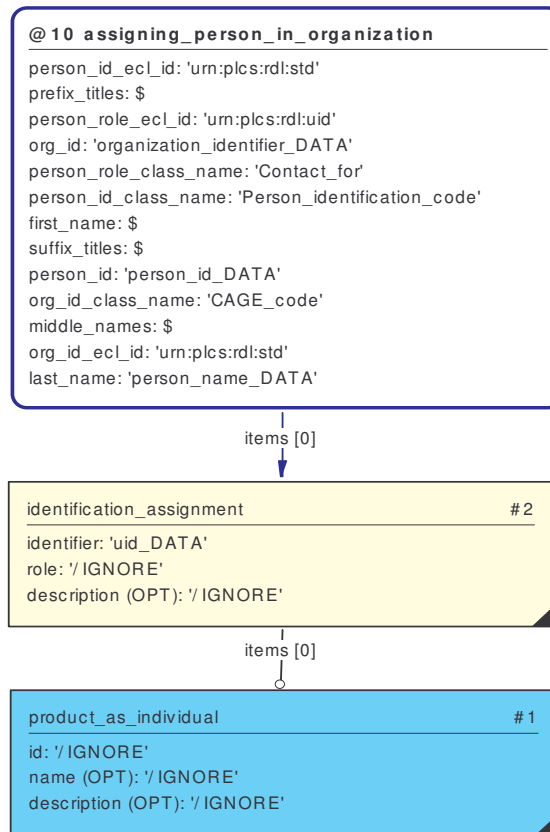


Figure 7 Name of contact person for UII information

The name of the contact person is held in @10.assigning\_person\_in\_organization.last\_name. The assumption in PLCS is that a person in the PLCS context always belongs to at least one organization of some kind. An assumption here is that the contact person has a relationship with the organization responsible for assigning the UII (or having some other kind of relationship with the assignment of the UII).

## 4.2.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('contact.stp','2006-01-11T13:22:30', ('Eurostep Limited'),$, $,
'GraphicalInstance 1.0 Beta 5 [1.0.5.7]', '');
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE', '/IGNORE', '/IGNORE');
#2 = IDENTIFICATION_ASSIGNMENT('uii_DATA', '/IGNORE', '/IGNORE', (#1));
#4 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#9, '/IGNORE', (#2));
#6 = CLASSIFICATION_ASSIGNMENT(#7, (#4), '/IGNORE');
#7 = EXTERNAL_CLASS('/IGNORE', 'Contact_for', '/IGNORE', #8);
#8 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid', $);
#9 = PERSON_IN_ORGANIZATION(#10, #30, '/IGNORE');
#10 = PERSON('person_last_name_DATA', $, $, $, $);
#12 = IDENTIFICATION_ASSIGNMENT('Person_id_DATA', '/IGNORE', $, (#10));
#14 = CLASSIFICATION_ASSIGNMENT(#15, (#12), '/IGNORE');
#15 = EXTERNAL_CLASS('/IGNORE', 'Person_identification_code', '/IGNORE', #16);
#16 = EXTERNAL_CLASS_LIBRARY('urnh:plcs:rdl:std', $);
#18 = ORGANIZATION('/IGNORE', '/IGNORE');
#20 = IDENTIFICATION_ASSIGNMENT($, '/IGNORE', '/IGNORE', (#18));
#22 = CLASSIFICATION_ASSIGNMENT(#35, (#20), '/IGNORE');
#25 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#18, '/IGNORE', (#12));
#27 = CLASSIFICATION_ASSIGNMENT(#28, (#25), '/IGNORE');
#28 = EXTERNAL_CLASS('/IGNORE', 'Owner_of', '/IGNORE', #16);
#30 = ORGANIZATION('/IGNORE', '/IGNORE');
#32 =
IDENTIFICATION_ASSIGNMENT('organization_identifier_DATA', '/IGNORE', '/IGNORE', (#30
));
#34 = CLASSIFICATION_ASSIGNMENT(#35, (#32), '/IGNORE');
#35 = EXTERNAL_CLASS('/IGNORE', 'CAGE_code', '/IGNORE', #16);
ENDSEC;
END-ISO-10303-21;

```

## 4.2.3 Part 28 data file

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303-28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:Product_as_individual id="i1">
    <Id>/IGNORE</Id>
    <Name>/IGNORE</Name>
    <Description>/IGNORE</Description>
  </ap239:Product_as_individual>
  <ap239:Identification_assignment id="i2">
    <Identifier>uii_DATA</Identifier>
    <Role>/IGNORE</Role>
    <Description>/IGNORE</Description>
    <Items>
      <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
    </Items>
  </ap239:Identification_assignment>
  <ap239:Organization_or_person_in_organization_assignment id="i4">
    <Assigned_entity>
      <ap239:Person_in_organization ref="i9" xsi:nil="true"/>
    </Assigned_entity>
    <Role>/IGNORE</Role>
    <Items>
      <ap239:Identification_assignment ref="i2" xsi:nil="true"/>
    </Items>
  </ap239:Organization_or_person_in_organization_assignment>
</ap239:uos>

```

```
</Items>
</ap239:Organization_or_person_in_organization_assignment>

<ap239:Classification_assignment id="i6">
  <Assigned_class>
    <ap239:External_class ref="i7" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i4" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i7">
  <Id>/IGNORE</Id>
  <Name>Contact_for</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i8" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:External_class_library id="i8">
  <Id>urn:plcs:rdl:uid</Id>
</ap239:External_class_library>
<ap239:Person_in_organization id="i9">
  <Concerned_person>
    <ap239:Person ref="i10" xsi:nil="true"/>
  </Concerned_person>
  <Containing_organization>
    <ap239:Organization ref="i30" xsi:nil="true"/>
  </Containing_organization>
  <Role>/IGNORE</Role>
</ap239:Person_in_organization>
<ap239:Person id="i10">
  <Last_name>person_last_name_DATA</Last_name>
</ap239:Person>
<ap239:Identification_assignment id="i12">
  <Identifier>Person_id_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Person ref="i10" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i14">
  <Assigned_class>
    <ap239:External_class ref="i15" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i12" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i15">
  <Id>/IGNORE</Id>
  <Name>Person_identification_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i16" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:External_class_library id="i16">
  <Id>urn:plcs:rdl:std</Id>
</ap239:External_class_library>
```

```
<ap239:Organization id="i18">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>

<ap239:Identification_assignment id="i20">
  <Identifier/>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i18" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i22">
  <Assigned_class>
    <ap239:External_class ref="i35" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i20" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization_or_person_in_organization_assignment id="i25">
  <Assigned_entity>
    <ap239:Organization ref="i18" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i12" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Classification_assignment id="i27">
  <Assigned_class>
    <ap239:External_class ref="i28" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i25" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i28">
  <Id>/IGNORE</Id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i16" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Organization id="i30">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:Identification_assignment id="i32">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i30" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
```

```

</ap239:Identification_assignment>
<ap239:Classification_assignment id="i34">
  <Assigned_class>
    <ap239:External_class ref="i35" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i32" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>

```

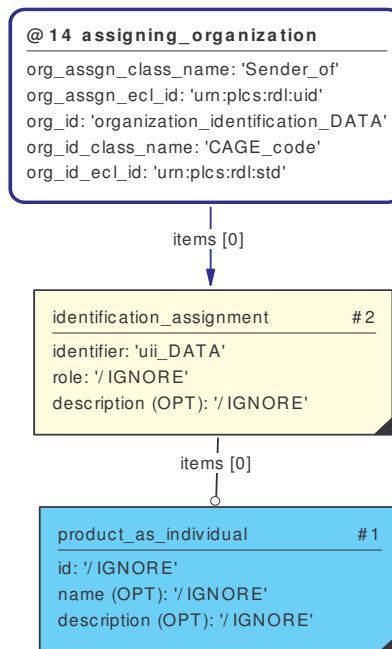
```

<ap239:External_class id="i35">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i16" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
</ap239:uos>

```

### 4.3 UII sender organization identifier (Header Record.Organization)

#### 4.3.1 Instance diagram



**Figure 8 Organization sending UII information**

The identifier for the sending organization is held in @14.assigning\_organization.org\_id. The assignment of the organization to the UII is classified using reference data as “Sender\_of”.

### 4.3.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('org_code.stp','2006-02-10T14:24:29', ('Eurostep Limited'),$, $,
'GraphicalInstance 1.0 Beta 5 [1.0.5.7]','');
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;

DATA;
#2 = IDENTIFICATION_ASSIGNMENT('uii_DATA','/IGNORE','/IGNORE',(#1));
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE','/IGNORE','/IGNORE');
#15 = ORGANIZATION('/IGNORE','/IGNORE');
#17 =
IDENTIFICATION_ASSIGNMENT('organization_identification_DATA','/IGNORE','/IGNORE',
(#15));
#19 = CLASSIFICATION_ASSIGNMENT(#20, (#17), '/IGNORE');
#20 = EXTERNAL_CLASS('/IGNORE', 'CAGE_code', '/IGNORE', #21);
#21 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std', $);
#22 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#15, '/IGNORE', (#2));
#24 = CLASSIFICATION_ASSIGNMENT(#25, (#22), '/IGNORE');
#25 = EXTERNAL_CLASS('/IGNORE', 'Sender_of', '/IGNORE', #26);
#26 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid', $);
ENDSEC;
END-ISO-10303-21;

```

### 4.3.3 Part 28 data file

```

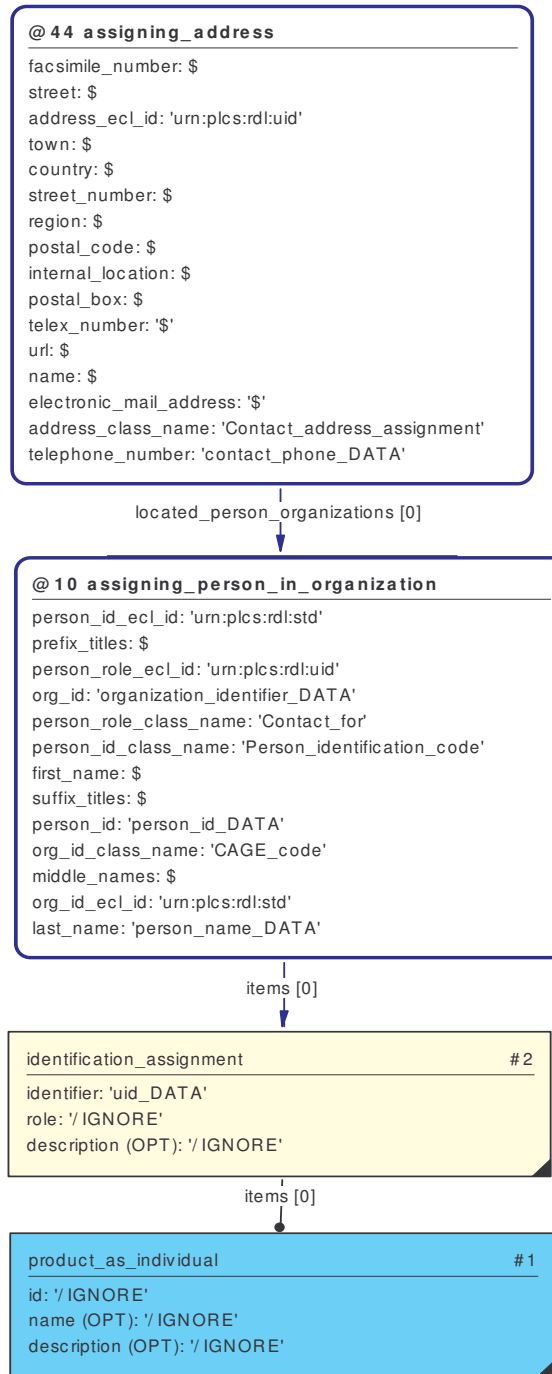
<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303-28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:Identification_assignment id="i2">
    <Identifier>uii_DATA</Identifier>
    <Role>/IGNORE</Role>
    <Description>/IGNORE</Description>
    <Items>
      <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
    </Items>
  </ap239:Identification_assignment>
  <ap239:Product_as_individual id="i1">
    <Id>/IGNORE</Id>
    <Name>/IGNORE</Name>
    <Description>/IGNORE</Description>
  </ap239:Product_as_individual>
  <ap239:Organization id="i15">
    <Id>/IGNORE</Id>
    <Name>/IGNORE</Name>
  </ap239:Organization>
  <ap239:Identification_assignment id="i17">
    <Identifier>organization_identification_DATA</Identifier>
    <Role>/IGNORE</Role>
    <Description>/IGNORE</Description>
    <Items>
      <ap239:Organization ref="i15" xsi:nil="true"/>
    </Items>
  </ap239:Identification_assignment>
  <ap239:Classification_assignment id="i19">
    <Assigned_class>
      <ap239:External_class ref="i20" xsi:nil="true"/>
    </Assigned_class>
  </Items>

```

```
<ap239:Identification_assignment ref="i17" xsi:nil="true"/>
</Items>
<Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i20">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i21" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:External_class_library id="i21">
  <Id>urn:plcs:rdl:std</Id>
</ap239:External_class_library>
<ap239:Organization_or_person_in_organization_assignment id="i22">
  <Assigned_entity>
    <ap239:Organization ref="i15" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i2" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Classification_assignment id="i24">
  <Assigned_class>
    <ap239:External_class ref="i25" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i22" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i25">
  <Id>/IGNORE</Id>
  <Name>Sender_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i26" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:External_class_library id="i26">
  <Id>urn:plcs:rdl:uid</Id>
</ap239:External_class_library>
</ap239:uos>
```

## 4.4 Contact telephone number (Header Record.Phone)

### 4.4.1 Instance diagram



**Figure 9 Telephone number of contact person for UII information**

The telephone number for the contact person is held in `@44.assigning_address.telephone_number`. The assignment of the organization to the UII is classified using reference data as “Sender\_of”. The assumption in PLCS is that a person in the



PLCS context always belongs to at least one organization of some kind. An assumption here is that the contact person has a relationship with the organization responsible for assigning the UII (or having some other kind of relationship with the assignment of the UII).

#### 4.4.2 Part 21 data file

```
ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('phone.stp','2006-02-11T14:44:58', ('Eurostep Limited'),$, $,
'GraphicalInstance 1.0 Beta 5 [1.0.5.7]', '');
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;DATA;
#15 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid',$);
#14 = EXTERNAL_CLASS('/IGNORE','Contact_for','/IGNORE',#15);
#13 = CLASSIFICATION_ASSIGNMENT(#14,(#11),'/IGNORE');
#11 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT($,'/IGNORE',(#2));
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE','/IGNORE','/IGNORE');
#2 = IDENTIFICATION_ASSIGNMENT('uid_DATA','/IGNORE','/IGNORE',(#1));
#29 = CLASSIFICATION_ASSIGNMENT(#42,(#27),'/IGNORE');
#27 = IDENTIFICATION_ASSIGNMENT($,'/IGNORE','/IGNORE',(#25));
#25 = ORGANIZATION('/IGNORE','/IGNORE');
#23 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std',$);
#22 = EXTERNAL_CLASS('/IGNORE','Person_identification_code','/IGNORE',#23);
#21 = CLASSIFICATION_ASSIGNMENT(#22,(#19),'/IGNORE');
#19 = IDENTIFICATION_ASSIGNMENT('person_id_DATA','/IGNORE',$,(#17));
#17 = PERSON('person_name_DATA',$,$,$,$);
#47 = CLASSIFICATION_ASSIGNMENT(#48,(#45),'/IGNORE');
#45 = ADDRESS_ASSIGNMENT('/IGNORE',#50,(#17));
#42 = EXTERNAL_CLASS('/IGNORE','CAGE_code','/IGNORE',#23);
#41 = CLASSIFICATION_ASSIGNMENT(#42,(#39),'/IGNORE');
#39 =
IDENTIFICATION_ASSIGNMENT('organization_identifier_DATA','/IGNORE','/IGNORE',(#25
));
#35 = EXTERNAL_CLASS('/IGNORE','Owner_of','/IGNORE',#23);
#34 = CLASSIFICATION_ASSIGNMENT(#35,(#32),'/IGNORE');
#32 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#25,'/IGNORE',(#19));
#50 = ADDRESS($,$,$,$,$,$,$,$,$,$,'contact_phone_DATA','$','$,$);
#48 = EXTERNAL_CLASS('/IGNORE','Contact_address_assignment','/IGNORE',#15);
ENDSEC;
END-ISO-10303-21;
```

#### 4.4.3 Part 28 data file

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303:28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303:28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:External_class_library id="i15">
    <Id>urn:plcs:rdl:uid</Id>
  </ap239:External_class_library>
  <ap239:External_class id="i14">
    <Id>/IGNORE</Id>
    <Name>Contact_for</Name>
    <Description>/IGNORE</Description>
    <External_source>
      <ap239:External_class_library ref="i15" xsi:nil="true"/>
    </External_source>
  </ap239:External_class>
  <ap239:Classification_assignment id="i13">
    <Assigned_class>
```

```
<ap239:External_class ref="i14" xsi:nil="true"/>
</Assigned_class>
</Items>
<ap239:Organization_or_person_in_organization_assignment ref="i11" xsi:nil="true"/>
</Items>
<Role>/IGNORE</Role>
</ap239:Classification_assignment>

<ap239:Person_in_organization id="i51">
  <Concerned_person>
    <ap239:Person ref="i17" xsi:nil="true"/>
  </Concerned_person>
  <Containing_organization>
    <ap239:Organization ref="i25" xsi:nil="true"/>
  </Containing_organization>
  <Role/>
</ap239:Person_in_organization>
<ap239:Organization_or_person_in_organization_assignment id="i11">
  <Assigned_entity>
    <ap239:Organization ref="i25" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  </Items>
  <ap239:Identification_assignment ref="i2" xsi:nil="true"/>
</Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Product_as_individual id="i1">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
</ap239:Product_as_individual>
<ap239:Identification_assignment id="i2">
  <Identifier>uid_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  </Items>
  <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
</Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i29">
  <Assigned_class>
    <ap239:External_class ref="i42" xsi:nil="true"/>
  </Assigned_class>
  </Items>
  <ap239:Identification_assignment ref="i27" xsi:nil="true"/>
</Items>
<Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i27">
  <Identifier/>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  </Items>
  <ap239:Organization ref="i25" xsi:nil="true"/>
</Items>
</ap239:Identification_assignment>
<ap239:Organization id="i25">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:External_class_library id="i23">
```

```
<Id>urn:plcs:rdl:std</Id>
</ap239:External_class_library>
<ap239:External_class id="i22">
  <Id>/IGNORE</Id>
  <Name>Person_identification_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i23" xsi:nil="true"/>
  </External_source>
</ap239:External_class>

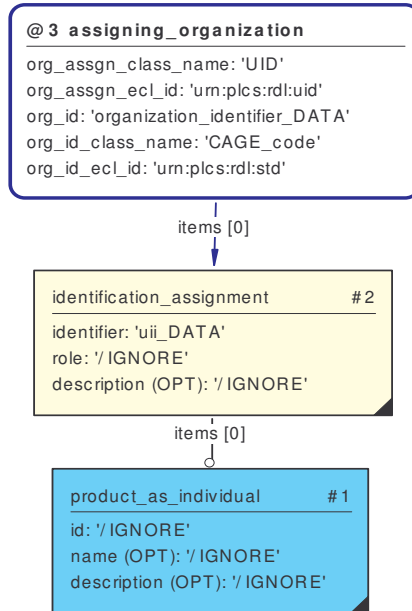
<ap239:Classification_assignment id="i21">
  <Assigned_class>
    <ap239:External_class ref="i22" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i19" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i19">
  <Identifier>person_id_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Person ref="i17" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Person id="i17">
  <Last_name>person_name_DATA</Last_name>
</ap239:Person>
<ap239:Classification_assignment id="i47">
  <Assigned_class>
    <ap239:External_class ref="i48" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Address_assignment ref="i45" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Address_assignment id="i45">
  <Address_type>/IGNORE</Address_type>
  <Assigned_address>
    <ap239:Address ref="i50" xsi:nil="true"/>
  </Assigned_address>
  <Located_person_organizations>
    <ap239:Person_in_organization xsi:nil="true" ref="i17"/>
  </Located_person_organizations>
</ap239:Address_assignment>
<ap239:External_class id="i42">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i23" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i41">
  <Assigned_class>
    <ap239:External_class ref="i42" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Address_assignment ref="i45" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
```

```
</Assigned_class>
</Items>
  <ap239:Identification_assignment ref="i39" xsi:nil="true"/>
</Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i39">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  </Items>
    <ap239:Organization ref="i25" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>

<ap239:External_class id="i35">
  <Id>/IGNORE</Id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i36" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i34">
  <Assigned_class>
    <ap239:External_class ref="i35" xsi:nil="true"/>
  </Assigned_class>
  </Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i32" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization_or_person_in_organization_assignment id="i32">
  <Assigned_entity>
    <ap239:Organization ref="i25" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  </Items>
    <ap239:Identification_assignment ref="i19" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Address id="i50">
  <Telephone_number>contact_phone_DATA</Telephone_number>
  <Electronic_mail_address>$/Electronic_mail_address>
  <Telex_number>$/Telex_number>
</ap239:Address>
<ap239:External_class id="i48">
  <Id>/IGNORE</Id>
  <Name>Contact_address_assignment</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i15" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
</ap239:uos>
```

## 4.5 UII (Item Record.UII)

### 4.5.1 Instance diagram



**Figure 10 UII assigned to individual part**

The UII itself is held in #2.identification\_assignment.identifier. The UII will typically be concatenated from several identifiers which may (optionally) also be separately recorded as PLCS data (see 2.2 Assigning a UII that is concatenated from three components above).

## 4.5.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('uii.stp','2006-02-12T12:41:17',('Eurostep Limited'),(''),'','GraphicalInstance 1.0 Beta 5 [1.0.5.7]','');
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#15 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid',$);
#14 = EXTERNAL_CLASS('/IGNORE','UID','/IGNORE',#15);
#13 = CLASSIFICATION_ASSIGNMENT(#14,(#11),'/IGNORE');
#11 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#4,'/IGNORE',(#2));
#10 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std',$);
#9 = EXTERNAL_CLASS('/IGNORE','CAGE_code','/IGNORE',#10);
#8 = CLASSIFICATION_ASSIGNMENT(#9,(#6),'/IGNORE');
#6 =
IDENTIFICATION_ASSIGNMENT('organization_identifier_DATA','/IGNORE','/IGNORE',(#4)
);
#4 = ORGANIZATION('/IGNORE','/IGNORE');
#2 = IDENTIFICATION_ASSIGNMENT('uii_DATA','/IGNORE','/IGNORE',(#1));
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE','/IGNORE','/IGNORE');
ENDSEC;
END-ISO-10303-21;

```

## 4.5.3 Part 28 data file

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303-28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:Product_as_individual id="i1">
    <id>/IGNORE</id>
    <Name>/IGNORE</Name>
    <Description>/IGNORE</Description>
  </ap239:Product_as_individual>
  <ap239:Identification_assignment id="i3">
    <Identifier>uii_DATA</Identifier>
    <Role>/IGNORE</Role>
    <Items>
      <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
    </Items>
  </ap239:Identification_assignment>
  <ap239:Classification_assignment id="i5">
    <Assigned_class>
      <ap239:External_class ref="i6" xsi:nil="true"/>
    </Assigned_class>
    <Items>
      <ap239:Identification_assignment ref="i3" xsi:nil="true"/>
    </Items>
    <Role>/IGNORE</Role>
  </ap239:Classification_assignment>
  <ap239:External_class id="i6">
    <id>/IGNORE</id>
    <Name>UID</Name>
    <Description>/IGNORE</Description>
    <External_source>
      <ap239:External_class_library ref="i7" xsi:nil="true"/>
    </External_source>
  </ap239:External_class>
</ap239:External_class_library id="i7">

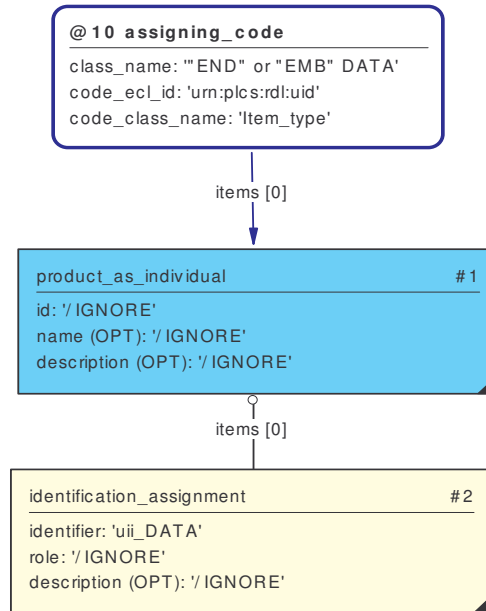
```

```
<Id>urn:plcs:rdl:std</Id>
</ap239:External_class_library>
<ap239:Organization id="i9">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:Identification_assignment id="i11">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i9" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i13">
  <Assigned_class>
    <ap239:External_class ref="i14" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i11" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i14">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i15" xsi:nil="true"/>
  </External_source>
</ap239:External_class>

<ap239:External_class_library id="i15">
  <Id>urn:plcs:rdl:std</Id>
</ap239:External_class_library>
<ap239:Organization_or_person_in_organization_assignment id="i16">
  <Assigned_entity>
    <ap239:Organization ref="i9" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i3" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Classification_assignment id="i18">
  <Assigned_class>
    <ap239:External_class ref="i19" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i16" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i19">
  <Id>/IGNORE</Id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i20" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:External_class_library id="i20">
  <Id>urn:plcs:rdl:std</Id>
```

## 4.6 Item type (Item Record.Item Type)

### 4.6.1 Instance diagram



**Figure 11 Item Type assigned to individual Ull identified part**

The item type code (“END” or “EMB” – EMBbedded) is held in `@10.assigning_code.class_name`. The class is classified, using reference data, as “Item\_type”.

### 4.6.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'), '2;1');
FILE_NAME('item_type.stp', '2006-02-10T09:46:45', ('Eurostep Limited'), (''), ('',
'GraphicalInstance 1.0 Beta 5 [1.0.5.7]'), (''));
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE', '/IGNORE', '/IGNORE');
#2 = IDENTIFICATION_ASSIGNMENT('uii_DATA', '/IGNORE', '/IGNORE', (#1));
#11 = CLASSIFICATION_ASSIGNMENT(#12, (#1), '/IGNORE');
#12 = CLASS('/IGNORE', "END" or "EMB" DATA', '/IGNORE');
#14 = CLASSIFICATION_ASSIGNMENT(#15, (#12), '/IGNORE');
#15 = EXTERNAL_CLASS('/IGNORE', 'Item_type', '/IGNORE', #16);
#16 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid', $);
ENDSEC;
END-ISO-10303-21;
  
```

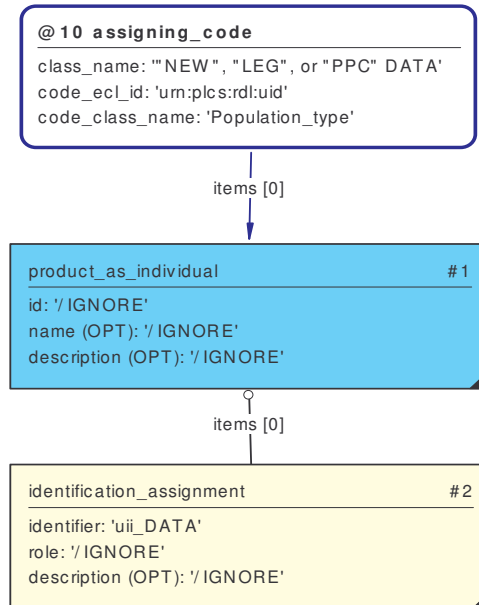


### 4.6.3 Part 28 data file

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303-28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:Product_as_individual id="i1">
    <Id>/IGNORE</Id>
    <Name>/IGNORE</Name>
    <Description>/IGNORE</Description>
  </ap239:Product_as_individual>
  <ap239:Identification_assignment id="i2">
    <Identifier>uij_DATA</Identifier>
    <Role>/IGNORE</Role>
    <Description>/IGNORE</Description>
    <Items>
      <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
    </Items>
  </ap239:Identification_assignment>
  <ap239:Classification_assignment id="i11">
    <Assigned_class>
      <ap239:Class ref="i12" xsi:nil="true"/>
    </Assigned_class>
    <Items>
      <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
    </Items>
    <Role>/IGNORE</Role>
  </ap239:Classification_assignment>
  <ap239:Class id="i12">
    <Id>/IGNORE</Id>
    <Name>"END" or "EMB" DATA</Name>
    <Description>/IGNORE</Description>
  </ap239:Class>
  <ap239:Classification_assignment id="i14">
    <Assigned_class>
      <ap239:External_class ref="i15" xsi:nil="true"/>
    </Assigned_class>
    <Items>
      <ap239:Class ref="i12" xsi:nil="true"/>
    </Items>
    <Role>/IGNORE</Role>
  </ap239:Classification_assignment>
  <ap239:External_class id="i15">
    <Id>/IGNORE</Id>
    <Name>Item_type</Name>
    <Description>/IGNORE</Description>
    <External_source>
      <ap239:External_class_library ref="i16" xsi:nil="true"/>
    </External_source>
  </ap239:External_class>
  <ap239:External_class_library id="i16">
    <Id>urn:plcs:rdl:uid</Id>
  </ap239:External_class_library>
</ap239:uos>
```

## 4.7 Population type (Item Record.Population Type)

### 4.7.1 Instance diagram



**Figure 12 Population Type assigned to individual UII identified part**

The item type code (“NEW”, “LEG”, or “PPC”) is held in @10.assigning\_code.class\_name.

### 4.7.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('pop_type.stp','2006-02-10T09:46:45', ('Eurostep Limited'), (''), ('',
'GraphicalInstance 1.0 Beta 5 [1.0.5.7]',''));
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE', '/IGNORE', '/IGNORE');
#2 = IDENTIFICATION_ASSIGNMENT('uii_DATA', '/IGNORE', '/IGNORE', (#1));
#11 = CLASSIFICATION_ASSIGNMENT(#12, (#1), '/IGNORE');
#12 = CLASS('/IGNORE', 'NEW', "LEG", or "PPC" DATA, '/IGNORE');
#14 = CLASSIFICATION_ASSIGNMENT(#15, (#12), '/IGNORE');
#15 = EXTERNAL_CLASS('/IGNORE', 'Population_type', '/IGNORE', #16);
#16 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid', $);
ENDSEC;
END-ISO-10303-21;
  
```

### 4.7.3 Part 28 data file

```

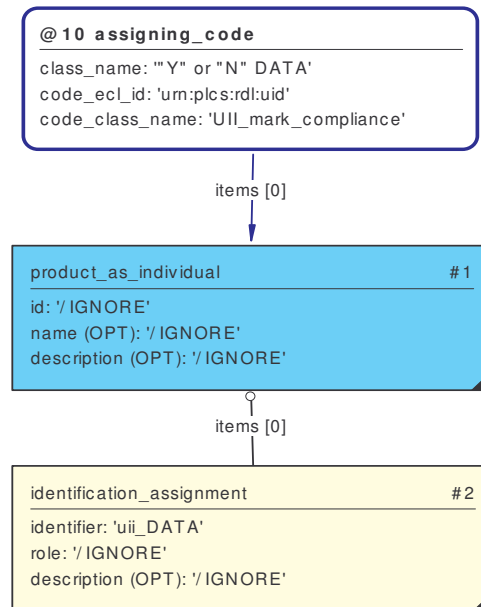
<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303-28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  
```

```
<ap239:Product_as_individual id="i1">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
</ap239:Product_as_individual>
<ap239:Identification_assignment id="i2">
  <Identifier>uii_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i11">
  <Assigned_class>
    <ap239:Class ref="i12" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Class id="i12">
  <Id>/IGNORE</Id>
  <Name>"NEW", "LEG", or "PPC" DATA</Name>
  <Description>/IGNORE</Description>
</ap239:Class>
<ap239:Classification_assignment id="i14">
  <Assigned_class>
    <ap239:External_class ref="i15" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Class ref="i12" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>

<ap239:External_class id="i15">
  <Id>/IGNORE</Id>
  <Name>Population_type</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i16" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:External_class_library id="i16">
  <Id>urn:plcs:rdl:uid</Id>
</ap239:External_class_library>
</ap239:uos>
```

## 4.8 Item compliance (Item Record.Compliant Mark Flag)

### 4.8.1 Instance diagram



**Figure 13 Compliant Mark Flag assigned to individual UII identified part**

The item type code (“Y” – “yes” or “N” – “no”) is held in @10.assigning\_code.class\_name.

### 4.8.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'), '2;1');
FILE_NAME('compliant.stp', '2006-02-10T09:46:45', ('Eurostep Limited'), (''), ('',
'GraphicalInstance 1.0 Beta 5 [1.0.5.7]'), (''));
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE', '/IGNORE', '/IGNORE');
#2 = IDENTIFICATION_ASSIGNMENT('uii_DATA', '/IGNORE', '/IGNORE', (#1));
#11 = CLASSIFICATION_ASSIGNMENT(#12, (#1), '/IGNORE');
#12 = CLASS('/IGNORE', '"Y" or "N" DATA', '/IGNORE');
#14 = CLASSIFICATION_ASSIGNMENT(#15, (#12), '/IGNORE');
#15 = EXTERNAL_CLASS('/IGNORE', 'UII_mark_compliance', '/IGNORE', #16);
#16 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid', $);
ENDSEC;
END-ISO-10303-21;
  
```

### 4.8.3 Part 28 data file

```

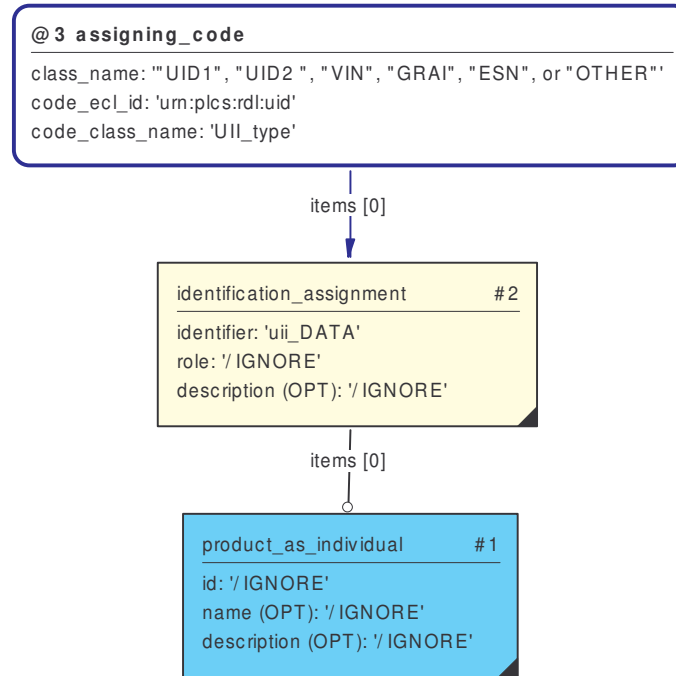
<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303-28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  
```

```
<ap239:Product_as_individual id="i1">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
</ap239:Product_as_individual>
<ap239:Identification_assignment id="i2">
  <Identifier>uii_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i11">
  <Assigned_class>
    <ap239:Class ref="i12" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Class id="i12">
  <Id>/IGNORE</Id>
  <Name>"Y" or "N" DATA</Name>
  <Description>/IGNORE</Description>
</ap239:Class>
<ap239:Classification_assignment id="i14">
  <Assigned_class>
    <ap239:External_class ref="i15" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Class ref="i12" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>

<ap239:External_class id="i15">
  <Id>/IGNORE</Id>
  <Name>UII_mark_compliance</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i16" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:External_class_library id="i16">
  <Id>urn:plcs:rdl:uid</Id>
</ap239:External_class_library>
</ap239:uos>
```

## 4.9 UII type (Item Record.UII Type)

### 4.9.1 Instance diagram



**Figure 14 UII type assigned to UII**

The item type code (“UID1”, “UID2 ”, “VIN” – Vehicle Identification Number, “GRAI” - Global Returnable Asset IdentifierVI, “ESN” - Electronic Serial Number, or “OTHER”) is held in @3.assigning\_code.class\_name.

### 4.9.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('uii_type.stp','2006-02-10T09:46:45', ('Eurostep Limited'),(''),'','
'GraphicalInstance 1.0 Beta 5 [1.0.5.7]','');
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE','/IGNORE','/IGNORE');
#2 = IDENTIFICATION_ASSIGNMENT('uii_DATA','/IGNORE','/IGNORE',(#1));
#4 = CLASSIFICATION_ASSIGNMENT(#5,(#2),'/IGNORE');
#5 = CLASS('/IGNORE','UID1", "UID2 ", "VIN", "GRAI", "ESN", or
"OTHER"', '/IGNORE');
#7 = CLASSIFICATION_ASSIGNMENT(#8,(#5),'/IGNORE');
#8 = EXTERNAL_CLASS('/IGNORE','Uii_type','/IGNORE',#9);
#9 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid',$);
ENDSEC;
END-ISO-10303-21;
  
```

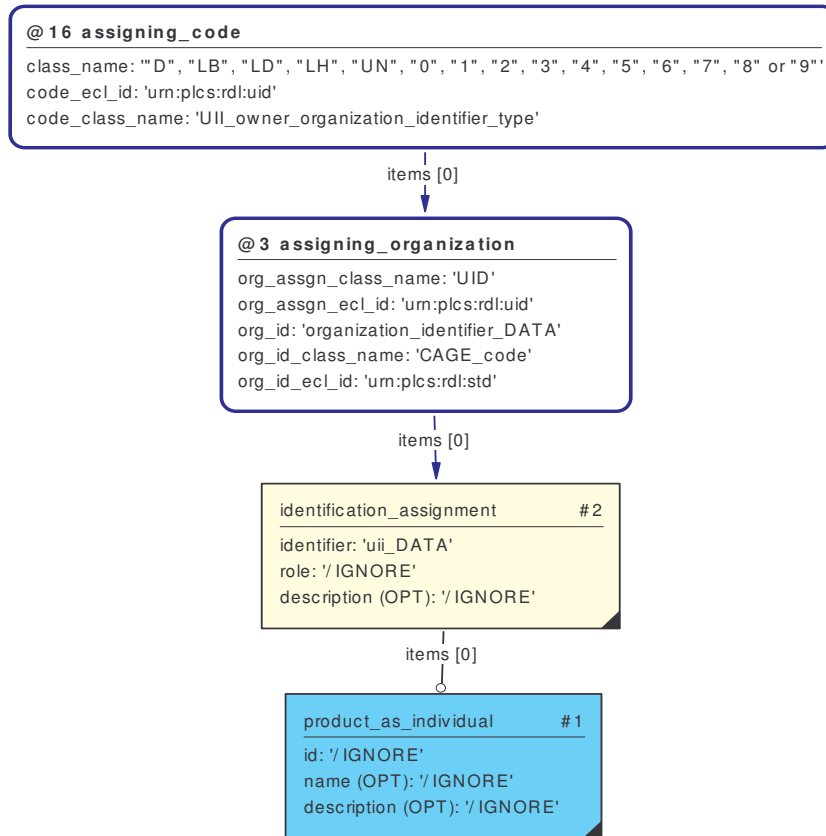
### 4.9.3 Part 28 data file

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303-28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:Product_as_individual id="i1">
    <Id>/IGNORE</Id>
    <Name>/IGNORE</Name>
    <Description>/IGNORE</Description>
  </ap239:Product_as_individual>
  <ap239:Identification_assignment id="i2">
    <Identifier>uij_DATA</Identifier>
    <Role>/IGNORE</Role>
    <Description>/IGNORE</Description>
    <Items>
      <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
    </Items>
  </ap239:Identification_assignment>
  <ap239:Classification_assignment id="i4">
    <Assigned_class>
      <ap239:Class ref="i5" xsi:nil="true"/>
    </Assigned_class>
    <Items>
      <ap239:Identification_assignment ref="i2" xsi:nil="true"/>
    </Items>
    <Role>/IGNORE</Role>
  </ap239:Classification_assignment>
  <ap239:Class id="i5">
    <Id>/IGNORE</Id>
    <Name>"UID1", "UID2 ", "VIN", "GRAI", "ESN", or "OTHER"</Name>
    <Description>/IGNORE</Description>
  </ap239:Class>
  <ap239:Classification_assignment id="i7">
    <Assigned_class>
      <ap239:External_class ref="i8" xsi:nil="true"/>
    </Assigned_class>
    <Items>
      <ap239:Class ref="i5" xsi:nil="true"/>
    </Items>
    <Role>/IGNORE</Role>
  </ap239:Classification_assignment>

  <ap239:External_class id="i8">
    <Id>/IGNORE</Id>
    <Name>UII_type</Name>
    <Description>/IGNORE</Description>
    <External_source>
      <ap239:External_class_library ref="i9" xsi:nil="true"/>
    </External_source>
  </ap239:External_class>
  <ap239:External_class_library id="i9">
    <Id>urn:plcs:rdl:uid</Id>
  </ap239:External_class_library>
</ap239:uos>
```

## 4.10 Code for type of UII owner organization identifier (Item Record.Issuing Agency Code)

### 4.10.1 Instance diagram



**Figure 15 Issuing Agency Code type assigned to the organization responsible for the UII**

The UII owner organization identifier type code (“D” – CAGE, “LB” - ANSI T1.220, “LD” – DoDAAC, “LH” – EHBCC, “UN” – DUNS; or “0”, “1”, “2”, “3”, “4”, “5”, “6”, “7”, “8” or “9” - EAN.UCC Company Prefix) is held in @35.assigning\_code.class\_name. This is assigned to the identification\_assignment applied to the organization that is responsible for the UII.



## 4.10.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('iss_agncy_cd.stp','2006-02-10T20:35:21', ('Eurostep Limited'),$, $,
'GraphicalInstance 1.0 Beta 5 [1.0.5.7]', '');
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#15 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid',$);
#14 = EXTERNAL_CLASS('/IGNORE','UID','/IGNORE',#15);
#13 = CLASSIFICATION_ASSIGNMENT(#14, (#11), '/IGNORE');
#11 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#4, '/IGNORE', (#2));
#10 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std',$);
#9 = EXTERNAL_CLASS('/IGNORE','CAGE_code','/IGNORE',#10);
#8 = CLASSIFICATION_ASSIGNMENT(#9, (#6), '/IGNORE');
#6 =
IDENTIFICATION_ASSIGNMENT('organization_identifier_DATA','/IGNORE','/IGNORE', (#4)
);
#4 = ORGANIZATION('/IGNORE','/IGNORE');
#2 = IDENTIFICATION_ASSIGNMENT('uii_DATA','/IGNORE','/IGNORE', (#1));
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE','/IGNORE','/IGNORE');
#21 =
EXTERNAL_CLASS('/IGNORE','UII_owner_organization_identifier_type','/IGNORE',#15);
#20 = CLASSIFICATION_ASSIGNMENT(#21, (#18), '/IGNORE');
#18 = CLASS('/IGNORE','D", "LB", "LD", "LH", "UN", "0", "1", "2", "3", "4", "5",
"6", "7", "8" or "9"', '/IGNORE');
#17 = CLASSIFICATION_ASSIGNMENT(#18, (#11), '/IGNORE');
ENDSEC;
END-ISO-10303-21;

```

## 4.10.3 Part 28 data file

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303-28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:Product_as_individual id="i1">
    <id>/IGNORE</id>
    <Name>/IGNORE</Name>
    <Description>/IGNORE</Description>
  </ap239:Product_as_individual>
  <ap239:Identification_assignment id="i17">
    <Identifier>uii_DATA</Identifier>
    <Role>/IGNORE</Role>
    <Items>
      <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
    </Items>
  </ap239:Identification_assignment>
  <ap239:Classification_assignment id="i19">
    <Assigned_class>
      <ap239:External_class ref="i20" xsi:nil="true"/>
    </Assigned_class>
    <Items>
      <ap239:Identification_assignment ref="i17" xsi:nil="true"/>
    </Items>
    <Role>/IGNORE</Role>
  </ap239:Classification_assignment>
  <ap239:External_class id="i20">
    <id>/IGNORE</id>
    <Name>UID</Name>
    <Description>/IGNORE</Description>

```

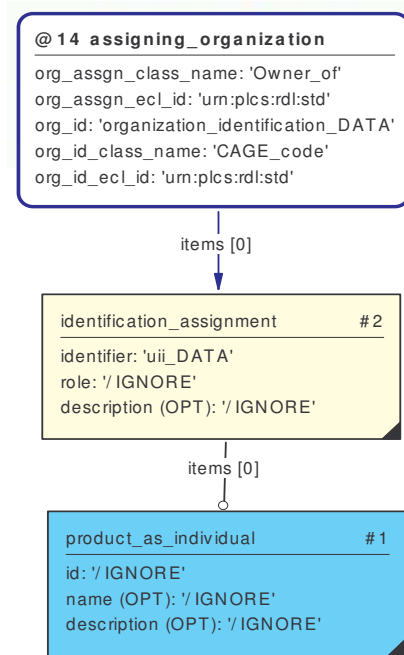
```
<External_source>
  <ap239:External_class_library ref="i21" xsi:nil="true"/>
</External_source>
</ap239:External_class>
<ap239:External_class_library id="i21">
  <Id>urn:plcs:rdl:uid</Id>
</ap239:External_class_library>
<ap239:Organization id="i23">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:Identification_assignment id="i25">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i23" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i27">
  <Assigned_class>
    <ap239:External_class ref="i28" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i25" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i28">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i29" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:External_class_library id="i29">
  <Id>urn:plcs:rdl:std</Id>
</ap239:External_class_library>
<ap239:Organization_or_person_in_organization_assignment id="i30">
  <Assigned_entity>
    <ap239:Organization ref="i23" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i17" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Classification_assignment id="i32">
  <Assigned_class>
    <ap239:External_class ref="i33" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i30" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i33">
  <Id>/IGNORE</Id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i29" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
```

```
</External_source>
</ap239:External_class>
```

```
<ap239:Classification_assignment id="i36">
  <Assigned_class>
    <ap239:Class ref="i37" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i17" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Class id="i37">
  <Id>/IGNORE</Id>
  <Name>"D", "LB", "LD", "LH", "UN", "0", "1", "2", "3", "4", "5", "6", "7", "8" or "9"</Name>
  <Description>/IGNORE</Description>
</ap239:Class>
<ap239:Classification_assignment id="i39">
  <Assigned_class>
    <ap239:External_class ref="i40" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Class ref="i37" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i40">
  <Id>/IGNORE</Id>
  <Name>Ull_owner_organization_identifier_type</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i21" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
</ap239:uos>
```

## 4.11 UII owner organization identifier (Item Record.Enterprise Identifier)

### 4.11.1 Instance diagram



**Figure 16 Enterprise Identifier assigned to the organization responsible for the UII**

The identifier for the owning organization is held in @14.assigning\_organization.org\_id. The assignment of the organization to the UII is classified using reference data as "Owner\_of".

## 4.11.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('ent_id.stp','2006-01-13T20:35:21', ('Eurostep Limited'),$, $,
'GraphicalInstance 1.0 Beta 5 [1.0.5.7]', '');
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#15 = ORGANIZATION('/IGNORE','/IGNORE');
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE','/IGNORE','/IGNORE');
#2 = IDENTIFICATION_ASSIGNMENT('uii_DATA','/IGNORE','/IGNORE', (#1));
#26 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std',$);
#25 = EXTERNAL_CLASS('/IGNORE','Owner_of','/IGNORE', #26);
#24 = CLASSIFICATION_ASSIGNMENT(#25, (#22), '/IGNORE');
#22 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#15, '/IGNORE', (#2));
#21 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std',$);
#20 = EXTERNAL_CLASS('/IGNORE','CAGE_code','/IGNORE', #21);
#19 = CLASSIFICATION_ASSIGNMENT(#20, (#17), '/IGNORE');
#17 =
IDENTIFICATION_ASSIGNMENT('organization_identification_DATA','/IGNORE','/IGNORE',
(#15));
ENDSEC;
END-ISO-10303-21;

```

## 4.11.3 Part 28 data file

```

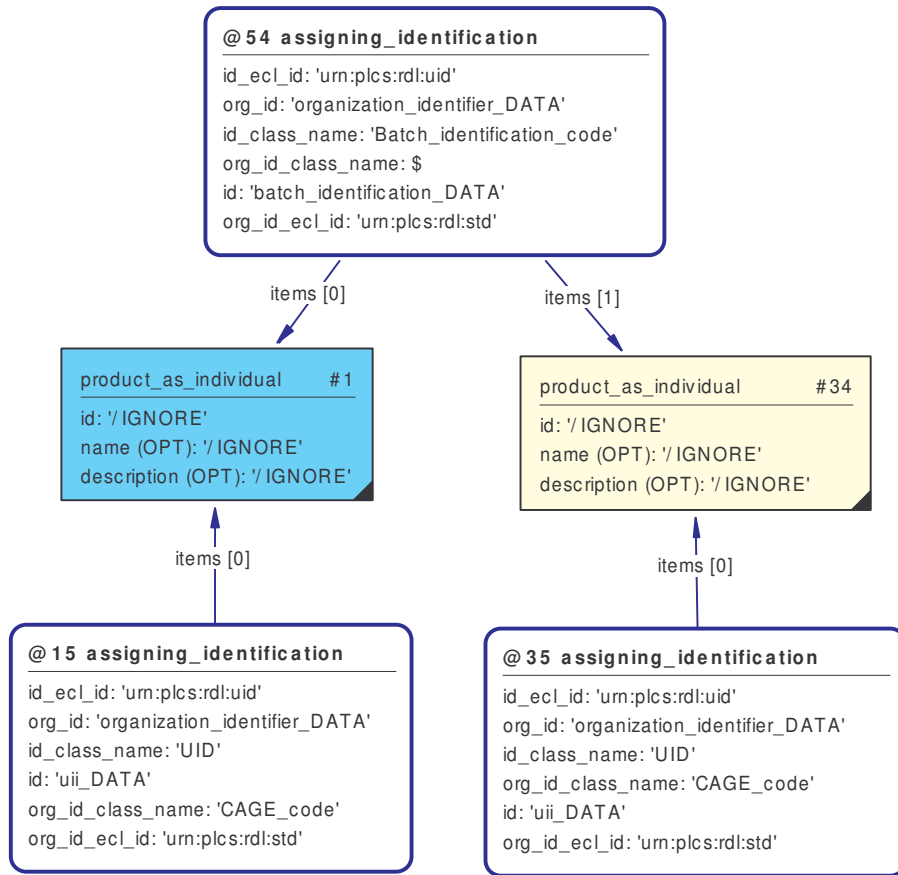
<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso10303-28:xs/Product_life_cycle_support
arm_if_p28xsd.xsd">
  <ap239:Organization id="i15">
    <id>/IGNORE</id>
    <Name>/IGNORE</Name>
  </ap239:Organization>
  <ap239:Product_as_individual id="i1">
    <id>/IGNORE</id>
    <Name>/IGNORE</Name>
    <Description>/IGNORE</Description>
  </ap239:Product_as_individual>
  <ap239:Identification_assignment id="i2">
    <Identifier>uii_DATA</Identifier>
    <Role>/IGNORE</Role>
    <Description>/IGNORE</Description>
    <Items>
      <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
    </Items>
  </ap239:Identification_assignment>
  <ap239:External_class_library id="i26">
    <id>urn:plcs:rdl:std</id>
  </ap239:External_class_library>
  <ap239:External_class id="i25">
    <id>/IGNORE</id>
    <Name>Owner_of</Name>
    <Description>/IGNORE</Description>
    <External_source>
      <ap239:External_class_library ref="i26" xsi:nil="true"/>
    </External_source>
  </ap239:External_class>

```

```
<ap239:Classification_assignment id="i24">
  <Assigned_class>
    <ap239:External_class ref="i25" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i22" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization_or_person_in_organization_assignment id="i22">
  <Assigned_entity>
    <ap239:Organization ref="i15" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i2" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:External_class_library id="i21">
  <Id>urn:plcs:rdl:std</Id>
</ap239:External_class_library>
<ap239:External_class id="i20">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i21" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i19">
  <Assigned_class>
    <ap239:External_class ref="i20" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i17" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i17">
  <Identifier>organization_identification_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i15" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
</ap239:uos>
```

## 4.12 Batch identifier (Item Record.Batch/Lot)

### 4.12.1 Instance diagram



**Figure 17 Batch identifier assigned to individual UII identified parts**

The identifier for the batch is held in @54.assigning\_identification.id. The assignment of the identifier is classified using reference data as “Batch\_identification\_code”.

## 4.12.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('batch_id.stp','2006-02-11T20:35:21', ('Eurostep Limited'),$, $,
'GraphicalInstance 1.0 Beta 5 [1.0.5.7]', '');
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE', '/IGNORE', '/IGNORE');
#31 = CLASSIFICATION_ASSIGNMENT(#32, (#29), '/IGNORE');
#29 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#22, '/IGNORE', (#16));
#28 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std', $);
#27 = EXTERNAL_CLASS('/IGNORE', 'CAGE_code', '/IGNORE', #28);
#26 = CLASSIFICATION_ASSIGNMENT(#27, (#24), '/IGNORE');
#24 =
IDENTIFICATION_ASSIGNMENT('organization_identifier_DATA', '/IGNORE', '/IGNORE', (#22
));
#22 = ORGANIZATION('/IGNORE', '/IGNORE');
#20 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid', $);
#19 = EXTERNAL_CLASS('/IGNORE', 'UID', '/IGNORE', #20);
#18 = CLASSIFICATION_ASSIGNMENT(#19, (#16), '/IGNORE');
#16 = IDENTIFICATION_ASSIGNMENT('uii_DATA', '/IGNORE', $, (#1));
#32 = EXTERNAL_CLASS('/IGNORE', 'Owner_of', '/IGNORE', #28);
#34 = PRODUCT_AS_INDIVIDUAL('/IGNORE', '/IGNORE', '/IGNORE');
#36 = IDENTIFICATION_ASSIGNMENT('uii_DATA', '/IGNORE', $, (#34));
#38 = CLASSIFICATION_ASSIGNMENT(#39, (#36), '/IGNORE');
#39 = EXTERNAL_CLASS('/IGNORE', 'UID', '/IGNORE', #20);
#42 = ORGANIZATION('/IGNORE', '/IGNORE');
#44 =
IDENTIFICATION_ASSIGNMENT('organization_identifier_DATA', '/IGNORE', '/IGNORE', (#42
));
#46 = CLASSIFICATION_ASSIGNMENT(#47, (#44), '/IGNORE');
#47 = EXTERNAL_CLASS('/IGNORE', 'CAGE_code', '/IGNORE', #28);
#49 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#42, '/IGNORE', (#36));
#51 = CLASSIFICATION_ASSIGNMENT(#52, (#49), '/IGNORE');
#52 = EXTERNAL_CLASS('/IGNORE', 'Owner_of', '/IGNORE', #28);
#55 =
IDENTIFICATION_ASSIGNMENT('batch_identification_DATA', '/IGNORE', $, (#1, #34));
#57 = CLASSIFICATION_ASSIGNMENT(#58, (#55), '/IGNORE');
#58 = EXTERNAL_CLASS('/IGNORE', 'Batch_identification_code', '/IGNORE', #20);
#61 = ORGANIZATION('/IGNORE', '/IGNORE');
#63 =
IDENTIFICATION_ASSIGNMENT('organization_identifier_DATA', '/IGNORE', '/IGNORE', (#61
));
#65 = CLASSIFICATION_ASSIGNMENT(#66, (#63), '/IGNORE');
#66 = EXTERNAL_CLASS('/IGNORE', $, '/IGNORE', #28);
#68 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#61, '/IGNORE', (#55));
#70 = CLASSIFICATION_ASSIGNMENT(#71, (#68), '/IGNORE');
#71 = EXTERNAL_CLASS('/IGNORE', 'Owner_of', '/IGNORE', #28);
ENDSEC;
END-ISO-10303-21;

```

## 4.12.3 Part 28 data file

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303-28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:Product_as_individual id="i1">
    <id>/IGNORE</id>
    <Name>/IGNORE</Name>

```



```
<Description>/IGNORE</Description>
</ap239:Product_as_individual>
<ap239:Classification_assignment id="i31">
  <Assigned_class>
    <ap239:External_class ref="i32" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i29" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization_or_person_in_organization_assignment id="i29">
  <Assigned_entity>
    <ap239:Organization ref="i22" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i16" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:External_class_library id="i28">
  <Id>urn:plcs:rdl:std</Id>
</ap239:External_class_library>
<ap239:External_class id="i27">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i26">
  <Assigned_class>
    <ap239:External_class ref="i27" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i24" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i24">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i22" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Organization id="i22">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:External_class_library id="i20">
  <Id>urn:plcs:rdl:uid</Id>
</ap239:External_class_library>
<ap239:External_class id="i19">
  <Id>/IGNORE</Id>
  <Name>UID</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i20" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
```

```
<ap239:Classification_assignment id="i18">
  <Assigned_class>
    <ap239:External_class ref="i19" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i16" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i16">
  <Identifier>uii_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:External_class id="i32">
  <Id>/IGNORE</Id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Product_as_individual id="i34">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
</ap239:Product_as_individual>
<ap239:Identification_assignment id="i36">
  <Identifier>uii_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Product_as_individual ref="i34" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i38">
  <Assigned_class>
    <ap239:External_class ref="i39" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i36" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i39">
  <Id>/IGNORE</Id>
  <Name>UID</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i20" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Organization id="i42">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
```

```
</ap239:Organization>
<ap239:Identification_assignment id="i44">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i42" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>

<ap239:Classification_assignment id="i46">
  <Assigned_class>
    <ap239:External_class ref="i47" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i44" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i47">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Organization_or_person_in_organization_assignment id="i49">
  <Assigned_entity>
    <ap239:Organization ref="i42" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i36" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Classification_assignment id="i51">
  <Assigned_class>
    <ap239:External_class ref="i52" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i49" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i52">
  <Id>/IGNORE</Id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Identification_assignment id="i55">
  <Identifier>batch_identification_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
    <ap239:Product_as_individual ref="i34" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
```

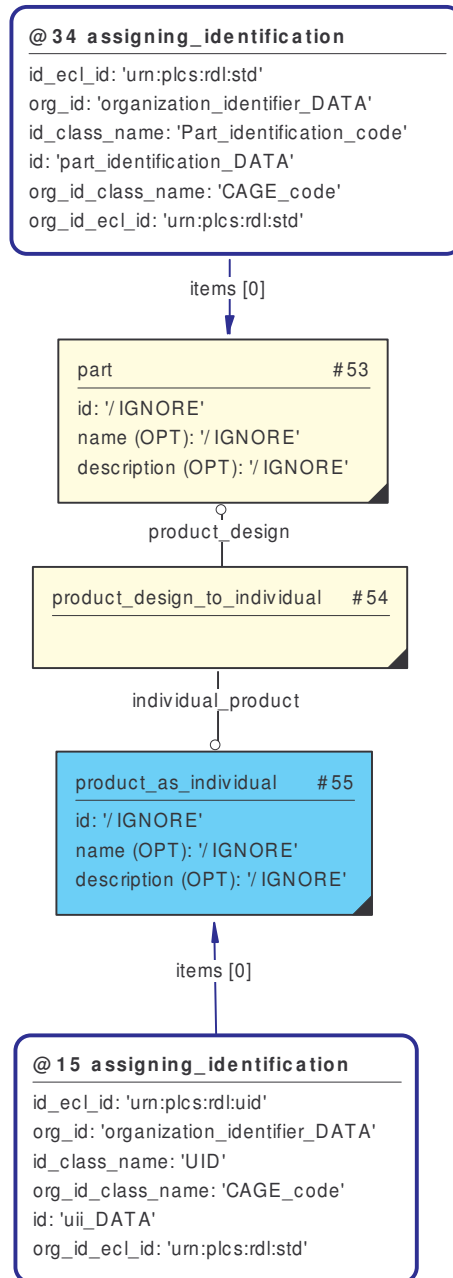
```
<ap239:Classification_assignment id="i57">
  <Assigned_class>
    <ap239:External_class ref="i58" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i55" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i58">
  <Id>/IGNORE</Id>
  <Name>Batch_identification_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i20" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Organization id="i61">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:Identification_assignment id="i63">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i61" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i65">
  <Assigned_class>
    <ap239:External_class ref="i66" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i63" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i66">
  <Id>/IGNORE</Id>
  <Name/>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Organization_or_person_in_organization_assignment id="i68">
  <Assigned_entity>
    <ap239:Organization ref="i61" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i55" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Classification_assignment id="i70">
  <Assigned_class>
    <ap239:External_class ref="i71" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i68" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
```

Eurostep.ESPCUK14.000154, Final version 22, 2006-05-10 20:37:53

```
</ap239:Classification_assignment>
<ap239:External_class id="i71">
  <Id>/IGNORE</Id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
</ap239:uos>
```

### 4.13 Part number (Item Record.Original Part Number)

#### 4.13.1 Instance diagram



**Figure 18 Original Part Number assigned to individual UII identified part**

The part number is held in @34.assigning\_identification.id. The assignment of the identifier is classified using reference data as “Part\_identification\_code”. NB The identification\_assignment entity instances are (in this diagram) included within the assigning\_identification templates.

## 4.13.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('part_no.stp','2006-02-10T20:35:21', ('Eurostep Limited'),$, $,
'GraphicalInstance 1.0 Beta 5 [1.0.5.7]','');
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#16 = IDENTIFICATION_ASSIGNMENT('uii_DATA','/IGNORE',$, (#55));
#18 = CLASSIFICATION_ASSIGNMENT(#19, (#16), '/IGNORE');
#19 = EXTERNAL_CLASS('/IGNORE','UID','/IGNORE', #20);
#20 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid',$);
#22 = ORGANIZATION('/IGNORE','/IGNORE');
#24 =
IDENTIFICATION_ASSIGNMENT('organization_identifier_DATA','/IGNORE','/IGNORE', (#22
));
#26 = CLASSIFICATION_ASSIGNMENT(#27, (#24), '/IGNORE');
#27 = EXTERNAL_CLASS('/IGNORE','CAGE_code','/IGNORE', #28);
#28 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std',$);
#29 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#22, '/IGNORE', (#16));
#31 = CLASSIFICATION_ASSIGNMENT(#32, (#29), '/IGNORE');
#46 = EXTERNAL_CLASS('/IGNORE','CAGE_code','/IGNORE', #28);
#45 = CLASSIFICATION_ASSIGNMENT(#46, (#43), '/IGNORE');
#43 =
IDENTIFICATION_ASSIGNMENT('organization_identifier_DATA','/IGNORE','/IGNORE', (#41
));
#41 = ORGANIZATION('/IGNORE','/IGNORE');
#38 = EXTERNAL_CLASS('/IGNORE','Part_identification_code','/IGNORE', #28);
#37 = CLASSIFICATION_ASSIGNMENT(#38, (#35), '/IGNORE');
#35 = IDENTIFICATION_ASSIGNMENT('part_identification_DATA','/IGNORE',$, (#53));
#32 = EXTERNAL_CLASS('/IGNORE','Owner_of','/IGNORE', #28);
#51 = EXTERNAL_CLASS('/IGNORE','Owner_of','/IGNORE', #28);
#50 = CLASSIFICATION_ASSIGNMENT(#51, (#48), '/IGNORE');
#48 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#41, '/IGNORE', (#35));
#53 = PART('/IGNORE','/IGNORE','/IGNORE');
#54 = PRODUCT_DESIGN_TO_INDIVIDUAL(#53, #55);
#55 = PRODUCT_AS_INDIVIDUAL('/IGNORE','/IGNORE','/IGNORE');
ENDSEC;
END-ISO-10303-21;

```

## 4.13.3 Part 28 data file

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303-28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:Identification_assignment id="i16">
    <Identifier>uii_DATA</Identifier>
    <Role>/IGNORE</Role>
    <Items>
      <ap239:Product_as_individual ref="i55" xsi:nil="true"/>
    </Items>
  </ap239:Identification_assignment>
  <ap239:Classification_assignment id="i18">
    <Assigned_class>
      <ap239:External_class ref="i19" xsi:nil="true"/>
    </Assigned_class>
    <Items>
      <ap239:Identification_assignment ref="i16" xsi:nil="true"/>
    </Items>
    <Role>/IGNORE</Role>

```

```
</ap239:Classification_assignment>

<ap239:External_class id="i19">
  <Id>/IGNORE</Id>
  <Name>UID</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i20" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:External_class_library id="i20">
  <Id>urn:plcs:rdl:uid</Id>
</ap239:External_class_library>
<ap239:Organization id="i22">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:Identification_assignment id="i24">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i22" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i26">
  <Assigned_class>
    <ap239:External_class ref="i27" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i24" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i27">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:External_class_library id="i28">
  <Id>urn:plcs:rdl:std</Id>
</ap239:External_class_library>
<ap239:Organization_or_person_in_organization_assignment id="i29">
  <Assigned_entity>
    <ap239:Organization ref="i22" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i16" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Classification_assignment id="i31">
  <Assigned_class>
    <ap239:External_class ref="i32" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i29" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
```



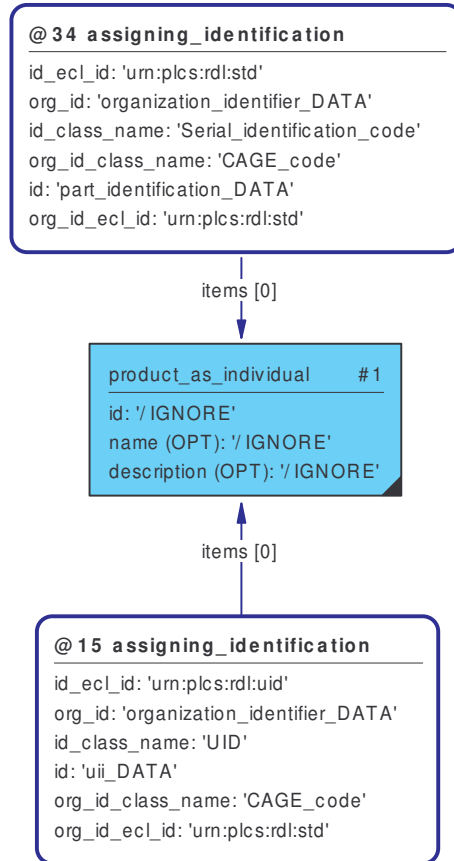
```
<ap239:External_class id="i46">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i45">
  <Assigned_class>
    <ap239:External_class ref="i46" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i43" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i43">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i41" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Organization id="i41">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:External_class id="i38">
  <Id>/IGNORE</Id>
  <Name>Part_identification_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i37">
  <Assigned_class>
    <ap239:External_class ref="i38" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i35" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i35">
  <Identifier>part_identification_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Part ref="i53" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:External_class id="i32">
  <Id>/IGNORE</Id>
  <Name>Owner_of</Name>
```

```
<Description>/IGNORE</Description>
<External_source>
  <ap239:External_class_library ref="i28" xsi:nil="true"/>
</External_source>
</ap239:External_class>

<ap239:External_class id="i51">
  <id>/IGNORE</id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i50">
  <Assigned_class>
    <ap239:External_class ref="i51" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i48" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization_or_person_in_organization_assignment id="i48">
  <Assigned_entity>
    <ap239:Organization ref="i41" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i35" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Part id="i53">
  <id>/IGNORE</id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
</ap239:Part>
<ap239:Product_design_to_individual id="i54">
  <Product_design>
    <ap239:Part ref="i53" xsi:nil="true"/>
  </Product_design>
  <Individual_product>
    <ap239:Product_as_individual ref="i55" xsi:nil="true"/>
  </Individual_product>
</ap239:Product_design_to_individual>
<ap239:Product_as_individual id="i55">
  <id>/IGNORE</id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
</ap239:Product_as_individual>
</ap239:uos>
```

#### 4.14 Serial number (Item Record.Serial Number)

##### 4.14.1 Instance diagram



**Figure 19 Serial Number assigned to individual UII identified part**

The serial number for the individual product is held in @34.assigning\_identification.id. The assignment of the identifier is classified using reference data as “Serial\_identification\_code”. NB The identification\_assignment entity instances are (in this diagram) included within the assigning\_identification templates.

## 4.14.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('serial_no.stp','2006-01-13T20:35:21', ('Eurostep Limited'),$, $,
'GraphicalInstance 1.0 Beta 5 [1.0.5.7]', '' );
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE','/IGNORE','/IGNORE');
#31 = CLASSIFICATION_ASSIGNMENT(#32, (#29), '/IGNORE');
#29 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#22, '/IGNORE', (#16));
#28 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std', $);
#27 = EXTERNAL_CLASS('/IGNORE', 'CAGE_code', '/IGNORE', #28);
#26 = CLASSIFICATION_ASSIGNMENT(#27, (#24), '/IGNORE');
#24 =
IDENTIFICATION_ASSIGNMENT('organization_identifier_DATA', '/IGNORE', '/IGNORE', (#22
));
#22 = ORGANIZATION('/IGNORE', '/IGNORE');
#20 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid', $);
#19 = EXTERNAL_CLASS('/IGNORE', 'UID', '/IGNORE', #20);
#18 = CLASSIFICATION_ASSIGNMENT(#19, (#16), '/IGNORE');
#16 = IDENTIFICATION_ASSIGNMENT('uii_DATA', '/IGNORE', $, (#1));
#32 = EXTERNAL_CLASS('/IGNORE', 'Owner_of', '/IGNORE', #28);
#35 = IDENTIFICATION_ASSIGNMENT('part_identification_DATA', '/IGNORE', $, (#1));
#37 = CLASSIFICATION_ASSIGNMENT(#38, (#35), '/IGNORE');
#38 = EXTERNAL_CLASS('/IGNORE', 'Serial_identification_code', '/IGNORE', #28);
#41 = ORGANIZATION('/IGNORE', '/IGNORE');
#43 =
IDENTIFICATION_ASSIGNMENT('organization_identifier_DATA', '/IGNORE', '/IGNORE', (#41
));
#45 = CLASSIFICATION_ASSIGNMENT(#46, (#43), '/IGNORE');
#46 = EXTERNAL_CLASS('/IGNORE', 'CAGE_code', '/IGNORE', #28);
#48 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#41, '/IGNORE', (#35));
#50 = CLASSIFICATION_ASSIGNMENT(#51, (#48), '/IGNORE');
#51 = EXTERNAL_CLASS('/IGNORE', 'Owner_of', '/IGNORE', #28);
ENDSEC;
END-ISO-10303-21;

```

## 4.14.3 Part 28 data file

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303:28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303:28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:Product_as_individual id="i1">
    <Id>/IGNORE</Id>
    <Name>/IGNORE</Name>
    <Description>/IGNORE</Description>
  </ap239:Product_as_individual>
  <ap239:Classification_assignment id="i31">
    <Assigned_class>
      <ap239:External_class ref="i32" xsi:nil="true"/>
    </Assigned_class>
    <Items>
      <ap239:Organization_or_person_in_organization_assignment ref="i29" xsi:nil="true"/>
    </Items>
    <Role>/IGNORE</Role>
  </ap239:Classification_assignment>

```

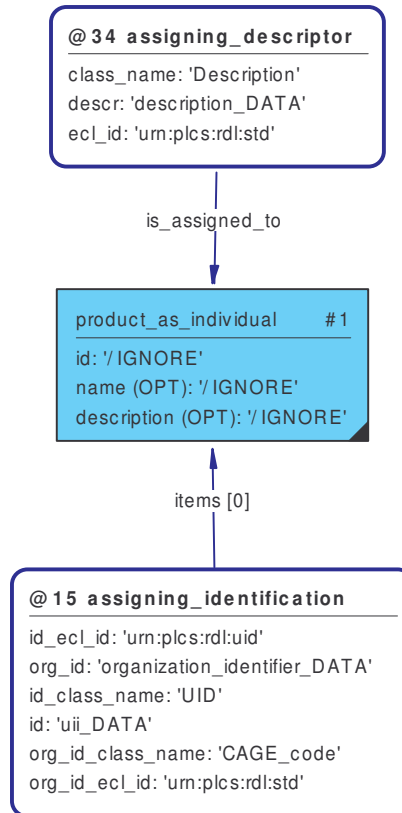
```
<ap239:Organization_or_person_in_organization_assignment id="i29">
  <Assigned_entity>
    <ap239:Organization ref="i22" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
</Items>
  <ap239:Identification_assignment ref="i16" xsi:nil="true"/>
</Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:External_class_library id="i28">
  <id>urn:plcs:rdl:std</id>
</ap239:External_class_library>
<ap239:External_class id="i27">
  <id>/IGNORE</id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i26">
  <Assigned_class>
    <ap239:External_class ref="i27" xsi:nil="true"/>
  </Assigned_class>
</Items>
  <ap239:Identification_assignment ref="i24" xsi:nil="true"/>
</Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i24">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
</Items>
  <ap239:Organization ref="i22" xsi:nil="true"/>
</Items>
</ap239:Identification_assignment>
<ap239:Organization id="i22">
  <id>/IGNORE</id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:External_class_library id="i20">
  <id>urn:plcs:rdl:uid</id>
</ap239:External_class_library>
<ap239:External_class id="i19">
  <id>/IGNORE</id>
  <Name>UID</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i20" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i18">
  <Assigned_class>
    <ap239:External_class ref="i19" xsi:nil="true"/>
  </Assigned_class>
</Items>
  <ap239:Identification_assignment ref="i16" xsi:nil="true"/>
</Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
```

```
<ap239:Identification_assignment id="i16">
  <Identifier>uii_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:External_class id="i32">
  <Id>/IGNORE</Id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Identification_assignment id="i35">
  <Identifier>part_identification_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i37">
  <Assigned_class>
    <ap239:External_class ref="i38" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i35" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i38">
  <Id>/IGNORE</Id>
  <Name>Serial_identification_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Organization id="i41">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:Identification_assignment id="i43">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i41" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i45">
  <Assigned_class>
    <ap239:External_class ref="i46" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i43" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i46">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
```

```
<Description>/IGNORE</Description>
<External_source>
  <ap239:External_class_library ref="i28" xsi:nil="true"/>
</External_source>
</ap239:External_class>
<ap239:External_class id="i51">
  <id>/IGNORE</id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Organization_or_person_in_organization_assignment id="i48">
  <Assigned_entity>
    <ap239:Organization ref="i41" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i35" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Classification_assignment id="i50">
  <Assigned_class>
    <ap239:External_class ref="i51" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i48" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
</ap239:uos>
```

## 4.15 Item description (Item Record.Description)

### 4.15.1 Instance diagram



**Figure 20 Description assigned to individual Ull identified part**

The description for the individual product is held in @34.assigning\_descriptor.descr. The assignment of the identifier is classified using reference data as “Description”. NB The identification\_assignment entity instances are (in this diagram) included within the assigning\_identification template.



## 4.15.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('description.stp','2006-01-13T20:35:21', ('Eurostep Limited'),$, $,
'GraphicalInstance 1.0 Beta 5 [1.0.5.7]','');
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE','/IGNORE','/IGNORE');
#31 = CLASSIFICATION_ASSIGNMENT(#32, (#29), '/IGNORE');
#29 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#22, '/IGNORE', (#16));
#28 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std',$);
#27 = EXTERNAL_CLASS('/IGNORE','CAGE_code','/IGNORE', #28);
#26 = CLASSIFICATION_ASSIGNMENT(#27, (#24), '/IGNORE');
#24 =
IDENTIFICATION_ASSIGNMENT('organization_identifier_DATA','/IGNORE','/IGNORE', (#22
));
#22 = ORGANIZATION('/IGNORE','/IGNORE');
#20 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid',$);
#19 = EXTERNAL_CLASS('/IGNORE','UID','/IGNORE', #20);
#18 = CLASSIFICATION_ASSIGNMENT(#19, (#16), '/IGNORE');
#16 = IDENTIFICATION_ASSIGNMENT('uii_DATA','/IGNORE',$, (#1));
#32 = EXTERNAL_CLASS('/IGNORE','Owner_of','/IGNORE', #28);
#35 = DOCUMENT_ASSIGNMENT(#40, #1, '/IGNORE');
#37 = CLASSIFICATION_ASSIGNMENT(#38, (#35), '/IGNORE');
#38 = EXTERNAL_CLASS('/IGNORE','Description','/IGNORE', #28);
#40 = DOCUMENT('/IGNORE','/IGNORE','description_DATA');
#42 = CLASSIFICATION_ASSIGNMENT(#43, (#40), '/IGNORE');
#43 = EXTERNAL_CLASS('/IGNORE','Descriptor','/IGNORE', #28);
ENDSEC;
END-ISO-10303-21;

```

## 4.15.3 Part 28 data file

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303:28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303:28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:Product_as_individual id="i1">
    <Id>/IGNORE</Id>
    <Name>/IGNORE</Name>
    <Description>/IGNORE</Description>
  </ap239:Product_as_individual>
  <ap239:Classification_assignment id="i31">
    <Assigned_class>
      <ap239:External_class ref="i32" xsi:nil="true"/>
    </Assigned_class>
    <Items>
      <ap239:Organization_or_person_in_organization_assignment ref="i29" xsi:nil="true"/>
    </Items>
    <Role>/IGNORE</Role>
  </ap239:Classification_assignment>
  <ap239:Organization_or_person_in_organization_assignment id="i29">
    <Assigned_entity>
      <ap239:Organization ref="i22" xsi:nil="true"/>
    </Assigned_entity>
    <Role>/IGNORE</Role>
    <Items>
      <ap239:Identification_assignment ref="i16" xsi:nil="true"/>
    </Items>
  </ap239:Organization_or_person_in_organization_assignment>

```

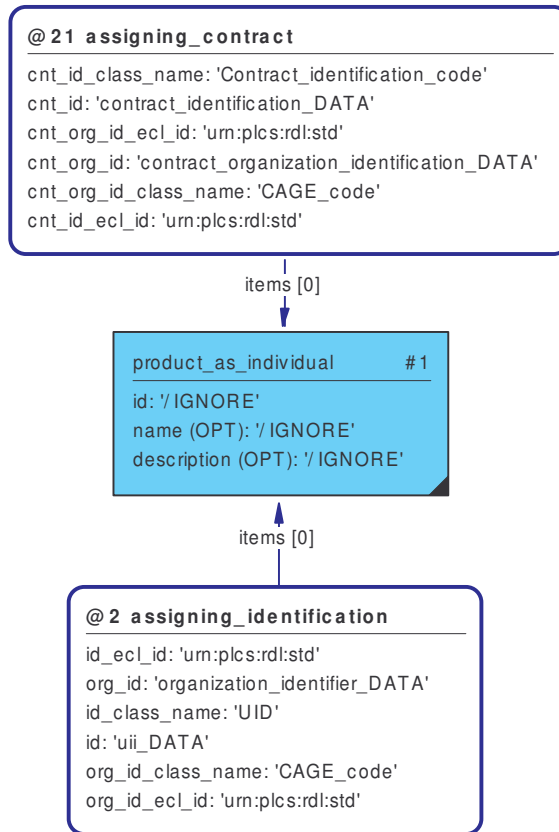
```
<ap239:External_class_library id="i28">
  <Id>urn:plcs:rdl:std</Id>
</ap239:External_class_library>
<ap239:External_class id="i27">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i26">
  <Assigned_class>
    <ap239:External_class ref="i27" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i24" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i24">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i22" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Organization id="i22">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:External_class_library id="i20">
  <Id>urn:plcs:rdl:uid</Id>
</ap239:External_class_library>
<ap239:External_class id="i19">
  <Id>/IGNORE</Id>
  <Name>UID</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i20" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i18">
  <Assigned_class>
    <ap239:External_class ref="i19" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i16" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i16">
  <Identifier>uii_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:External_class id="i32">
  <Id>/IGNORE</Id>
  <Name>Owner_of</Name>
```

```
<Description>/IGNORE</Description>
<External_source>
  <ap239:External_class_library ref="i28" xsi:nil="true"/>
</External_source>
</ap239:External_class>

<ap239:Document_assignment id="i35">
  <Assigned_document>
    <ap239:Document ref="i40" xsi:nil="true"/>
  </Assigned_document>
  <Is_assigned_to>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Is_assigned_to>
  <Role>/IGNORE</Role>
</ap239:Document_assignment>
<ap239:Classification_assignment id="i37">
  <Assigned_class>
    <ap239:External_class ref="i38" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Document_assignment ref="i35" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i38">
  <id>/IGNORE</id>
  <Name>Description</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Document id="i40">
  <id>/IGNORE</id>
  <Name>/IGNORE</Name>
  <Description>description_DATA</Description>
</ap239:Document>
<ap239:Classification_assignment id="i42">
  <Assigned_class>
    <ap239:External_class ref="i43" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Document ref="i40" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i43">
  <id>/IGNORE</id>
  <Name>Descriptor</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
</ap239:uos>
```

## 4.16 Contract identifier (Item Record.Procurement Instrument Number)

### 4.16.1 Instance diagram



**Figure 21 Procurement Instrument Number assigned to individual UII identified part**

The identifier for the contract is held in @21.assigning\_contract.cnt\_id. The assignment of the identifier is classified using reference data as "Contract\_identification\_code". NB The identification\_assignment entity instances are (in this diagram) included within the assigning\_identification template.

## 4.16.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('contract_id.stp','2006-02-11T20:35:21', ('Eurostep Limited'),$, $,
'GraphicalInstance 1.0 Beta 5 [1.0.5.7]','');
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#15 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std',$);
#14 = EXTERNAL_CLASS('/IGNORE','CAGE_code','/IGNORE',#15);
#13 = CLASSIFICATION_ASSIGNMENT(#14,(#11),'/IGNORE');
#11 =
IDENTIFICATION_ASSIGNMENT('organization_identifier_DATA','/IGNORE','/IGNORE',(#9)
);
#9 = ORGANIZATION('/IGNORE','/IGNORE');
#7 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std',$);
#6 = EXTERNAL_CLASS('/IGNORE','UID','/IGNORE',#7);
#5 = CLASSIFICATION_ASSIGNMENT(#6,(#3),'/IGNORE');
#3 = IDENTIFICATION_ASSIGNMENT('uii_DATA','/IGNORE',$,(#1));
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE','/IGNORE','/IGNORE');
#19 = EXTERNAL_CLASS('/IGNORE','Owner_of','/IGNORE',#7);
#18 = CLASSIFICATION_ASSIGNMENT(#19,(#16),'/IGNORE');
#16 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#9,'/IGNORE',(#3));
#22 = CONTRACT_ASSIGNMENT(#23,(#1));
#23 = CONTRACT('/IGNORE','/IGNORE','/IGNORE');
#25 =
IDENTIFICATION_ASSIGNMENT('contract_identification_DATA','/IGNORE',$,(#23));
#27 = CLASSIFICATION_ASSIGNMENT(#28,(#25),'/IGNORE');
#28 = EXTERNAL_CLASS('/IGNORE','Contract_identification_code','/IGNORE',#7);
#31 = ORGANIZATION('/IGNORE','/IGNORE');
#33 =
IDENTIFICATION_ASSIGNMENT('contract_organization_identification_DATA','/IGNORE','
/IGNORE',(#31));
#35 = CLASSIFICATION_ASSIGNMENT(#36,(#33),'/IGNORE');
#36 = EXTERNAL_CLASS('/IGNORE','CAGE_code','/IGNORE',#7);
#38 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#31,'/IGNORE',(#25));
#40 = CLASSIFICATION_ASSIGNMENT(#41,(#38),'/IGNORE');
#41 = EXTERNAL_CLASS('/IGNORE','Owner_of','/IGNORE',#7);
ENDSEC;
END-ISO-10303-21;

```

## 4.16.3 Part 28 data file

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303-28:xs/Product_life_cycle_support
arm_if_p28xsd.xsd">
  <ap239:External_class_library id="i15">
    <id>urn:plcs:rdl:std</id>
  </ap239:External_class_library>
  <ap239:External_class id="i14">
    <id>/IGNORE</id>
    <Name>CAGE_code</Name>
    <Description>/IGNORE</Description>
    <External_source>
      <ap239:External_class_library ref="i15" xsi:nil="true"/>
    </External_source>
  </ap239:External_class>

```

```
<ap239:Classification_assignment id="i13">
  <Assigned_class>
    <ap239:External_class ref="i14" xsi:nil="true"/>
  </Assigned_class>
</Items>
  <ap239:Identification_assignment ref="i11" xsi:nil="true"/>
</Items>
<Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i11">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i9" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Organization id="i9">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:External_class_library id="i7">
  <Id>urn:plcs:rdl:std</Id>
</ap239:External_class_library>
<ap239:External_class id="i6">
  <Id>/IGNORE</Id>
  <Name>UID</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i7" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i5">
  <Assigned_class>
    <ap239:External_class ref="i6" xsi:nil="true"/>
  </Assigned_class>
</Items>
  <ap239:Identification_assignment ref="i3" xsi:nil="true"/>
</Items>
<Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i3">
  <Identifier>uii_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Product_as_individual id="i1">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
</ap239:Product_as_individual>
<ap239:External_class id="i19">
  <Id>/IGNORE</Id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i7" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
```

```
</External_source>
</ap239:External_class>

<ap239:Classification_assignment id="i18">
  <Assigned_class>
    <ap239:External_class ref="i19" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i16" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization_or_person_in_organization_assignment id="i16">
  <Assigned_entity>
    <ap239:Organization ref="i9" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i3" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Contract_assignment id="i22">
  <Assigned_contract>
    <ap239:Contract ref="i23" xsi:nil="true"/>
  </Assigned_contract>
  <Items>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Items>
</ap239:Contract_assignment>
<ap239:Contract id="i23">
  <Id>/IGNORE</Id>
  <Purpose>/IGNORE</Purpose>
  <Kind>/IGNORE</Kind>
</ap239:Contract>
<ap239:Identification_assignment id="i25">
  <Identifier>contract_identification_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Contract ref="i23" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i27">
  <Assigned_class>
    <ap239:External_class ref="i28" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i25" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i28">
  <Id>/IGNORE</Id>
  <Name>Contract_identification_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i7" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
```

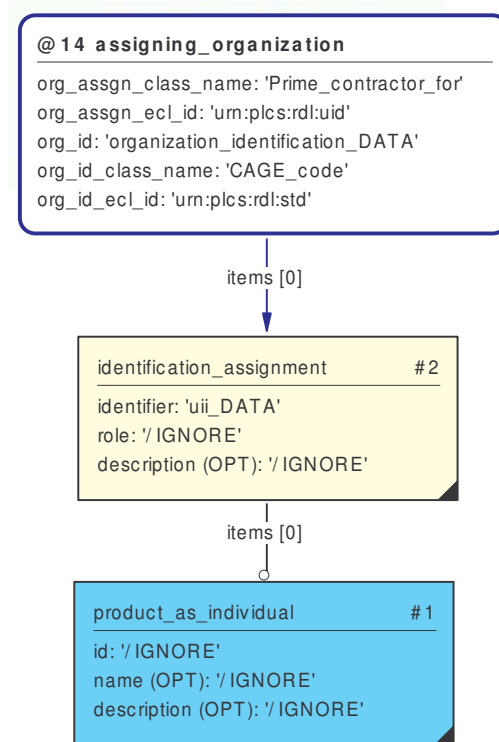
```
</ap239:External_class>
<ap239:Organization id="i31">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:Identification_assignment id="i33">
  <Identifier>contract_organization_identification_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i31" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>

<ap239:Classification_assignment id="i35">
  <Assigned_class>
    <ap239:External_class ref="i36" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i33" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i36">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i7" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Organization_or_person_in_organization_assignment id="i38">
  <Assigned_entity>
    <ap239:Organization ref="i31" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i25" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Classification_assignment id="i40">
  <Assigned_class>
    <ap239:External_class ref="i41" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i38" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i41">
  <Id>/IGNORE</Id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i7" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
</ap239:uos>
```



## 4.17 Prime contractor identifier (Item Record.Pr procurement Prime Contractor Identifier)

### 4.17.1 Instance diagram



**Figure 22 Procurement Prime Contractor ID assigned to individual UII identified part**

The identifier for the prime procurement contractor is held in `@14.assigning_organization.org_id`. The assignment of the organization is classified using reference data as "Prime\_contractor\_for". NB The `identification_assignment` entity instances are (in this diagram) included within the `assigning_identification` template.

## 4.17.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('prime_contractor.stp','2006-02-11T20:35:21', ('Eurostep Limited'),$, $,
'GraphicalInstance 1.0 Beta 5 [1.0.5.7]', '');
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#2 = IDENTIFICATION_ASSIGNMENT('uii_DATA', '/IGNORE', '/IGNORE', (#1));
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE', '/IGNORE', '/IGNORE');
#15 = ORGANIZATION('/IGNORE', '/IGNORE');
#17 =
IDENTIFICATION_ASSIGNMENT('organization_identification_DATA', '/IGNORE', '/IGNORE',
(#15));
#19 = CLASSIFICATION_ASSIGNMENT(#20, (#17), '/IGNORE');
#20 = EXTERNAL_CLASS('/IGNORE', 'CAGE_code', '/IGNORE', #21);
#21 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std', $);
#22 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#15, '/IGNORE', (#2));
#24 = CLASSIFICATION_ASSIGNMENT(#25, (#22), '/IGNORE');
#25 = EXTERNAL_CLASS('/IGNORE', 'Prime_contractor_for', '/IGNORE', #26);
#26 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid', $);
ENDSEC;
END-ISO-10303-21;

```

## 4.17.3 Part 28 data file

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303-28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:Identification_assignment id="i2">
    <Identifier>uii_DATA</Identifier>
    <Role>/IGNORE</Role>
    <Description>/IGNORE</Description>
    <Items>
      <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
    </Items>
  </ap239:Identification_assignment>
  <ap239:Product_as_individual id="i1">
    <Id>/IGNORE</Id>
    <Name>/IGNORE</Name>
    <Description>/IGNORE</Description>
  </ap239:Product_as_individual>
  <ap239:Organization id="i15">
    <Id>/IGNORE</Id>
    <Name>/IGNORE</Name>
  </ap239:Organization>
  <ap239:Identification_assignment id="i17">
    <Identifier>organization_identification_DATA</Identifier>
    <Role>/IGNORE</Role>
    <Description>/IGNORE</Description>
    <Items>
      <ap239:Organization ref="i15" xsi:nil="true"/>
    </Items>
  </ap239:Identification_assignment>
  <ap239:Classification_assignment id="i19">
    <Assigned_class>
      <ap239:External_class ref="i20" xsi:nil="true"/>
    </Assigned_class>
    <Items>
      <ap239:Identification_assignment ref="i17" xsi:nil="true"/>
    </Items>
  </ap239:Classification_assignment>

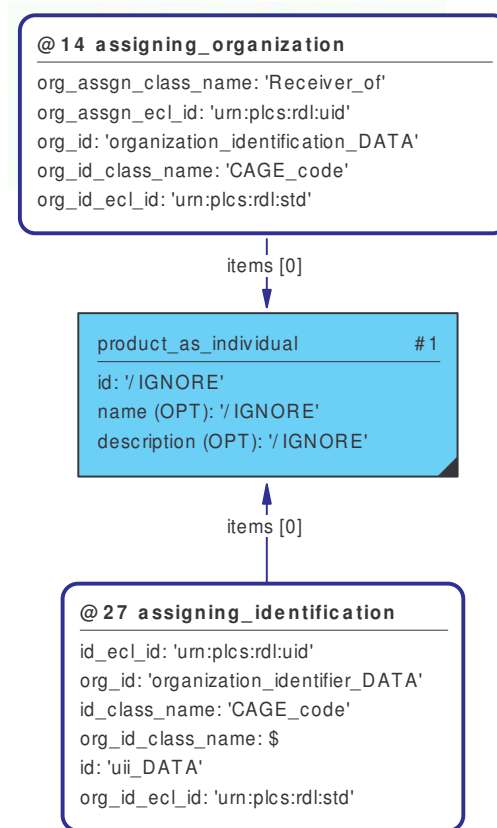
```

```
</Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>

<ap239:External_class id="i20">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i21" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:External_class_library id="i21">
  <Id>urn:plcs:rdl:std</Id>
</ap239:External_class_library>
<ap239:Organization_or_person_in_organization_assignment id="i22">
  <Assigned_entity>
    <ap239:Organization ref="i15" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i2" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Classification_assignment id="i24">
  <Assigned_class>
    <ap239:External_class ref="i25" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i22" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i25">
  <Id>/IGNORE</Id>
  <Name>Prime_contractor_for</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i26" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:External_class_library id="i26">
  <Id>urn:plcs:rdl:uid</Id>
</ap239:External_class_library>
</ap239:uos>
```

## 4.18 Accepting government entity (Item Record.Acceptance Code)

### 4.18.1 Instance diagram



**Figure 23 Acceptance Code for accepting government entity assigned to individual UUI identified part**

The identifier for the government agency that accepts the individual product is held in @14.assigning\_organization.org\_id. The assignment of the organization is classified using reference data as "Receiver\_of". NB The identification\_assignment instances are (in this diagram) included within the assigning\_identification template.

## 4.18.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('acceptor.stp','2006-02-11T12:25:46',('Eurostep Limited'),(''),'','GraphicalInstance 1.0 Beta 5 [1.0.5.7]','');
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#15 = ORGANIZATION('/IGNORE','/IGNORE');
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE','/IGNORE','/IGNORE');
#26 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid',$);
#25 = EXTERNAL_CLASS('/IGNORE','Receiver_of','/IGNORE',#26);
#24 = CLASSIFICATION_ASSIGNMENT(#25,#22,'/IGNORE');
#22 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#15,'/IGNORE',(#1));
#21 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std',$);
#20 = EXTERNAL_CLASS('/IGNORE','CAGE_code','/IGNORE',#21);
#19 = CLASSIFICATION_ASSIGNMENT(#20,#17,'/IGNORE');
#17 =
IDENTIFICATION_ASSIGNMENT('organization_identification_DATA','/IGNORE','/IGNORE',
(#15));
#28 = IDENTIFICATION_ASSIGNMENT('uii_DATA','/IGNORE',$,(#1));
#30 = CLASSIFICATION_ASSIGNMENT(#26,#28,'/IGNORE');
#34 = ORGANIZATION('/IGNORE','/IGNORE');
#36 =
IDENTIFICATION_ASSIGNMENT('organization_identifier_DATA','/IGNORE','/IGNORE',(#34
));
#38 = CLASSIFICATION_ASSIGNMENT(#20,#36,'/IGNORE')↵
#41 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#34,'/IGNORE',(#28));
#43 = CLASSIFICATION_ASSIGNMENT(#44,#41,'/IGNORE');
#44 = EXTERNAL_CLASS('/IGNORE','Owner_of','/IGNORE',#21);
ENDSEC;
END-ISO-10303-21;

```

## 4.18.3 Part 28 data file

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303-28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:Organization id="i15">
    <id>/IGNORE</id>
    <Name>/IGNORE</Name>
  </ap239:Organization>
  <ap239:Product_as_individual id="i1">
    <id>/IGNORE</id>
    <Name>/IGNORE</Name>
    <Description>/IGNORE</Description>
  </ap239:Product_as_individual>
  <ap239:External_class_library id="i26">
    <id>urn:plcs:rdl:uid</id>
  </ap239:External_class_library>
  <ap239:External_class id="i25">
    <id>/IGNORE</id>
    <Name>Receiver_of</Name>
    <Description>/IGNORE</Description>
    <External_source>
      <ap239:External_class_library ref="i26" xsi:nil="true"/>
    </External_source>
  </ap239:External_class>

```

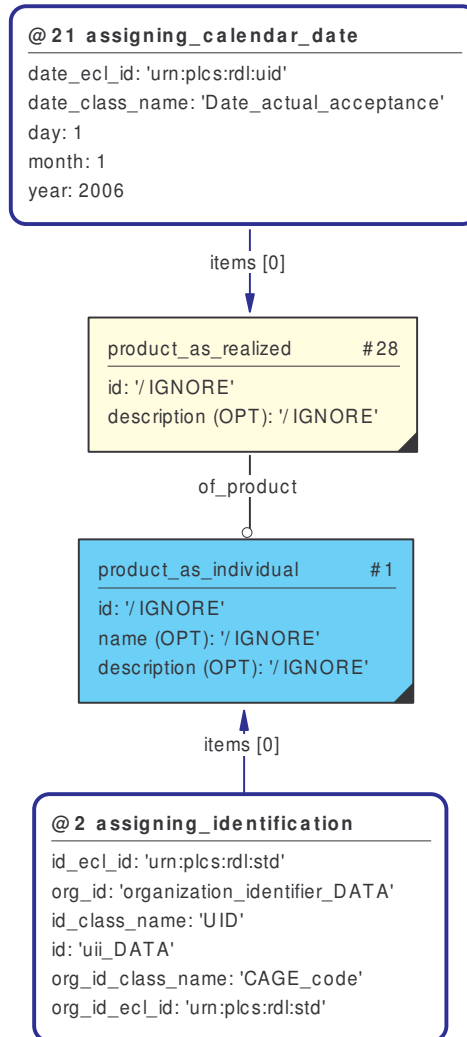
```
<ap239:Classification_assignment id="i24">
  <Assigned_class>
    <ap239:External_class ref="i25" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i22" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization_or_person_in_organization_assignment id="i22">
  <Assigned_entity>
    <ap239:Organization ref="i15" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:External_class_library id="i21">
  <Id>urn:plcs:rdl:std</Id>
</ap239:External_class_library>
<ap239:External_class id="i20">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i21" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i19">
  <Assigned_class>
    <ap239:External_class ref="i20" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i17" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i17">
  <Identifier>organization_identification_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i15" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Identification_assignment id="i28">
  <Identifier>uii_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i30">
  <Assigned_class>
    <ap239:External_class ref="i26" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i28" xsi:nil="true"/>
  </Items>
</ap239:Classification_assignment>
```

```
</Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization id="i34">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>

<ap239:Identification_assignment id="i36">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i34" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i38">
  <Assigned_class>
    <ap239:External_class ref="i20" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i36" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization_or_person_in_organization_assignment id="i41">
  <Assigned_entity>
    <ap239:Organization ref="i34" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i28" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Classification_assignment id="i43">
  <Assigned_class>
    <ap239:External_class ref="i44" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i41" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i44">
  <Id>/IGNORE</Id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i21" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
</ap239:uos>
```

### 4.19 Acceptance date (Item Record.Acceptance Date)

#### 4.19.1 Instance diagram



**Figure 24 Acceptance Date assigned to individual Ull identified part**

The date on which the receiving Government body accepts the current realization of the individual product is held in @21.assigning\_calendar\_date.day/month/year. The date assignment is classified, using reference data, as “Date\_actual\_acceptance”. NB The identification\_assignment entity instances are (in this diagram) included within the assigning\_identification template.



## 4.19.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('acceptance_date.stp','2006-02-11T12:29:32',('Eurostep
Limited'),(''),'GraphicalInstance 1.0 Beta 5 [1.0.5.7]','');
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#15 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std',$);
#14 = EXTERNAL_CLASS('/IGNORE','CAGE_code','/IGNORE',#15);
#13 = CLASSIFICATION_ASSIGNMENT(#14,(#11),'/IGNORE');
#11 =
IDENTIFICATION_ASSIGNMENT('organization_identifier_DATA','/IGNORE','/IGNORE',(#9
));
#9 = ORGANIZATION('/IGNORE','/IGNORE');
#6 = EXTERNAL_CLASS('/IGNORE','UID','/IGNORE',#15);
#5 = CLASSIFICATION_ASSIGNMENT(#6,(#3),'/IGNORE');
#3 = IDENTIFICATION_ASSIGNMENT('uii_DATA','/IGNORE',$,(#1));
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE','/IGNORE','/IGNORE');
#19 = EXTERNAL_CLASS('/IGNORE','Owner_of','/IGNORE',#15);
#18 = CLASSIFICATION_ASSIGNMENT(#19,(#16),'/IGNORE');
#16 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#9,'/IGNORE',(#3));
#22 = DATE_OR_DATE_TIME_ASSIGNMENT(#27,'/IGNORE',(#28));
#24 = CLASSIFICATION_ASSIGNMENT(#25,(#22),'/IGNORE');
#25 = EXTERNAL_CLASS('/IGNORE','Date_actual_acceptance','/IGNORE',#26);
#26 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid',$);
#27 = CALENDAR_DATE(2006,1,1);
#28 = PRODUCT_AS_REALIZED('/IGNORE','/IGNORE',#1);
ENDSEC;
END-ISO-10303-21;

```

## 4.19.3 Part 28 data file

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303-28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:External_class_library id="i15">
    <id>urn:plcs:rdl:std</id>
  </ap239:External_class_library>
  <ap239:External_class id="i14">
    <id>/IGNORE</id>
    <Name>CAGE_code</Name>
    <Description>/IGNORE</Description>
    <External_source>
      <ap239:External_class_library ref="i15" xsi:nil="true"/>
    </External_source>
  </ap239:External_class>
  <ap239:Classification_assignment id="i13">
    <Assigned_class>
      <ap239:External_class ref="i14" xsi:nil="true"/>
    </Assigned_class>
    <Items>
      <ap239:Identification_assignment ref="i11" xsi:nil="true"/>
    </Items>
    <Role>/IGNORE</Role>
  </ap239:Classification_assignment>
  <ap239:Identification_assignment id="i11">
    <Identifier>organization_identifier_DATA</Identifier>
    <Role>/IGNORE</Role>
    <Description>/IGNORE</Description>

```

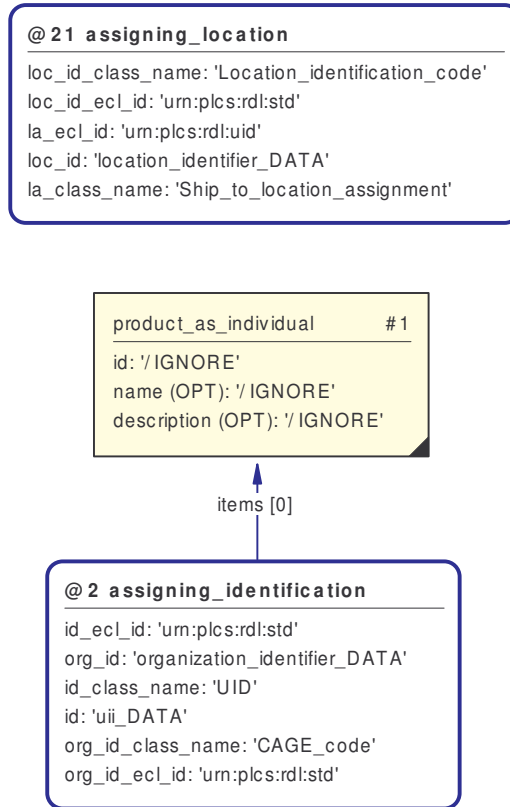
```
<Items>
  <ap239:Organization ref="i9" xsi:nil="true"/>
</Items>
</ap239:Identification_assignment>

<ap239:Organization id="i9">
  <id>/IGNORE</id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:External_class id="i6">
  <id>/IGNORE</id>
  <Name>UID</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i15" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i5">
  <Assigned_class>
    <ap239:External_class ref="i6" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i3" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i3">
  <Identifier>uii_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Product_as_individual id="i1">
  <id>/IGNORE</id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
</ap239:Product_as_individual>
<ap239:External_class id="i19">
  <id>/IGNORE</id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i15" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i18">
  <Assigned_class>
    <ap239:External_class ref="i19" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i16" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization_or_person_in_organization_assignment id="i16">
  <Assigned_entity>
    <ap239:Organization ref="i9" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i3" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
</Items>
```

```
</ap239:Organization_or_person_in_organization_assignment>
<ap239>Date_or_date_time_assignment id="i22">
  <Assigned_date>
    <ap239:Calendar_date ref="i27" xsi:nil="true"/>
  </Assigned_date>
  <Role>/IGNORE</Role>
</Items>
  <ap239:Product_as_realized ref="i28" xsi:nil="true"/>
</Items>
</ap239>Date_or_date_time_assignment>
<ap239:Classification_assignment id="i24">
  <Assigned_class>
    <ap239:External_class ref="i25" xsi:nil="true"/>
  </Assigned_class>
</Items>
  <ap239>Date_or_date_time_assignment ref="i22" xsi:nil="true"/>
</Items>
<Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i25">
  <Id>/IGNORE</Id>
  <Name>Date_actual_acceptance</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i26" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:External_class_library id="i26">
  <Id>urn:plcs:rdl:uid</Id>
</ap239:External_class_library>
<ap239:Calendar_date id="i27">
  <Year_component>2006</Year_component>
  <Month_component>1</Month_component>
  <Day_component>1</Day_component>
</ap239:Calendar_date>
<ap239:Product_as_realized id="i28">
  <Id>/IGNORE</Id>
  <Description>/IGNORE</Description>
  <Of_product>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Of_product>
</ap239:Product_as_realized>
</ap239:uos>
```

## 4.20 Ship to location identifier (Item Record.Ship To Code)

### 4.20.1 Instance diagram



**Figure 25 Ship To Code assigned to individual Ull identified part**

The identifier for the location to which the individual product is shipped is held in @21.assigning\_location.loc\_id. The location assignment is classified, using reference data, as “Location\_identification\_code”. NB The identification\_assignment entity instances are (in this diagram) included within the assigning\_identification templates.

## 4.20.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('ship2location.stp','2006-02-11T12:33:05',('Eurostep
Limited'),(''),'GraphicalInstance 1.0 Beta 5 [1.0.5.7]','');
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#15 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std',$);
#14 = EXTERNAL_CLASS('/IGNORE','CAGE_code','/IGNORE',#15);
#13 = CLASSIFICATION_ASSIGNMENT(#14,(#11),'/IGNORE');
#11 =
IDENTIFICATION_ASSIGNMENT('organization_identifier_DATA','/IGNORE','/IGNORE',(#9)
);
#9 = ORGANIZATION('/IGNORE','/IGNORE');
#6 = EXTERNAL_CLASS('/IGNORE','UID','/IGNORE',#15);
#5 = CLASSIFICATION_ASSIGNMENT(#6,(#3),'/IGNORE');
#3 = IDENTIFICATION_ASSIGNMENT('uii_DATA','/IGNORE',$,(#1));
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE','/IGNORE','/IGNORE');
#19 = EXTERNAL_CLASS('/IGNORE','Owner_of','/IGNORE',#15);
#18 = CLASSIFICATION_ASSIGNMENT(#19,(#16),'/IGNORE');
#16 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#9,'/IGNORE',(#3));
#22 = LOCATION_ASSIGNMENT('/IGNORE','/IGNORE',#1,#23);
#23 = LOCATION($,$,());
#25 = CLASSIFICATION_ASSIGNMENT(#26,(#22),'/IGNORE');
#26 = EXTERNAL_CLASS('/IGNORE','Ship_to_location_assignment','/IGNORE',#27);
#27 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid',$);
#28 = LOCATION('/IGNORE','/IGNORE',());
#30 =
IDENTIFICATION_ASSIGNMENT('location_identifier_DATA','/IGNORE','/IGNORE',(#28));
#32 = CLASSIFICATION_ASSIGNMENT(#33,(#30),'/IGNORE');
#33 = EXTERNAL_CLASS('/IGNORE','Location_identification_code','/IGNORE',#15);
ENDSEC;
END-ISO-10303-21;

```

## 4.20.3 Part 28 data file

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303-28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:External_class_library id="i15">
    <id>urn:plcs:rdl:std</id>
  </ap239:External_class_library>
  <ap239:External_class id="i14">
    <id>/IGNORE</id>
    <Name>CAGE_code</Name>
    <Description>/IGNORE</Description>
    <External_source>
      <ap239:External_class_library ref="i15" xsi:nil="true"/>
    </External_source>
  </ap239:External_class>
  <ap239:Classification_assignment id="i13">
    <Assigned_class>
      <ap239:External_class ref="i14" xsi:nil="true"/>
    </Assigned_class>
    <Items>
      <ap239:Identification_assignment ref="i11" xsi:nil="true"/>
    </Items>
    <Role>/IGNORE</Role>
  </ap239:Classification_assignment>

```

```
<ap239:Identification_assignment id="i11">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i9" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Organization id="i9">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:External_class id="i6">
  <Id>/IGNORE</Id>
  <Name>UID</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i15" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i5">
  <Assigned_class>
    <ap239:External_class ref="i6" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i3" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i3">
  <Identifier>uii_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Product_as_individual id="i1">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
</ap239:Product_as_individual>
<ap239:External_class id="i19">
  <Id>/IGNORE</Id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i15" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i18">
  <Assigned_class>
    <ap239:External_class ref="i19" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i16" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization_or_person_in_organization_assignment id="i16">
  <Assigned_entity>
```

```
<ap239:Organization ref="i9" xsi:nil="true"/>
</Assigned_entity>
<Role>/IGNORE</Role>
<Items>
  <ap239:Identification_assignment ref="i3" xsi:nil="true"/>
</Items>
</ap239:Organization_or_person_in_organization_assignment>

<ap239:Location_assignment id="i22">
  <Description>/IGNORE</Description>
  <Role>/IGNORE</Role>
  <Entity_for_location>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Entity_for_location>
  <Location_for_assignment>
    <ap239:Location ref="i23" xsi:nil="true"/>
  </Location_for_assignment>
</ap239:Location_assignment>
<ap239:Location id="i23">
  <Name/>
  <Alternative_location_representations/>
</ap239:Location>
<ap239:Classification_assignment id="i25">
  <Assigned_class>
    <ap239:External_class ref="i26" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Location_assignment ref="i22" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i26">
  <Id>/IGNORE</Id>
  <Name>Ship_to_location_assignment</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i27" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:External_class_library id="i27">
  <Id>urn:plcs:rdl:uid</Id>
</ap239:External_class_library>
<ap239:Location id="i28">
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
  <Alternative_location_representations/>
</ap239:Location>
<ap239:Identification_assignment id="i30">
  <Identifier>location_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Location ref="i28" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i32">
  <Assigned_class>
    <ap239:External_class ref="i33" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i30" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
```

Eurostep.ESPCUK14.000154, Final version 22, 2006-05-10 20:37:53

```
</ap239:Classification_assignment>
<ap239:External_class id="i33">
  <Id>/IGNORE</Id>
  <Name>Location_identification_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i15" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
</ap239:uos>
```



## 4.21 Acquisition Cost (Item Record.Acquisition Cost)

### 4.21.1 Instance diagram

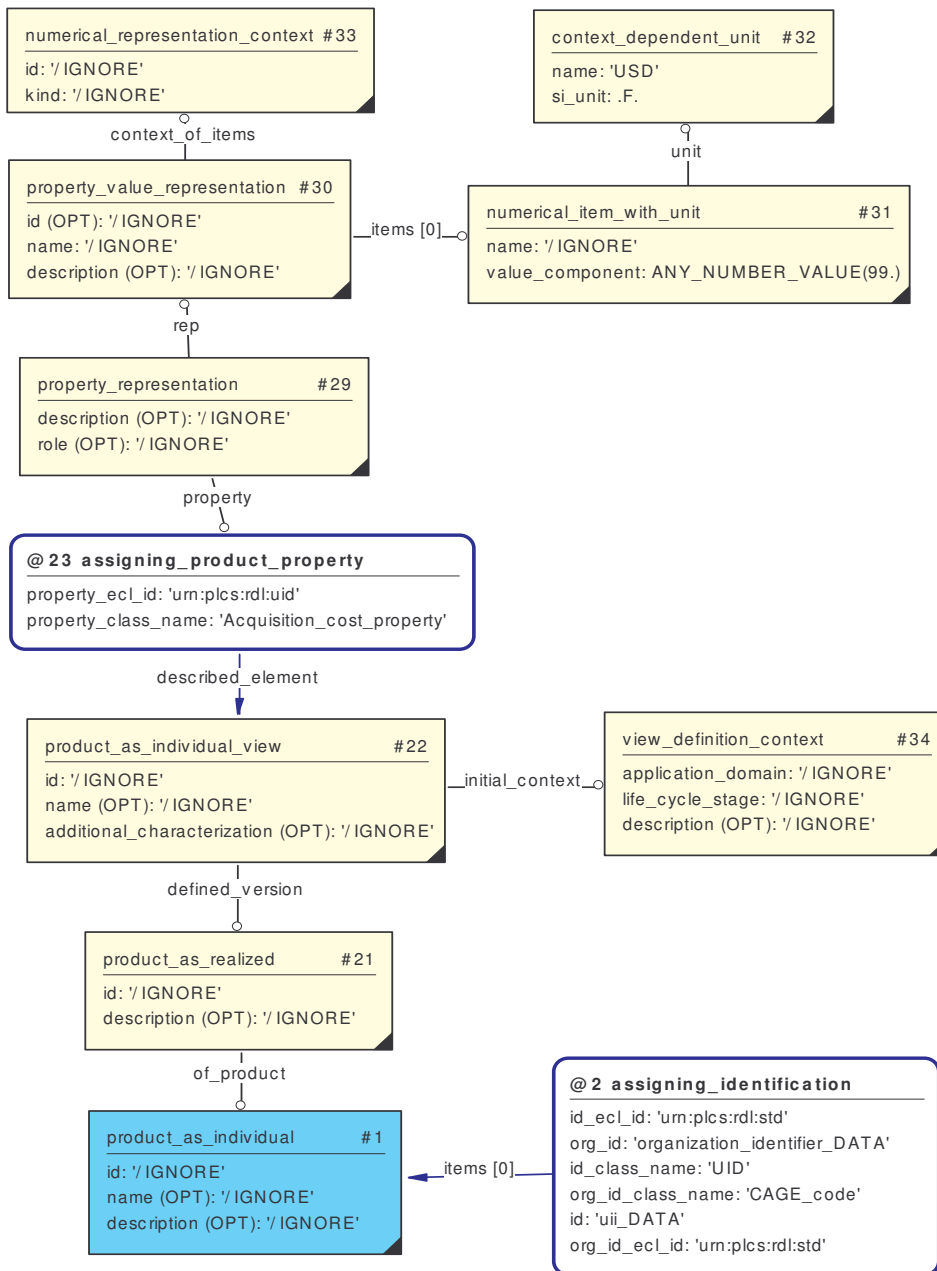


Figure 26 Acquisition Cost assigned to individual UII identified part

The acquisition cost for the uniquely identified product is in #31.value\_component. The product property assignment is classified, using reference data, as “Acquisition\_cost\_property”. NB The identification\_assignment entity instances are (in this diagram) included within the assigning\_identification templates.

## 4.21.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('acquisition_cost.stp','2006-01-13T20:35:21','Eurostep Limited'),$, $,
'GraphicalInstance 1.0 Beta 4',$);
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE','/IGNORE','/IGNORE');
#3 = IDENTIFICATION_ASSIGNMENT('uii_DATA','/IGNORE',$, (#1));
#5 = CLASSIFICATION_ASSIGNMENT(#6, (#3), '/IGNORE');
#6 = EXTERNAL_CLASS('/IGNORE','UID','/IGNORE', #7);
#7 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std',$);
#9 = ORGANIZATION('/IGNORE','/IGNORE');
#11 =
IDENTIFICATION_ASSIGNMENT('organization_identifier_DATA','/IGNORE','/IGNORE', (#9)
);
#13 = CLASSIFICATION_ASSIGNMENT(#14, (#11), '/IGNORE');
#14 = EXTERNAL_CLASS('/IGNORE','CAGE_code','/IGNORE', #7);
#16 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#9, '/IGNORE', (#3));
#18 = CLASSIFICATION_ASSIGNMENT(#19, (#16), '/IGNORE');
#19 = EXTERNAL_CLASS('/IGNORE','Owner_of','/IGNORE', #7);
#21 = PRODUCT_AS_REALIZED('/IGNORE','/IGNORE', #1);
#22 = PRODUCT_AS_INDIVIDUAL_VIEW('/IGNORE','/IGNORE','/IGNORE', #34, (), #21);
#24 = ASSIGNED_PROPERTY('/IGNORE','/IGNORE','/IGNORE', #22);
#26 = CLASSIFICATION_ASSIGNMENT(#27, (#24), '/IGNORE');
#27 = EXTERNAL_CLASS('/IGNORE','Acquisition_cost_property','/IGNORE', #28);
#28 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid',$);
#29 = PROPERTY_REPRESENTATION('/IGNORE', #24, #30, '/IGNORE');
#30 = PROPERTY_VALUE_REPRESENTATION('/IGNORE','/IGNORE','/IGNORE', #33, (#31));
#31 = NUMERICAL_ITEM_WITH_UNIT('/IGNORE', #32, 99);
#32 = CONTEXT_DEPENDENT_UNIT('USD', .F.);
#33 = NUMERICAL_REPRESENTATION_CONTEXT('/IGNORE','/IGNORE',$, $);
#34 = VIEW_DEFINITION_CONTEXT('/IGNORE','/IGNORE','/IGNORE');
ENDSEC;
END-ISO-10303-21;

```

## 4.21.3 Part 28 data file

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303-28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:Product_as_individual id="i1">
    <Id>/IGNORE</Id>
    <Name>/IGNORE</Name>
    <Description>/IGNORE</Description>
  </ap239:Product_as_individual>
  <ap239:Identification_assignment id="i3">
    <Identifier>uii_DATA</Identifier>
    <Role>/IGNORE</Role>
    <Items>
      <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
    </Items>
  </ap239:Identification_assignment>

```

```
<ap239:Classification_assignment id="i5">
  <Assigned_class>
    <ap239:External_class ref="i6" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i3" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i6">
  <Id>/IGNORE</Id>
  <Name>UID</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i7" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:External_class_library id="i7">
  <Id>urn:plcs:rdl:std</Id>
</ap239:External_class_library>
<ap239:Organization id="i9">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:Identification_assignment id="i11">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i9" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i13">
  <Assigned_class>
    <ap239:External_class ref="i14" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i11" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i14">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i7" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Organization_or_person_in_organization_assignment id="i16">
  <Assigned_entity>
    <ap239:Organization ref="i9" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i3" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Classification_assignment id="i18">
  <Assigned_class>
    <ap239:External_class ref="i19" xsi:nil="true"/>
  </Assigned_class>
```

```
</Items>
  <ap239:Organization_or_person_in_organization_assignment ref="i16" xsi:nil="true"/>
</Items>
<Role>/IGNORE</Role>
</ap239:Classification_assignment>

<ap239:External_class id="i19">
  <Id>/IGNORE</Id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i7" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:External_class_library id="i7">
  <Id>urn:plcs:rdl:std</Id>
</ap239:External_class_library>
<ap239:Product_as_realized id="i21">
  <Id>/IGNORE</Id>
  <Description>/IGNORE</Description>
  <Of_product>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Of_product>
</ap239:Product_as_realized>
<ap239:Product_as_individual_view id="i22">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
  <Additional_characterization>/IGNORE</Additional_characterization>
  <Initial_context>
    <ap239:View_definition_context ref="i34" xsi:nil="true"/>
  </Initial_context>
  <Additional_contexts/>
  <Defined_version>
    <ap239:Product_as_realized ref="i21" xsi:nil="true"/>
  </Defined_version>
</ap239:Product_as_individual_view>
<ap239:Assigned_property id="i24">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
  <Described_element>
    <ap239:Product_as_individual_view ref="i22" xsi:nil="true"/>
  </Described_element>
</ap239:Assigned_property>
<ap239:Classification_assignment id="i26">
  <Assigned_class>
    <ap239:External_class ref="i27" xsi:nil="true"/>
  </Assigned_class>
  </Items>
  <ap239:Assigned_property ref="i24" xsi:nil="true"/>
</Items>
<Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i27">
  <Id>/IGNORE</Id>
  <Name>Acquisition_cost_property</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:External_class_library id="i28">
  <Id>urn:plcs:rdl:uid</Id>
```

```
</ap239:External_class_library>
<ap239:Property_representation id="i29">
  <Description>/IGNORE</Description>
  <Property>
    <ap239:Assigned_property ref="i24" xsi:nil="true"/>
  </Property>
  <Rep>
    <ap239:Property_value_representation ref="i30" xsi:nil="true"/>
  </Rep>
  <Role>/IGNORE</Role>
</ap239:Property_representation>
<ap239:Property_value_representation id="i30">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
  <Context_of_items>
    <ap239:Numerical_representation_context ref="i33" xsi:nil="true"/>
  </Context_of_items>
  <Items>
    <ap239:Numerical_item_with_unit ref="i31" xsi:nil="true"/>
  </Items>
</ap239:Property_value_representation>
<ap239:Numerical_item_with_unit id="i31">
  <Name>/IGNORE</Name>
  <Unit>
    <ap239:Context_dependent_unit ref="i32" xsi:nil="true"/>
  </Unit>
  <Value_component>
    <ap239:Any_number_value-wrapper>99</ap239:Any_number_value-wrapper>
  </Value_component>
</ap239:Numerical_item_with_unit>
<ap239:Context_dependent_unit id="i32">
  <Name>USD</Name>
  <Si_unit>false</Si_unit>
</ap239:Context_dependent_unit>
<ap239:Numerical_representation_context id="i33">
  <Id>/IGNORE</Id>
  <Kind>/IGNORE</Kind>
</ap239:Numerical_representation_context>
<ap239:View_definition_context id="i34">
  <Application_domain>/IGNORE</Application_domain>
  <Life_cycle_stage>/IGNORE</Life_cycle_stage>
  <Description>/IGNORE</Description>
</ap239:View_definition_context>
</ap239:uos>
```

## 4.22 Acquisition cost currency code (Item Record.Foreign Currency Code)

### 4.22.1 Instance diagram

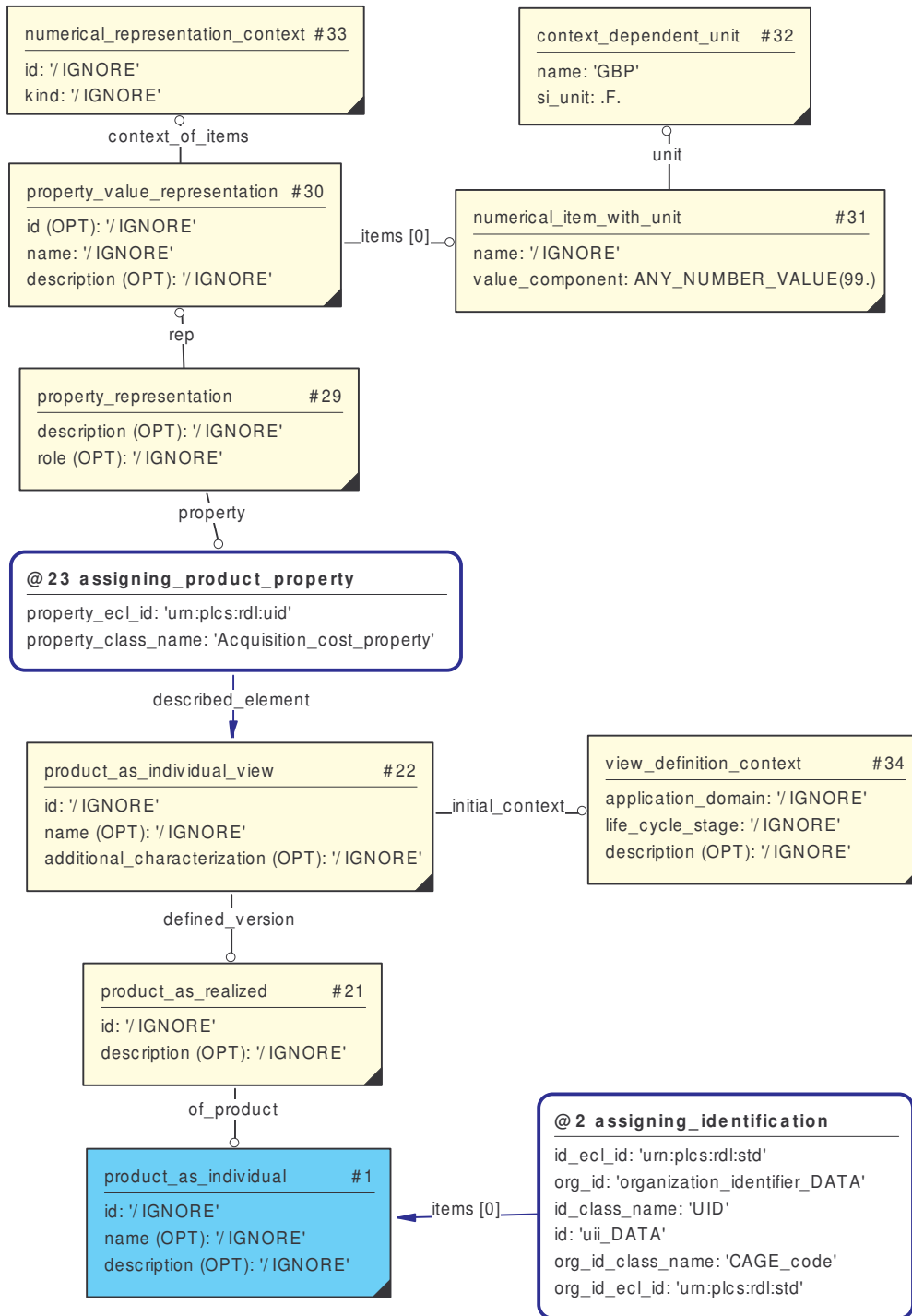


Figure 27 Foreign Currency Code assigned to the acquisition cost of an individual UII identified part

The currency code for the acquisition cost of the uniquely identified product is in #32context\_dependent\_unit. The code is one of the three letter currency codes specified by ISO 4217<sup>15</sup>. NB The identification\_assignment entity instances are (in this diagram) included within the assigning\_identification templates.

#### 4.22.2 Part 21 data file

```
ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('acquisition_cost.stp','2006-01-13T20:35:21',('Eurostep Limited'),$, $,
'GraphicalInstance 1.0 Beta 4',$);
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE','/IGNORE','/IGNORE');
#3 = IDENTIFICATION_ASSIGNMENT('uii_DATA','/IGNORE',$, (#1));
#5 = CLASSIFICATION_ASSIGNMENT(#6, (#3), '/IGNORE');
#6 = EXTERNAL_CLASS('/IGNORE','UID','/IGNORE', #7);
#7 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std',$);
#9 = ORGANIZATION('/IGNORE','/IGNORE');
#11 =
IDENTIFICATION_ASSIGNMENT('organization_identifier_DATA','/IGNORE','/IGNORE', (#9)
);
#13 = CLASSIFICATION_ASSIGNMENT(#14, (#11), '/IGNORE');
#14 = EXTERNAL_CLASS('/IGNORE','CAGE_code','/IGNORE', #7);
#16 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#9, '/IGNORE', (#3));
#18 = CLASSIFICATION_ASSIGNMENT(#19, (#16), '/IGNORE');
#19 = EXTERNAL_CLASS('/IGNORE','Owner_of','/IGNORE', #7);
#21 = PRODUCT_AS_REALIZED('/IGNORE','/IGNORE', #1);
#22 = PRODUCT_AS_INDIVIDUAL_VIEW('/IGNORE','/IGNORE','/IGNORE', #34, (), #21);
#24 = ASSIGNED_PROPERTY('/IGNORE','/IGNORE','/IGNORE', #22);
#26 = CLASSIFICATION_ASSIGNMENT(#27, (#24), '/IGNORE');
#27 = EXTERNAL_CLASS('/IGNORE','Acquisition_cost_property','/IGNORE', #28);
#28 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid',$);
#29 = PROPERTY_REPRESENTATION('/IGNORE', #24, #30, '/IGNORE');
#30 = PROPERTY_VALUE_REPRESENTATION('/IGNORE','/IGNORE','/IGNORE', #33, (#31));
#31 = NUMERICAL_ITEM_WITH_UNIT('/IGNORE', #32, 99);
#32 = CONTEXT_DEPENDENT_UNIT('GBP', .F.);
#33 = NUMERICAL_REPRESENTATION_CONTEXT('/IGNORE','/IGNORE',$, $);
#34 = VIEW_DEFINITION_CONTEXT('/IGNORE','/IGNORE','/IGNORE');
ENDSEC;
END-ISO-10303-21;
```

#### 4.22.3 Part 28 data file

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303-28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:Product_as_individual id="i1">
    <Id>/IGNORE</Id>
    <Name>/IGNORE</Name>
    <Description>/IGNORE</Description>
  </ap239:Product_as_individual>
  <ap239:Identification_assignment id="i3">
    <Identifier>uii_DATA</Identifier>
    <Role>/IGNORE</Role>
    <Items>
      <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
    </Items>
  </ap239:Identification_assignment>
</uos>
```

```
<ap239:Classification_assignment id="i5">
  <Assigned_class>
    <ap239:External_class ref="i6" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i3" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i6">
  <Id>/IGNORE</Id>
  <Name>UID</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i7" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:External_class_library id="i7">
  <Id>urn:plcs:rdl:std</Id>
</ap239:External_class_library>
<ap239:Organization id="i9">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:Identification_assignment id="i11">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i9" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i13">
  <Assigned_class>
    <ap239:External_class ref="i14" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i11" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i14">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i7" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Organization_or_person_in_organization_assignment id="i16">
  <Assigned_entity>
    <ap239:Organization ref="i9" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i3" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
```



```
<ap239:Classification_assignment id="i18">
  <Assigned_class>
    <ap239:External_class ref="i19" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i16" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>

<ap239:External_class id="i19">
  <Id>/IGNORE</Id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i7" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Product_as_realized id="i21">
  <Id>/IGNORE</Id>
  <Description>/IGNORE</Description>
  <Of_product>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Of_product>
</ap239:Product_as_realized>
<ap239:Product_as_individual_view id="i22">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
  <Additional_characterization>/IGNORE</Additional_characterization>
  <Initial_context>
    <ap239:View_definition_context ref="i34" xsi:nil="true"/>
  </Initial_context>
  <Additional_contexts/>
  <Defined_version>
    <ap239:Product_as_realized ref="i21" xsi:nil="true"/>
  </Defined_version>
</ap239:Product_as_individual_view>
<ap239:Assigned_property id="i24">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
  <Described_element>
    <ap239:Product_as_individual_view ref="i22" xsi:nil="true"/>
  </Described_element>
</ap239:Assigned_property>
<ap239:Classification_assignment id="i26">
  <Assigned_class>
    <ap239:External_class ref="i27" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Assigned_property ref="i24" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i27">
  <Id>/IGNORE</Id>
  <Name>Acquisition_cost_property</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:External_class_library id="i28">
```

```
<Id>urn:plcs:rdl:uid</Id>
</ap239:External_class_library>
<ap239:Property_representation id="i29">
  <Description>/IGNORE</Description>
  <Property>
    <ap239:Assigned_property ref="i24" xsi:nil="true"/>
  </Property>
  <Rep>
    <ap239:Property_value_representation ref="i30" xsi:nil="true"/>
  </Rep>
  <Role>/IGNORE</Role>
</ap239:Property_representation>

<ap239:Property_value_representation id="i30">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
  <Context_of_items>
    <ap239:Numerical_representation_context ref="i33" xsi:nil="true"/>
  </Context_of_items>
  <Items>
    <ap239:Numerical_item_with_unit ref="i31" xsi:nil="true"/>
  </Items>
</ap239:Property_value_representation>
<ap239:Numerical_item_with_unit id="i31">
  <Name>/IGNORE</Name>
  <Unit>
    <ap239:Context_dependent_unit ref="i32" xsi:nil="true"/>
  </Unit>
  <Value_component>
    <ap239:Any_number_value-wrapper>99</ap239:Any_number_value-wrapper>
  </Value_component>
</ap239:Numerical_item_with_unit>
<ap239:Context_dependent_unit id="i32">
  <Name>GBP</Name>
  <Si_unit>false</Si_unit>
</ap239:Context_dependent_unit>
<ap239:Numerical_representation_context id="i33">
  <Id>/IGNORE</Id>
  <Kind>/IGNORE</Kind>
</ap239:Numerical_representation_context>
<ap239:View_definition_context id="i34">
  <Application_domain>/IGNORE</Application_domain>
  <Life_cycle_stage>/IGNORE</Life_cycle_stage>
  <Description>/IGNORE</Description>
</ap239:View_definition_context>
</ap239:uos>
```

### 4.23 Part numbers with differing effectivities (Item Record.Current Part Number)

#### 4.23.1 Instance diagram

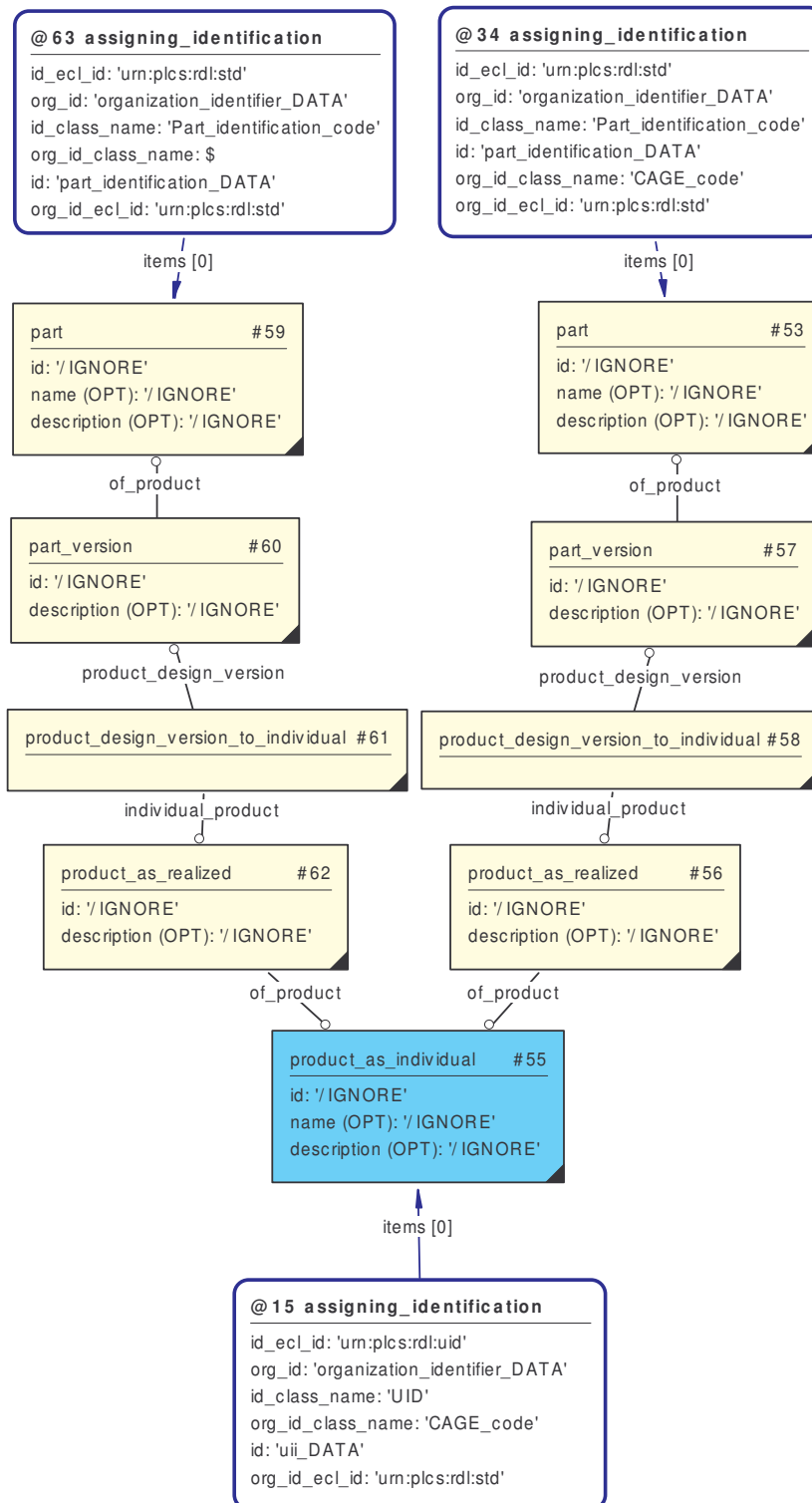


Figure 28 Current Part Number (& original p.n.) assigned to individual Ull identified part

Assume that the original part number is held in @34.assigning\_identification.id and the current part number is held in @63.assigning\_identification.id. The assignment of the identifiers is classified using reference data as “Part\_identification\_code”. The distinction between the two part numbers is made using effectivity [See 4.23 Part numbers with differing effectivities (Item Record.Current Part Number)]. NB The identification\_assignment entity instances are (in this diagram) included within the assigning\_identification templates. There may also be direct relationships between the part entity instances and the product\_as\_individual entity instances (See Part number (Item Record.Original Part Number) but these have not been shown here for clarity. There are two distinct product\_as\_realized entity instances corresponding to the individual product before and after modification (or simply redesignation) in accordance with the new part (design). Here there are two distinct parts and associated part numbers. Each part is associated with one part\_version. An alternative scenario would be a single part with a series or versions – each identified separately. The individual product retains its original identity throughout.

## 4.23.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('current_part_no.stp','2006-02-10T20:35:21',('Eurostep
Limited'),(''),'GraphicalInstance 1.0 Beta 5 [1.0.5.7]','');
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#31 = CLASSIFICATION_ASSIGNMENT(#32, (#29), '/IGNORE');
#29 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#22, '/IGNORE', (#16));
#28 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std',$);
#27 = EXTERNAL_CLASS('/IGNORE', 'CAGE_code', '/IGNORE', #28);
#26 = CLASSIFICATION_ASSIGNMENT(#27, (#24), '/IGNORE');
#24 = IDENTIFICATION_ASSIGNMENT('org_id_DATA', '/IGNORE', '/IGNORE', (#22));
#22 = ORGANIZATION('/IGNORE', '/IGNORE');
#20 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid',$);
#19 = EXTERNAL_CLASS('/IGNORE', 'UID', '/IGNORE', #20);
#18 = CLASSIFICATION_ASSIGNMENT(#19, (#16), '/IGNORE');
#16 = IDENTIFICATION_ASSIGNMENT('uui_DATA', '/IGNORE', $, (#55));
#32 = EXTERNAL_CLASS('/IGNORE', 'Owner_of', '/IGNORE', #28);
#35 = IDENTIFICATION_ASSIGNMENT('part_id_DATA', '/IGNORE', $, (#53));
#37 = CLASSIFICATION_ASSIGNMENT(#38, (#35), '/IGNORE');
#38 = EXTERNAL_CLASS('/IGNORE', 'Part_identification_code', '/IGNORE', #28);
#41 = ORGANIZATION('/IGNORE', '/IGNORE');
#43 = IDENTIFICATION_ASSIGNMENT('org_id_DATA', '/IGNORE', '/IGNORE', (#41));
#45 = CLASSIFICATION_ASSIGNMENT(#27, (#43), '/IGNORE');
#62 = PRODUCT_AS_REALIZED('/IGNORE', '/IGNORE', #55);
#61 = PRODUCT_DESIGN_VERSION_TO_INDIVIDUAL(#60, #62);
#60 = PART_VERSION('/IGNORE', '/IGNORE', #59);
#59 = PART('/IGNORE', '/IGNORE', '/IGNORE');
#58 = PRODUCT_DESIGN_VERSION_TO_INDIVIDUAL(#57, #56);
#57 = PART_VERSION('/IGNORE', '/IGNORE', #53);
#56 = PRODUCT_AS_REALIZED('/IGNORE', '/IGNORE', #55);
#55 = PRODUCT_AS_INDIVIDUAL('/IGNORE', '/IGNORE', '/IGNORE');
#53 = PART('/IGNORE', '/IGNORE', '/IGNORE');
#48 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#41, '/IGNORE', (#35));
#50 = CLASSIFICATION_ASSIGNMENT(#32, (#48), '/IGNORE');
#79 = CLASSIFICATION_ASSIGNMENT(#32, (#77), '/IGNORE');
#77 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#70, '/IGNORE', (#64));
#75 = EXTERNAL_CLASS('/IGNORE', $, '/IGNORE', #28);
#74 = CLASSIFICATION_ASSIGNMENT(#27, (#72), '/IGNORE');
#72 = IDENTIFICATION_ASSIGNMENT('org_id_DATA', '/IGNORE', '/IGNORE', (#70));
#70 = ORGANIZATION('/IGNORE', '/IGNORE');
#67 = EXTERNAL_CLASS('/IGNORE', 'Part_identification_code', '/IGNORE', #28);
#66 = CLASSIFICATION_ASSIGNMENT(#67, (#64), '/IGNORE');
#64 = IDENTIFICATION_ASSIGNMENT('part_idDATA', '/IGNORE', $, (#59));
ENDSEC;
END-ISO-10303-21;

```

## 4.23.3 Part 28 data file

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303:28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303:28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:Classification_assignment id="i31">
    <Assigned_class>
      <ap239:External_class ref="i32" xsi:nil="true"/>
    </Assigned_class>
  </Items>
  <ap239:Organization_or_person_in_organization_assignment ref="i29" xsi:nil="true"/>

```

```
</Items>
<Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization_or_person_in_organization_assignment id="i29">
  <Assigned_entity>
    <ap239:Organization ref="i22" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
</Items>
  <ap239:Identification_assignment ref="i16" xsi:nil="true"/>
</Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:External_class_library id="i28">
  <Id>urn:plcs:rdl:std</Id>
</ap239:External_class_library>
<ap239:External_class id="i27">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i26">
  <Assigned_class>
    <ap239:External_class ref="i27" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i24" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i24">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i22" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Organization id="i22">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:External_class_library id="i20">
  <Id>urn:plcs:rdl:uid</Id>
</ap239:External_class_library>
<ap239:External_class id="i19">
  <Id>/IGNORE</Id>
  <Name>UID</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i20" xsi:nil="true"/>
  </External_source>
</ap239:External_class>

<ap239:Classification_assignment id="i18">
  <Assigned_class>
    <ap239:External_class ref="i19" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i16" xsi:nil="true"/>
  </Items>
```

```
<Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i16">
  <Identifier>uii_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Product_as_individual ref="i55" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:External_class id="i32">
  <Id>/IGNORE</Id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Identification_assignment id="i35">
  <Identifier>part_identification_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Part ref="i53" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i37">
  <Assigned_class>
    <ap239:External_class ref="i38" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i35" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i38">
  <Id>/IGNORE</Id>
  <Name>Part_identification_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Organization id="i41">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:Identification_assignment id="i43">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i41" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
```

```
<ap239:Classification_assignment id="i45">
  <Assigned_class>
```

```
<ap239:External_class ref="i27" xsi:nil="true"/>
</Assigned_class>
<Items>
  <ap239:Identification_assignment ref="i43" xsi:nil="true"/>
</Items>
<Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Product_as_realized id="i62">
  <Id>/IGNORE</Id>
  <Description>/IGNORE</Description>
  <Of_product>
    <ap239:Product_as_individual ref="i55" xsi:nil="true"/>
  </Of_product>
</ap239:Product_as_realized>
<ap239:Product_design_version_to_individual id="i61">
  <Product_design_version>
    <ap239:Part_version ref="i60" xsi:nil="true"/>
  </Product_design_version>
  <Individual_product>
    <ap239:Product_as_realized ref="i62" xsi:nil="true"/>
  </Individual_product>
</ap239:Product_design_version_to_individual>
<ap239:Part_version id="i60">
  <Id>/IGNORE</Id>
  <Description>/IGNORE</Description>
  <Of_product>
    <ap239:Part ref="i59" xsi:nil="true"/>
  </Of_product>
</ap239:Part_version>
<ap239:Part id="i59">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
</ap239:Part>
<ap239:Product_design_version_to_individual id="i58">
  <Product_design_version>
    <ap239:Part_version ref="i57" xsi:nil="true"/>
  </Product_design_version>
  <Individual_product>
    <ap239:Product_as_realized ref="i56" xsi:nil="true"/>
  </Individual_product>
</ap239:Product_design_version_to_individual>
<ap239:Part_version id="i57">
  <Id>/IGNORE</Id>
  <Description>/IGNORE</Description>
  <Of_product>
    <ap239:Part ref="i53" xsi:nil="true"/>
  </Of_product>
</ap239:Part_version>
<ap239:Product_as_realized id="i56">
  <Id>/IGNORE</Id>
  <Description>/IGNORE</Description>
  <Of_product>
    <ap239:Product_as_individual ref="i55" xsi:nil="true"/>
  </Of_product>
</ap239:Product_as_realized>
<ap239:Product_as_individual id="i55">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
</ap239:Product_as_individual>
<ap239:Part id="i53">
  <Id>/IGNORE</Id>
```



```
<Name>/IGNORE</Name>
<Description>/IGNORE</Description>
</ap239:Part>
<ap239:Organization_or_person_in_organization_assignment id="i48">
  <Assigned_entity>
    <ap239:Organization ref="i41" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i35" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Classification_assignment id="i50">
  <Assigned_class>
    <ap239:External_class ref="i32" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i48" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Classification_assignment id="i79">
  <Assigned_class>
    <ap239:External_class ref="i32" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i77" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization_or_person_in_organization_assignment id="i77">
  <Assigned_entity>
    <ap239:Organization ref="i70" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i64" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:External_class id="i75">
  <Id>/IGNORE</Id>
  <Name/>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i74">
  <Assigned_class>
    <ap239:External_class ref="i27" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i72" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i72">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i70" xsi:nil="true"/>
  </Items>
```

```
</ap239:Identification_assignment>
<ap239:Organization id="i70">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>

<ap239:External_class id="i67">
  <Id>/IGNORE</Id>
  <Name>Part_identification_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i66">
  <Assigned_class>
    <ap239:External_class ref="i67" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i64" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i64">
  <Identifier>part_identification_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Part ref="i59" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
</ap239:uos>
```

## 4.24 Part number effectivity (Item Record.Current Part Number Effective Date)

### 4.24.1 Instance diagram

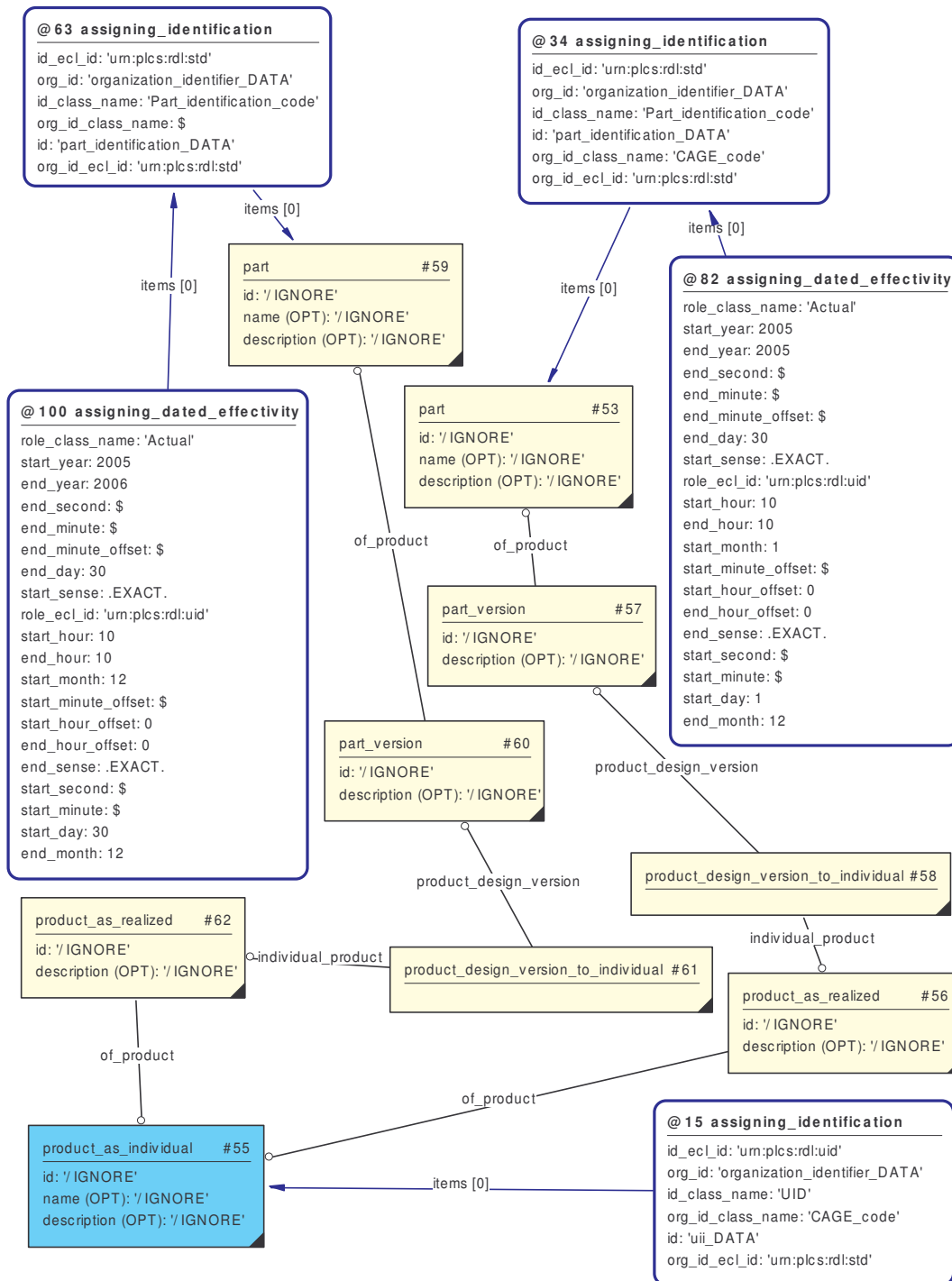


Figure 29 Current Part Number Effective Date (& original p.n.) assigned to individual UI identified part

Assume that the original part number is held in @34.assigning\_identification.id and the current part number is held in @63.assigning\_identification.id. The assignment of the identifiers is classified using reference data as "Part\_identification\_code". The distinction between the two part numbers is made using effectivity. NB The identification\_assignment entity instances are (in this diagram) included within the assigning\_identification templates. There may also be direct relationships between the part entity instances and the product\_as\_individual entity instances (See Part number (Item Record.Original Part Number) but these have not been shown here for clarity. There are two distinct product\_as\_realized entity instances corresponding to the individual product before and after modification (or simply redesignation) in accordance with the new part (design). Here there are two distinct parts and associated part numbers. Each part is associated with one part\_version. An alternative scenario would be a single part with a series or versions – each identified separately. The individual product retains its original identity throughout.

## 4.24.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('cuurent_part_no_eff_date.stp','2006-02-16T13:24:49', ('Eurostep
Limited'), (''), ('', 'GraphicalInstance 1.0 Beta 5 [1.0.5.7]',''));
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#31 = CLASSIFICATION_ASSIGNMENT(#32, (#29), '/IGNORE');
#29 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#22, '/IGNORE', (#16));
#28 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std',$);
#27 = EXTERNAL_CLASS('/IGNORE', 'CAGE_code', '/IGNORE', #28);
#26 = CLASSIFICATION_ASSIGNMENT(#27, (#24), '/IGNORE');
#24 =
IDENTIFICATION_ASSIGNMENT('organization_identifier_DATA', '/IGNORE', '/IGNORE', (#22
));
#22 = ORGANIZATION('/IGNORE', '/IGNORE');
#20 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid',$);
#19 = EXTERNAL_CLASS('/IGNORE', 'UID', '/IGNORE', #20);
#18 = CLASSIFICATION_ASSIGNMENT(#19, (#16), '/IGNORE');
#16 = IDENTIFICATION_ASSIGNMENT('uii_DATA', '/IGNORE', $, (#55));
#32 = EXTERNAL_CLASS('/IGNORE', 'Owner_of', '/IGNORE', #28);
#35 = IDENTIFICATION_ASSIGNMENT('part_identification_DATA', '/IGNORE', $, (#53));
#37 = CLASSIFICATION_ASSIGNMENT(#38, (#35), '/IGNORE');
#38 = EXTERNAL_CLASS('/IGNORE', 'Part_identification_code', '/IGNORE', #28);
#41 = ORGANIZATION('/IGNORE', '/IGNORE');
#43 =
IDENTIFICATION_ASSIGNMENT('organization_identifier_DATA', '/IGNORE', '/IGNORE', (#41
));
#45 = CLASSIFICATION_ASSIGNMENT(#27, (#43), '/IGNORE');
#62 = PRODUCT_AS_REALIZED('/IGNORE', '/IGNORE', #55);
#61 = PRODUCT_DESIGN_VERSION_TO_INDIVIDUAL(#60, #62);
#60 = PART_VERSION('/IGNORE', '/IGNORE', #59);
#59 = PART('/IGNORE', '/IGNORE', '/IGNORE');
#58 = PRODUCT_DESIGN_VERSION_TO_INDIVIDUAL(#57, #56);
#57 = PART_VERSION('/IGNORE', '/IGNORE', #53);
#56 = PRODUCT_AS_REALIZED('/IGNORE', '/IGNORE', #55);
#55 = PRODUCT_AS_INDIVIDUAL('/IGNORE', '/IGNORE', '/IGNORE');
#53 = PART('/IGNORE', '/IGNORE', '/IGNORE');
#48 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#41, '/IGNORE', (#35));
#40 = CLASSIFICATION_ASSIGNMENT(#32, (#48), '/IGNORE');
#79 = CLASSIFICATION_ASSIGNMENT(#32, (#77), '/IGNORE');
#77 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#70, '/IGNORE', (#64));
#74 = CLASSIFICATION_ASSIGNMENT(#27, (#72), '/IGNORE');
#72 =
IDENTIFICATION_ASSIGNMENT('organization_identifier_DATA', '/IGNORE', '/IGNORE', (#70
));
#70 = ORGANIZATION('/IGNORE', '/IGNORE');
#66 = CLASSIFICATION_ASSIGNMENT(#38, (#64), '/IGNORE');
#64 = IDENTIFICATION_ASSIGNMENT('part_identification_DATA', '/IGNORE', $, (#59));
#94 = TIME_OFFSET(0, $, .EXACT.);
#93 = LOCAL_TIME(10, $, $, #94);
#92 = CALENDAR_DATE(2005, 1, 1);
#91 = DATE_TIME(#92, #93);
#89 = DATED_EFFECTIVITY('/IGNORE', '/IGNORE', '/IGNORE', $, $);
#86 = EXTERNAL_CLASS('/IGNORE', 'Actual', '/IGNORE', #20);
#85 = CLASSIFICATION_ASSIGNMENT(#86, (#83), '/IGNORE');
#83 = EFFECTIVITY_ASSIGNMENT($, '/IGNORE', (#35));
#111 = LOCAL_TIME(10, $, $, #112);
#110 = CALENDAR_DATE(2005, 12, 30);
#109 = DATE_TIME(#110, #111);
#107 = DATED_EFFECTIVITY('/IGNORE', '/IGNORE', '/IGNORE', $, $);

```

```
#103 = CLASSIFICATION_ASSIGNMENT (#86, (#101), '/IGNORE');
#101 = EFFECTIVITY_ASSIGNMENT ($, '/IGNORE', (#64));
#99 = TIME_OFFSET (0, $, .EXACT.);
#98 = LOCAL_TIME (10, $, $, #99);
#97 = CALENDAR_DATE (2005, 12, 30);
#96 = DATE_TIME (#97, #98);
#117 = TIME_OFFSET (0, $, .EXACT.);
#116 = LOCAL_TIME (10, $, $, #117);
#115 = CALENDAR_DATE (2006, 12, 30);
#114 = DATE_TIME (#115, #116);
#112 = TIME_OFFSET (0, $, .EXACT.);
ENDSEC;
END-ISO-10303-21;
```

#### 4.24.3 Part 28 data file

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303-28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:Classification_assignment id="i31">
    <Assigned_class>
      <ap239:External_class ref="i32" xsi:nil="true"/>
    </Assigned_class>
  </Items>
  <ap239:Organization_or_person_in_organization_assignment ref="i29" xsi:nil="true"/>
</Items>
<Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization_or_person_in_organization_assignment id="i29">
  <Assigned_entity>
    <ap239:Organization ref="i22" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  </Items>
  <ap239:Identification_assignment ref="i16" xsi:nil="true"/>
</Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:External_class_library id="i28">
  <Id>urn:plcs:rdl:std</Id>
</ap239:External_class_library>
<ap239:External_class id="i27">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i26">
  <Assigned_class>
    <ap239:External_class ref="i27" xsi:nil="true"/>
  </Assigned_class>
  </Items>
  <ap239:Identification_assignment ref="i24" xsi:nil="true"/>
</Items>
<Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i24">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
```

```
<Items>
  <ap239:Organization ref="i22" xsi:nil="true"/>
</Items>
</ap239:Identification_assignment>

<ap239:Organization id="i22">
  <id>/IGNORE</id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:External_class_library id="i20">
  <id>urn:plcs:rdl:uid</id>
</ap239:External_class_library>
<ap239:External_class id="i19">
  <id>/IGNORE</id>
  <Name>UID</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i20" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i18">
  <Assigned_class>
    <ap239:External_class ref="i19" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i16" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i16">
  <Identifier>uii_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Product_as_individual ref="i55" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:External_class id="i32">
  <id>/IGNORE</id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i28" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Identification_assignment id="i35">
  <Identifier>part_identification_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Part ref="i53" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i37">
  <Assigned_class>
    <ap239:External_class ref="i38" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i35" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i38">
  <id>/IGNORE</id>
  <Name>Part_identification_code</Name>
```

```
<Description>/IGNORE</Description>
<External_source>
  <ap239:External_class_library ref="i28" xsi:nil="true"/>
</External_source>
</ap239:External_class>
<ap239:Organization id="i41">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>

<ap239:Identification_assignment id="i43">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i41" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i45">
  <Assigned_class>
    <ap239:External_class ref="i27" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i43" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Product_as_realized id="i62">
  <Id>/IGNORE</Id>
  <Description>/IGNORE</Description>
  <Of_product>
    <ap239:Product_as_individual ref="i55" xsi:nil="true"/>
  </Of_product>
</ap239:Product_as_realized>
<ap239:Product_design_version_to_individual id="i61">
  <Product_design_version>
    <ap239:Part_version ref="i60" xsi:nil="true"/>
  </Product_design_version>
  <Individual_product>
    <ap239:Product_as_realized ref="i62" xsi:nil="true"/>
  </Individual_product>
</ap239:Product_design_version_to_individual>
<ap239:Part_version id="i60">
  <Id>/IGNORE</Id>
  <Description>/IGNORE</Description>
  <Of_product>
    <ap239:Part ref="i59" xsi:nil="true"/>
  </Of_product>
</ap239:Part_version>
<ap239:Part id="i59">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
</ap239:Part>
<ap239:Product_design_version_to_individual id="i58">
  <Product_design_version>
    <ap239:Part_version ref="i57" xsi:nil="true"/>
  </Product_design_version>
  <Individual_product>
    <ap239:Product_as_realized ref="i56" xsi:nil="true"/>
  </Individual_product>
</ap239:Product_design_version_to_individual>
<ap239:Part_version id="i57">
```



```
</id>/IGNORE</id>
<Description>/IGNORE</Description>
<Of_product>
  <ap239:Part ref="i53" xsi:nil="true"/>
</Of_product>
</ap239:Part_version>
<ap239:Product_as_realized id="i56">
  </id>/IGNORE</id>
  <Description>/IGNORE</Description>
  <Of_product>
    <ap239:Product_as_individual ref="i55" xsi:nil="true"/>
  </Of_product>
</ap239:Product_as_realized>

<ap239:Product_as_individual id="i55">
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  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
</ap239:Product_as_individual>
<ap239:Part id="i53">
  </id>/IGNORE</id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
</ap239:Part>
<ap239:Organization_or_person_in_organization_assignment id="i48">
  <Assigned_entity>
    <ap239:Organization ref="i41" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i35" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Classification_assignment id="i50">
  <Assigned_class>
    <ap239:External_class ref="i32" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i48" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Classification_assignment id="i79">
  <Assigned_class>
    <ap239:External_class ref="i32" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i77" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization_or_person_in_organization_assignment id="i77">
  <Assigned_entity>
    <ap239:Organization ref="i70" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i64" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Classification_assignment id="i74">
  <Assigned_class>
```

```
<ap239:External_class ref="i27" xsi:nil="true"/>
</Assigned_class>
</Items>
<ap239:Identification_assignment ref="i72" xsi:nil="true"/>
</Items>
<Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i72">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  </Items>
  <ap239:Organization ref="i70" xsi:nil="true"/>
</Items>
</ap239:Identification_assignment>
<ap239:Organization id="i70">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>

<ap239:Classification_assignment id="i66">
  <Assigned_class>
    <ap239:External_class ref="i38" xsi:nil="true"/>
  </Assigned_class>
  </Items>
  <ap239:Identification_assignment ref="i64" xsi:nil="true"/>
</Items>
<Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i64">
  <Identifier>part_identification_DATA</Identifier>
  <Role>/IGNORE</Role>
  </Items>
  <ap239:Part ref="i59" xsi:nil="true"/>
</Items>
</ap239:Identification_assignment>
<ap239:Time_offset id="i94">
  <Hour_offset>0</Hour_offset>
  <Sense>exact</Sense>
</ap239:Time_offset>
<ap239:Local_time id="i93">
  <Hour_component>10</Hour_component>
  <Zone>
    <ap239:Time_offset ref="i94" xsi:nil="true"/>
  </Zone>
</ap239:Local_time>
<ap239:Calendar_date id="i92">
  <Year_component>2005</Year_component>
  <Month_component>1</Month_component>
  <Day_component>1</Day_component>
</ap239:Calendar_date>
<ap239>Date_time id="i91">
  <Date_component>
    <ap239:Calendar_date ref="i92" xsi:nil="true"/>
  </Date_component>
  <Time_component>
    <ap239:Local_time ref="i93" xsi:nil="true"/>
  </Time_component>
</ap239>Date_time>
<ap239:Dated_effectivity id="i89">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
```

```
<Start_bound/>
</ap239:Dated_effectivity>
<ap239:External_class id="i86">
  <Id>/IGNORE</Id>
  <Name>Actual</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i20" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i85">
  <Assigned_class>
    <ap239:External_class ref="i86" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Effectivity_assignment ref="i83" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
```

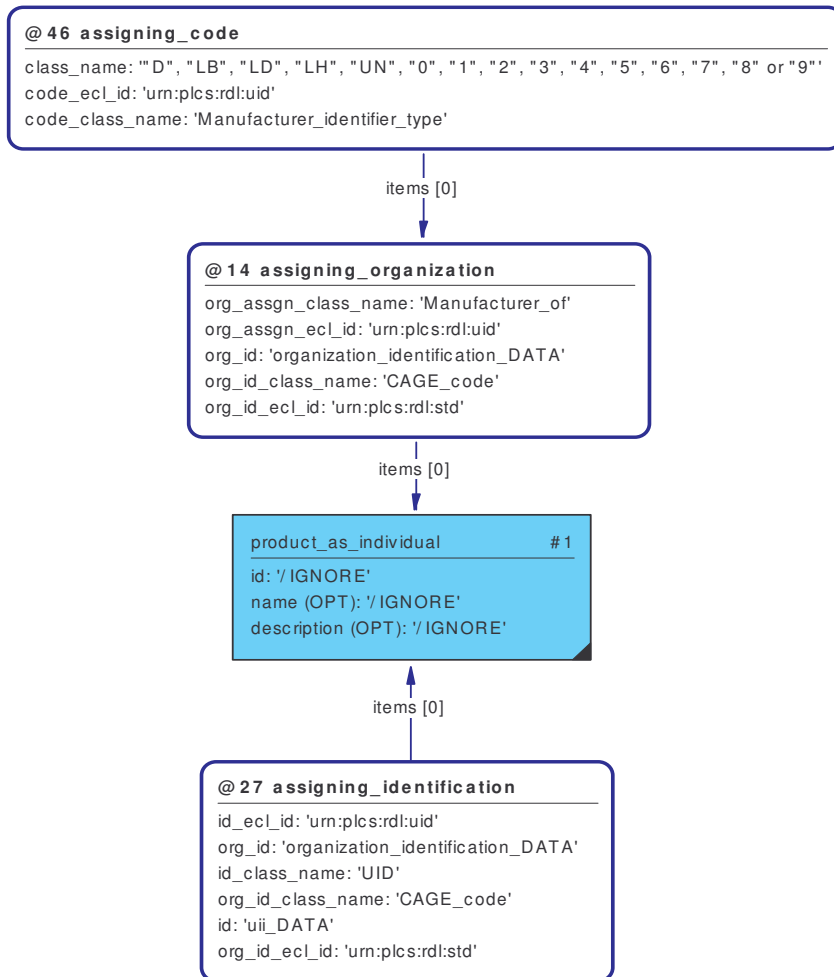
```
<ap239:Effectivity_assignment id="i83">
  <Assigned_effectivity>
    <ap239:Effectivity xsi:nil="true"/>
  </Assigned_effectivity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i35" xsi:nil="true"/>
  </Items>
</ap239:Effectivity_assignment>
<ap239:Local_time id="i111">
  <Hour_component>10</Hour_component>
  <Zone>
    <ap239:Time_offset ref="i112" xsi:nil="true"/>
  </Zone>
</ap239:Local_time>
<ap239:Calendar_date id="i110">
  <Year_component>2005</Year_component>
  <Month_component>12</Month_component>
  <Day_component>30</Day_component>
</ap239:Calendar_date>
<ap239:Date_time id="i109">
  <Date_component>
    <ap239:Calendar_date ref="i110" xsi:nil="true"/>
  </Date_component>
  <Time_component>
    <ap239:Local_time ref="i111" xsi:nil="true"/>
  </Time_component>
</ap239:Date_time>
<ap239:Dated_effectivity id="i107">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
  <Start_bound/>
</ap239:Dated_effectivity>
<ap239:Classification_assignment id="i103">
  <Assigned_class>
    <ap239:External_class ref="i86" xsi:nil="true"/>
  </Assigned_class>
```

```
<Items>
  <ap239:Effectivity_assignment ref="i101" xsi:nil="true"/>
</Items>
<Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Effectivity_assignment id="i101">
  <Assigned_effectivity>
    <ap239:Effectivity xsi:nil="true"/>
  </Assigned_effectivity>
  <Role>/IGNORE</Role>
</Items>
  <ap239:Identification_assignment ref="i64" xsi:nil="true"/>
</Items>
</ap239:Effectivity_assignment>
<ap239:Time_offset id="i99">
  <Hour_offset>0</Hour_offset>
  <Sense>exact</Sense>
</ap239:Time_offset>
<ap239:Local_time id="i98">
  <Hour_component>10</Hour_component>
  <Zone>
    <ap239:Time_offset ref="i99" xsi:nil="true"/>
  </Zone>
</ap239:Local_time>
<ap239:Calendar_date id="i97">
  <Year_component>2005</Year_component>
  <Month_component>12</Month_component>
  <Day_component>30</Day_component>
</ap239:Calendar_date>
<ap239>Date_time id="i96">
  <Date_component>
    <ap239:Calendar_date ref="i97" xsi:nil="true"/>
  </Date_component>
  <Time_component>
    <ap239:Local_time ref="i98" xsi:nil="true"/>
  </Time_component>
</ap239>Date_time>
<ap239:Time_offset id="i117">
  <Hour_offset>0</Hour_offset>
  <Sense>exact</Sense>
</ap239:Time_offset>
<ap239:Local_time id="i116">
  <Hour_component>10</Hour_component>
  <Zone>
    <ap239:Time_offset ref="i117" xsi:nil="true"/>
  </Zone>
</ap239:Local_time>
<ap239:Calendar_date id="i115">
  <Year_component>2006</Year_component>
  <Month_component>12</Month_component>
  <Day_component>30</Day_component>
</ap239:Calendar_date>
<ap239>Date_time id="i114">
  <Date_component>
    <ap239:Calendar_date ref="i115" xsi:nil="true"/>
  </Date_component>
  <Time_component>
    <ap239:Local_time ref="i116" xsi:nil="true"/>
  </Time_component>
</ap239>Date_time>
<ap239:Time_offset id="i112">
  <Hour_offset>0</Hour_offset>
```

Eurostep.ESPCUK14.000154, Final version 22, 2006-05-10 20:37:53  
 <Sense>exact</Sense>  
 </ap239:Time\_offset>  
 </ap239:uos>

## 4.25 Manufacturer identifier code (Item Record.Manufacturer Code)

### 4.25.1 Instance diagram



**Figure 30 Manufacturer Code assigned to the identifier of the manufacturer of the individual UII identified part**

The manufacturer identifier type code ("D" – CAGE, "LB" - ANSI T1.220, "LD" – DoDAAC, "LH" – EHBCC, "UN" – DUNS; or "0", "1", "2", "3", "4", "5", "6", "7", "8" or "9" - EAN.UCC Company Prefix) is held in @46.assigning\_code.class\_name. This is assigned to the identification\_assignment applied to the organization that manufactured the item identified by the UII.

## 4.25.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('man_id_code.stp','2006-02-16T21:15:17', ('someone'), (''), ('',
'GraphicalInstance 1.0 Beta 5 [1.0.5.7]',''));
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#15 = ORGANIZATION('/IGNORE','/IGNORE');
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE','/IGNORE','/IGNORE');
#31 = EXTERNAL_CLASS('/IGNORE','UID','/IGNORE',#26);
#30 = CLASSIFICATION_ASSIGNMENT(#31,#28,'/IGNORE');
#28 = IDENTIFICATION_ASSIGNMENT('uii_DATA','/IGNORE',$,(#1));
#26 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid',$);
#25 = EXTERNAL_CLASS('/IGNORE','Manufacturer_of','/IGNORE',#26);
#24 = CLASSIFICATION_ASSIGNMENT(#25,#22,'/IGNORE');
#22 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#15,'/IGNORE',( #1));
#21 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std',$);
#20 = EXTERNAL_CLASS('/IGNORE','CAGE_code','/IGNORE',#21);
#19 = CLASSIFICATION_ASSIGNMENT(#20,#17,'/IGNORE');
#17 =
IDENTIFICATION_ASSIGNMENT('organization_identification_DATA','/IGNORE','/IGNORE',
(#15));
#47 = CLASSIFICATION_ASSIGNMENT(#48,#17,'/IGNORE');
#44 = EXTERNAL_CLASS('/IGNORE','Owner_of','/IGNORE',#21);
#43 = CLASSIFICATION_ASSIGNMENT(#44,#41,'/IGNORE');
#41 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#34,'/IGNORE',( #28));
#38 = CLASSIFICATION_ASSIGNMENT(#20,#36,'/IGNORE');
#36 =
IDENTIFICATION_ASSIGNMENT('organization_id_DATA','/IGNORE','/IGNORE',( #34));
#34 = ORGANIZATION('/IGNORE','/IGNORE');
#51 = EXTERNAL_CLASS('/IGNORE','Manufacturer_identifier_type','/IGNORE',#26);
#50 = CLASSIFICATION_ASSIGNMENT(#51,#48,'/IGNORE');
#48 = CLASS('/IGNORE','"D", "LB", "LD", "LH", "UN", "0", "1", "2", "3", "4", "5",
"6", "7", "8" or "9"', '/IGNORE');
ENDSEC;
END-ISO-10303-21;

```

## 4.25.3 Part 28 data file

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303:28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303:28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:Organization id="i15">
    <id>/IGNORE</id>
    <Name>/IGNORE</Name>
  </ap239:Organization>
  <ap239:Product_as_individual id="i1">
    <id>/IGNORE</id>
    <Name>/IGNORE</Name>
    <Description>/IGNORE</Description>
  </ap239:Product_as_individual>
  <ap239:External_class id="i31">
    <id>/IGNORE</id>
    <Name>UID</Name>
    <Description>/IGNORE</Description>
    <External_source>
      <ap239:External_class_library ref="i26" xsi:nil="true"/>
    </External_source>
  </ap239:External_class>

```

```
<ap239:Classification_assignment id="i30">
  <Assigned_class>
    <ap239:External_class ref="i31" xsi:nil="true"/>
  </Assigned_class>
</Items>
  <ap239:Identification_assignment ref="i28" xsi:nil="true"/>
</Items>
<Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i28">
  <Identifier>uii_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:External_class_library id="i26">
  <Id>urn:plcs:rdl:uid</Id>
</ap239:External_class_library>
<ap239:External_class id="i25">
  <Id>/IGNORE</Id>
  <Name>Manufacturer_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i26" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i24">
  <Assigned_class>
    <ap239:External_class ref="i25" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i22" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization_or_person_in_organization_assignment id="i22">
  <Assigned_entity>
    <ap239:Organization ref="i15" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:External_class_library id="i21">
  <Id>urn:plcs:rdl:std</Id>
</ap239:External_class_library>
<ap239:External_class id="i20">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i21" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i19">
  <Assigned_class>
    <ap239:External_class ref="i20" xsi:nil="true"/>
  </Assigned_class>
</ap239:Classification_assignment>
```

```
</Items>
  <ap239:Identification_assignment ref="i17" xsi:nil="true"/>
</Items>
<Role>/IGNORE</Role>
</ap239:Classification_assignment>

<ap239:Identification_assignment id="i17">
  <Identifier>organization_identification_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i15" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i47">
  <Assigned_class>
    <ap239:Class ref="i48" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i17" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i44">
  <Id>/IGNORE</Id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i21" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i43">
  <Assigned_class>
    <ap239:External_class ref="i44" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i41" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization_or_person_in_organization_assignment id="i41">
  <Assigned_entity>
    <ap239:Organization ref="i34" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i28" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Classification_assignment id="i38">
  <Assigned_class>
    <ap239:External_class ref="i20" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i36" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i36">
  <Identifier>organization_identification_DATA</Identifier>
  <Role>/IGNORE</Role>
```

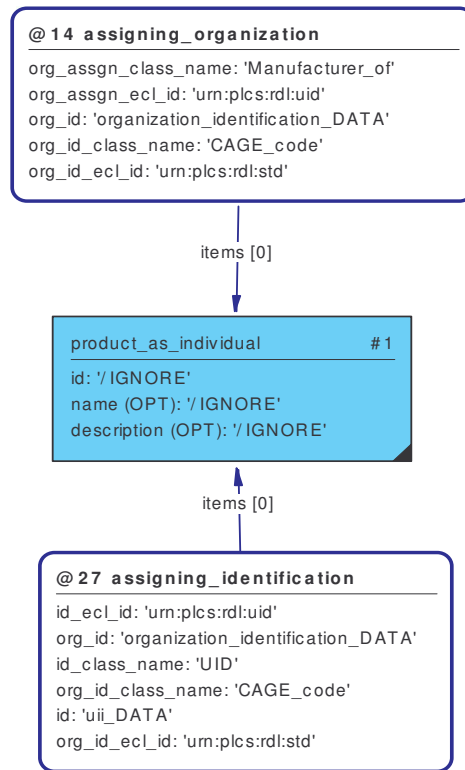


```
<Description>/IGNORE</Description>
</Items>
  <ap239:Organization ref="i34" xsi:nil="true"/>
</Items>
</ap239:Identification_assignment>
<ap239:Organization id="i34">
  </IGNORE</id>
  <Name>/IGNORE</Name>
</ap239:Organization>

<ap239:External_class id="i51">
  </IGNORE</id>
  <Name>Manufacturer_identifier_type</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i26" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i50">
  <Assigned_class>
    <ap239:External_class ref="i51" xsi:nil="true"/>
  </Assigned_class>
  </Items>
    <ap239:Class ref="i48" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Class id="i48">
  </IGNORE</id>
  <Name>"D", "LB", "LD", "LH", "UN", "0", "1", "2", "3", "4", "5", "6", "7", "8" or "9"</Name>
  <Description>/IGNORE</Description>
</ap239:Class>
</ap239:uos>
```

## 4.26 Manufacturer identifier (Item Record.Manufacturer Identifier)

### 4.26.1 Instance diagram



**Figure 31 Manufacturer Identifier assigned to individual Ull identified part**

The identifier for the manufacturer of the uniquely identified product is in @14 assigning\_organization.org\_id. The code is one of the three letter currency codes specified by ISO 4217<sup>15</sup>. NB The identification\_assignment entity instances are (in this diagram) included within the assigning\_identification templates.

## 4.26.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('man_id.stp','2006-02-16T20:52:16',('someone'),(''),'','GraphicalInstance 1.0 Beta 5 [1.0.5.7]','');
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#15 = ORGANIZATION('/IGNORE','/IGNORE');
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE','/IGNORE','/IGNORE');
#31 = EXTERNAL_CLASS('/IGNORE','UID','/IGNORE',#26);
#30 = CLASSIFICATION_ASSIGNMENT(#31,#28,'/IGNORE');
#28 = IDENTIFICATION_ASSIGNMENT('uii_DATA','/IGNORE',$,(#1));
#26 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid',$);
#25 = EXTERNAL_CLASS('/IGNORE','Manufacturer_of','/IGNORE',#26);
#24 = CLASSIFICATION_ASSIGNMENT(#25,#22,'/IGNORE');
#22 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#15,'/IGNORE',(#1));
#21 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std',$);
#20 = EXTERNAL_CLASS('/IGNORE','CAGE_code','/IGNORE',#21);
#19 = CLASSIFICATION_ASSIGNMENT(#20,#17,'/IGNORE');
#17 = IDENTIFICATION_ASSIGNMENT('org_id_DATA','/IGNORE','/IGNORE',(#15));
#44 = EXTERNAL_CLASS('/IGNORE','Owner_of','/IGNORE',#21);
#43 = CLASSIFICATION_ASSIGNMENT(#44,#41,'/IGNORE');
#41 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#34,'/IGNORE',(#28));
#38 = CLASSIFICATION_ASSIGNMENT(#20,#36,'/IGNORE');
#36 = IDENTIFICATION_ASSIGNMENT('org_id_DATA','/IGNORE','/IGNORE',(#34));
#34 = ORGANIZATION('/IGNORE','/IGNORE');
ENDSEC;
END-ISO-10303-21;

```

## 4.26.3 Part 28 data file

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303-28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:Organization id="i15">
    <id>/IGNORE</id>
    <Name>/IGNORE</Name>
  </ap239:Organization>
  <ap239:Product_as_individual id="i1">
    <id>/IGNORE</id>
    <Name>/IGNORE</Name>
    <Description>/IGNORE</Description>
  </ap239:Product_as_individual>
  <ap239:External_class id="i31">
    <id>/IGNORE</id>
    <Name>UID</Name>
    <Description>/IGNORE</Description>
    <External_source>
      <ap239:External_class_library ref="i26" xsi:nil="true"/>
    </External_source>
  </ap239:External_class>
  <ap239:Classification_assignment id="i30">
    <Assigned_class>
      <ap239:External_class ref="i31" xsi:nil="true"/>
    </Assigned_class>
    <Items>
      <ap239:Identification_assignment ref="i28" xsi:nil="true"/>
    </Items>
    <Role>/IGNORE</Role>

```

```
</ap239:Classification_assignment>
```

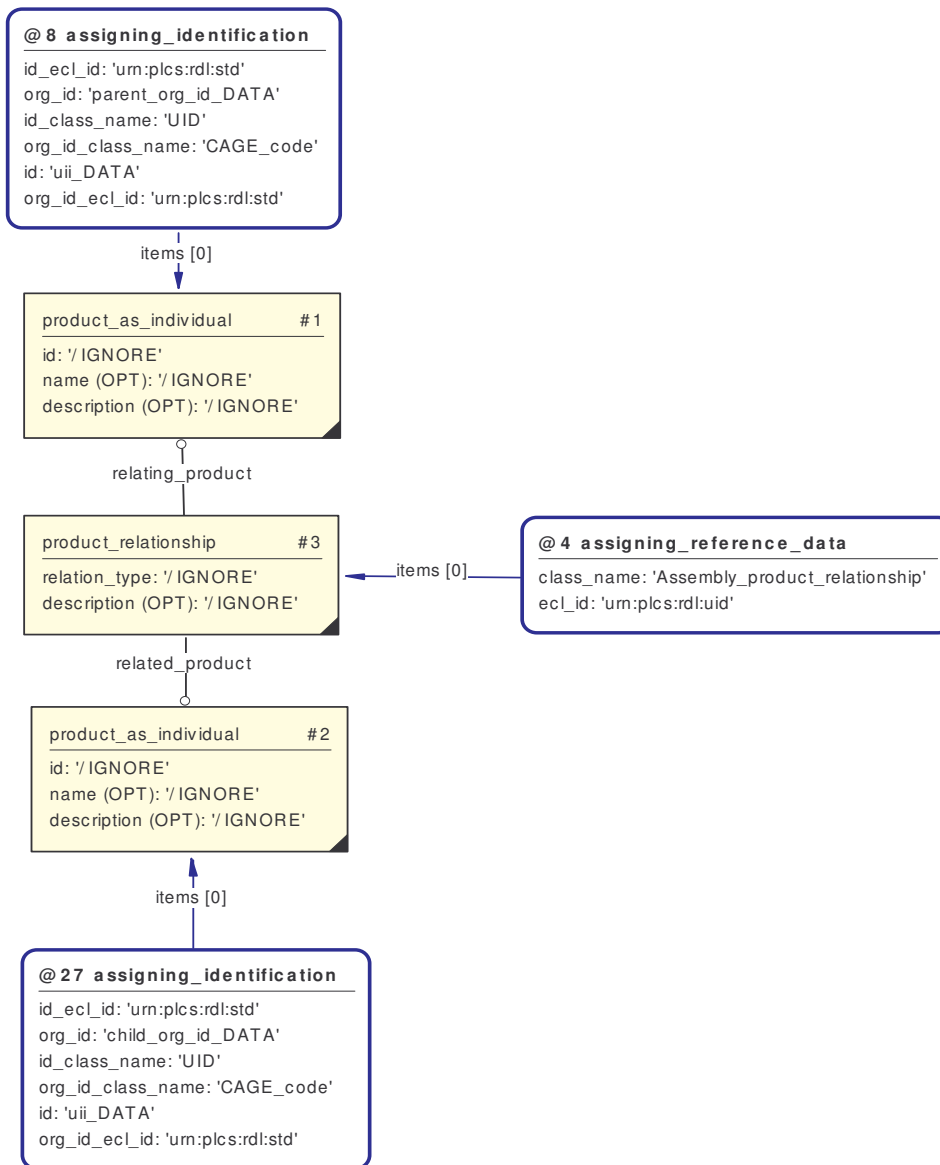
```
<ap239:Identification_assignment id="i28">
  <Identifier>uii_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:External_class_library id="i26">
  <Id>urn:plcs:rdl:uid</Id>
</ap239:External_class_library>
<ap239:External_class id="i25">
  <Id>/IGNORE</Id>
  <Name>Manufacturer_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i26" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i24">
  <Assigned_class>
    <ap239:External_class ref="i25" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i22" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization_or_person_in_organization_assignment id="i22">
  <Assigned_entity>
    <ap239:Organization ref="i15" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:External_class_library id="i21">
  <Id>urn:plcs:rdl:std</Id>
</ap239:External_class_library>
<ap239:External_class id="i20">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i21" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i19">
  <Assigned_class>
    <ap239:External_class ref="i20" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i17" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i17">
  <Identifier>organization_identification_DATA</Identifier>
  <Role>/IGNORE</Role>
```

```
<Description>/IGNORE</Description>
</Items>
  <ap239:Organization ref="i15" xsi:nil="true"/>
</Items>
</ap239:Identification_assignment>

<ap239:External_class id="i44">
  <id>/IGNORE</id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i21" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i43">
  <Assigned_class>
    <ap239:External_class ref="i44" xsi:nil="true"/>
  </Assigned_class>
  </Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i41" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization_or_person_in_organization_assignment id="i41">
  <Assigned_entity>
    <ap239:Organization ref="i34" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  </Items>
    <ap239:Identification_assignment ref="i28" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Classification_assignment id="i38">
  <Assigned_class>
    <ap239:External_class ref="i20" xsi:nil="true"/>
  </Assigned_class>
  </Items>
    <ap239:Identification_assignment ref="i36" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i36">
  <Identifier>organization_identification_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  </Items>
    <ap239:Organization ref="i34" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Organization id="i34">
  <id>/IGNORE</id>
  <Name>/IGNORE</Name>
</ap239:Organization>
</ap239:uos>
```

## 4.27 Ull of parent in assembly (Item Record.Parent Ull)

### 4.27.1 Instance diagram



**Figure 32 Parent Ull assigned to the parent (in an assembly) of the individual Ull identified part**

The identifier for the parent of the uniquely identified product is in @8 assigning\_identification.id. NB The identification\_assignment entity instances are (in this diagram) included within the assigning\_identification templates. This is the simplest possible way of representing a parent-child relationship between two individual products in an assembly. Typically, such a relationship would be a manifestation of a generic assembly structure defined for the part (type) using other resources of PLCS.

## 4.27.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('parent_iii.stp','2006-02-17T11:17:43', ('Eurostep Limited'), (''), ('',
'GraphicalInstance 1.0 Beta 5 [1.0.5.7]',''));
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#15 = ORGANIZATION('/IGNORE','/IGNORE');
#13 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std',$);
#12 = EXTERNAL_CLASS('/IGNORE','UID','/IGNORE',#13);
#11 = CLASSIFICATION_ASSIGNMENT(#12,(#9),'/IGNORE');
#9 = IDENTIFICATION_ASSIGNMENT('iii_DATA','/IGNORE',$,(#1));
#7 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid',$);
#6 = EXTERNAL_CLASS('/IGNORE','Assembly_product_relationship','/IGNORE',#7);
#5 = CLASSIFICATION_ASSIGNMENT(#6,(#3),'/IGNORE');
#3 = PRODUCT_RELATIONSHIP('/IGNORE','/IGNORE',#1,#2);
#2 = PRODUCT_AS_INDIVIDUAL('/IGNORE','/IGNORE','/IGNORE');
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE','/IGNORE','/IGNORE');
#30 = CLASSIFICATION_ASSIGNMENT(#12,(#28),'/IGNORE');
#28 = IDENTIFICATION_ASSIGNMENT('iii_DATA','/IGNORE',$,(#2));
#25 = EXTERNAL_CLASS('/IGNORE','Owner_of','/IGNORE',#13);
#24 = CLASSIFICATION_ASSIGNMENT(#25,(#22),'/IGNORE');
#22 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#15,'/IGNORE',(#9));
#20 = EXTERNAL_CLASS('/IGNORE','CAGE_code','/IGNORE',#13);
#19 = CLASSIFICATION_ASSIGNMENT(#20,(#17),'/IGNORE');
#17 = IDENTIFICATION_ASSIGNMENT('parent_org_id_DATA','/IGNORE','/IGNORE',(#15));
#43 = CLASSIFICATION_ASSIGNMENT(#25,(#41),'/IGNORE');
#41 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#34,'/IGNORE',(#28));
#38 = CLASSIFICATION_ASSIGNMENT(#20,(#36),'/IGNORE');
#36 = IDENTIFICATION_ASSIGNMENT('child_org_id_DATA','/IGNORE','/IGNORE',(#34));
#34 = ORGANIZATION('/IGNORE','/IGNORE');
ENDSEC;
END-ISO-10303-21;

```

## 4.27.3 Part 28 data file

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303-28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:Organization id="i15">
    <id>/IGNORE</id>
    <Name>/IGNORE</Name>
  </ap239:Organization>
  <ap239:External_class_library id="i13">
    <id>urn:plcs:rdl:std</id>
  </ap239:External_class_library>
  <ap239:External_class id="i12">
    <id>/IGNORE</id>
    <Name>UID</Name>
    <Description>/IGNORE</Description>
    <External_source>
      <ap239:External_class_library ref="i13" xsi:nil="true"/>
    </External_source>
  </ap239:External_class>

```

```
<ap239:Classification_assignment id="i11">
  <Assigned_class>
    <ap239:External_class ref="i12" xsi:nil="true"/>
  </Assigned_class>
</Items>
  <ap239:Identification_assignment ref="i9" xsi:nil="true"/>
</Items>
<Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i9">
  <Identifier>uii_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:External_class_library id="i7">
  <Id>urn:plcs:rdl:uid</Id>
</ap239:External_class_library>
<ap239:External_class id="i6">
  <Id>/IGNORE</Id>
  <Name>Assembly_product_relationship</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i7" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i5">
  <Assigned_class>
    <ap239:External_class ref="i6" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Product_relationship ref="i3" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Product_relationship id="i3">
  <Relation_type>/IGNORE</Relation_type>
  <Description>/IGNORE</Description>
  <Relating_product>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Relating_product>
  <Related_product>
    <ap239:Product_as_individual ref="i2" xsi:nil="true"/>
  </Related_product>
</ap239:Product_relationship>
<ap239:Product_as_individual id="i2">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
</ap239:Product_as_individual>
<ap239:Product_as_individual id="i1">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
</ap239:Product_as_individual>
<ap239:Classification_assignment id="i30">
  <Assigned_class>
    <ap239:External_class ref="i12" xsi:nil="true"/>
  </Assigned_class>
</Items>
```



```
<ap239:Identification_assignment ref="i28" xsi:nil="true"/>
</Items>
<Role>/IGNORE</Role>
</ap239:Classification_assignment>

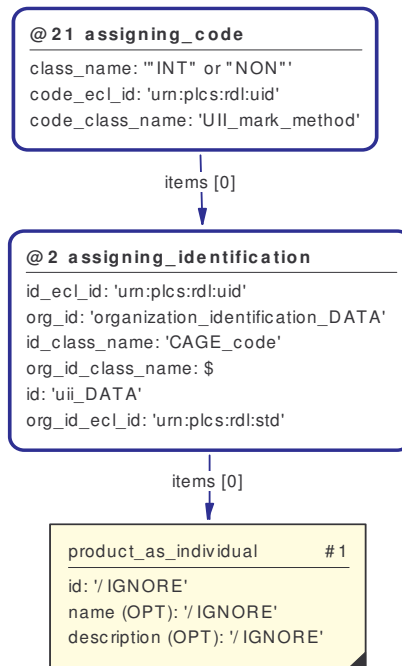
<ap239:Identification_assignment id="i28">
  <Identifier>uii_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Product_as_individual ref="i2" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:External_class id="i25">
  <Id>/IGNORE</Id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i13" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i24">
  <Assigned_class>
    <ap239:External_class ref="i25" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i22" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization_or_person_in_organization_assignment id="i22">
  <Assigned_entity>
    <ap239:Organization ref="i15" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i9" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:External_class id="i20">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i13" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i19">
  <Assigned_class>
    <ap239:External_class ref="i20" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i17" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i17">
  <Identifier>parent_org_id_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i15" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
```

```
</Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i43">
  <Assigned_class>
    <ap239:External_class ref="i25" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i41" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>

<ap239:Organization_or_person_in_organization_assignment id="i41">
  <Assigned_entity>
    <ap239:Organization ref="i34" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i28" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Classification_assignment id="i38">
  <Assigned_class>
    <ap239:External_class ref="i20" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i36" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i36">
  <Identifier>child_org_id_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i34" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Organization id="i34">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>
</ap239:uos>
```

## 4.28 Mark method identifier code (Item Record.Mark Method)

### 4.28.1 Instance diagram



**Figure 33 Mark method identifier code assigned to the identification assignment of an individual part**

The mark method code ("INT" – Intrusive or "NON" – Non-Intrusive) is held in @21.assigning\_code.class\_name. This is assigned to the identification\_assignment applied to the individual part.

## 4.28.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('mark_method_cd.stp','2006-02-23T21:54:24',('Eurostep
Limited'),(''),'GraphicalInstance 1.0 Beta 5 [1.0.5.7]','');
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#15 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std',$);
#14 = EXTERNAL_CLASS('/IGNORE',$,'/IGNORE',#15);
#13 = CLASSIFICATION_ASSIGNMENT(#14,(#11),'/IGNORE');
#11 =
IDENTIFICATION_ASSIGNMENT('organization_identification_DATA','/IGNORE','/IGNORE',
(#9));
#9 = ORGANIZATION('/IGNORE','/IGNORE');
#7 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid',$);
#6 = EXTERNAL_CLASS('/IGNORE','CAGE_code','/IGNORE',#7);
#5 = CLASSIFICATION_ASSIGNMENT(#6,(#3),'/IGNORE');
#3 = IDENTIFICATION_ASSIGNMENT('uii_DATA','/IGNORE',$,(#1));
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE','/IGNORE','/IGNORE');
#26 = EXTERNAL_CLASS('/IGNORE','UII_mark_method','/IGNORE',#7);
#25 = CLASSIFICATION_ASSIGNMENT(#26,(#23),'/IGNORE');
#23 = CLASS('/IGNORE','"INT" or "NON"', '/IGNORE');
#22 = CLASSIFICATION_ASSIGNMENT(#23,(#3),'/IGNORE');
#19 = EXTERNAL_CLASS('/IGNORE','Owner_of','/IGNORE',#15);
#18 = CLASSIFICATION_ASSIGNMENT(#19,(#16),'/IGNORE');
#16 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#9,'/IGNORE',(#3));
ENDSEC;
END-ISO-10303-21;

```

## 4.28.3 Part 28 data file

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303-28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:External_class_library id="i15">
    <id>urn:plcs:rdl:std</id>
  </ap239:External_class_library>
  <ap239:External_class id="i14">
    <id>/IGNORE</id>
    <Name>/IGNORE</Name>
    <Description>/IGNORE</Description>
    <External_source>
      <ap239:External_class_library ref="i15" xsi:nil="true"/>
    </External_source>
  </ap239:External_class>
  <ap239:Classification_assignment id="i13">
    <Assigned_class>
      <ap239:External_class ref="i14" xsi:nil="true"/>
    </Assigned_class>
    <Items>
      <ap239:Identification_assignment ref="i11" xsi:nil="true"/>
    </Items>
    <Role>/IGNORE</Role>
  </ap239:Classification_assignment>

  <ap239:Identification_assignment id="i11">

```

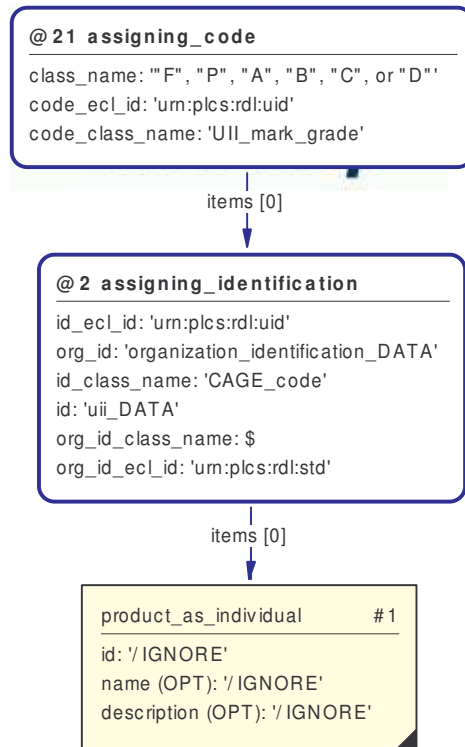
```
<Identifier>organization_identification_DATA</Identifier>
<Role>/IGNORE</Role>
<Description>/IGNORE</Description>
<Items>
  <ap239:Organization ref="i9" xsi:nil="true"/>
</Items>
</ap239:Identification_assignment>
<ap239:Organization id="i9">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:External_class_library id="i7">
  <Id>urn:plcs:rdl:uid</Id>
</ap239:External_class_library>
<ap239:External_class id="i6">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i7" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i5">
  <Assigned_class>
    <ap239:External_class ref="i6" xsi:nil="true"/>
  </Assigned_class>
</Items>
  <ap239:Identification_assignment ref="i3" xsi:nil="true"/>
</Items>
<Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i3">
  <Identifier>uij_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Product_as_individual id="i1">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
</ap239:Product_as_individual>
<ap239:External_class id="i26">
  <Id>/IGNORE</Id>
  <Name>UII_mark_method</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i7" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i25">
  <Assigned_class>
    <ap239:External_class ref="i26" xsi:nil="true"/>
  </Assigned_class>
</Items>
  <ap239:Class ref="i23" xsi:nil="true"/>
</Items>
<Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Class id="i23">
  <Id>/IGNORE</Id>
  <Name>"INT" or "NON"</Name>
```

```
<Description>/IGNORE</Description>
</ap239:Class>

<ap239:Classification_assignment id="i22">
  <Assigned_class>
    <ap239:Class ref="i23" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i3" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i19">
  <Id>/IGNORE</Id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i15" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i18">
  <Assigned_class>
    <ap239:External_class ref="i19" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i16" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization_or_person_in_organization_assignment id="i16">
  <Assigned_entity>
    <ap239:Organization ref="i9" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i3" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
</ap239:uos>
```

## 4.29 Mark grade identifier code (Item Record.Mark Grade)

### 4.29.1 Instance diagram



**Figure 34 Mark grade identifier code assigned to the identification assignment of an individual part**

The mark grade code ("INT" – Intrusive or "NON" – Non-Intrusive) is held in @21.assigning\_code.class\_name. This is assigned to the identification\_assignment applied to the individual part.

## 4.29.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('mark_grade_cd.stp','2006-02-23T21:54:24',('Eurostep
Limited'),(''),'GraphicalInstance 1.0 Beta 5 [1.0.5.7]','');
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#15 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std',$);
#14 = EXTERNAL_CLASS('/IGNORE',$,'/IGNORE',#15);
#13 = CLASSIFICATION_ASSIGNMENT(#14,(#11),'/IGNORE');
#11 =
IDENTIFICATION_ASSIGNMENT('organization_identification_DATA','/IGNORE','/IGNORE',
(#9));
#9 = ORGANIZATION('/IGNORE','/IGNORE');
#7 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:uid',$);
#6 = EXTERNAL_CLASS('/IGNORE','CAGE_code','/IGNORE',#7);
#5 = CLASSIFICATION_ASSIGNMENT(#6,(#3),'/IGNORE');
#3 = IDENTIFICATION_ASSIGNMENT('uii_DATA','/IGNORE',$,(#1));
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE','/IGNORE','/IGNORE');
#26 = EXTERNAL_CLASS('/IGNORE','UII_mark_grade','/IGNORE',#7);
#25 = CLASSIFICATION_ASSIGNMENT(#26,(#23),'/IGNORE');
#23 = CLASS('/IGNORE','"INT" or "NON"', '/IGNORE');
#22 = CLASSIFICATION_ASSIGNMENT(#23,(#3),'/IGNORE');
#19 = EXTERNAL_CLASS('/IGNORE','Owner_of','/IGNORE',#15);
#18 = CLASSIFICATION_ASSIGNMENT(#19,(#16),'/IGNORE');
#16 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#9,'/IGNORE',(#3));
ENDSEC;
END-ISO-10303-21;

```

## 4.29.3 Part 28 data file

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303-28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:External_class_library id="i15">
    <id>urn:plcs:rdl:std</id>
  </ap239:External_class_library>
  <ap239:External_class id="i14">
    <id>/IGNORE</id>
    <Name>/IGNORE</Name>
    <Description>/IGNORE</Description>
    <External_source>
      <ap239:External_class_library ref="i15" xsi:nil="true"/>
    </External_source>
  </ap239:External_class>
  <ap239:Classification_assignment id="i13">
    <Assigned_class>
      <ap239:External_class ref="i14" xsi:nil="true"/>
    </Assigned_class>
    <Items>
      <ap239:Identification_assignment ref="i11" xsi:nil="true"/>
    </Items>
    <Role>/IGNORE</Role>
  </ap239:Classification_assignment>
  <ap239:Identification_assignment id="i11">
    <Identifier>organization_identification_DATA</Identifier>
    <Role>/IGNORE</Role>
    <Description>/IGNORE</Description>
  </Items>

```



```
<ap239:Organization ref="i9" xsi:nil="true"/>
</Items>
</ap239:Identification_assignment>

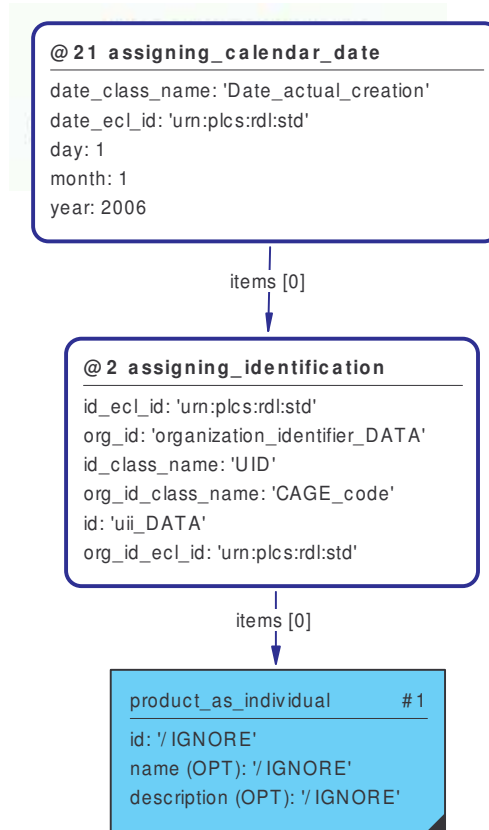
<ap239:Organization id="i9">
  <id>/IGNORE</id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:External_class_library id="i7">
  <id>urn:plcs:rdl:uid</id>
</ap239:External_class_library>
<ap239:External_class id="i6">
  <id>/IGNORE</id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i7" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i5">
  <Assigned_class>
    <ap239:External_class ref="i6" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i3" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Identification_assignment id="i3">
  <Identifier>uii_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Product_as_individual id="i1">
  <id>/IGNORE</id>
  <Name>/IGNORE</Name>
  <Description>/IGNORE</Description>
</ap239:Product_as_individual>
<ap239:External_class id="i26">
  <id>/IGNORE</id>
  <Name>UII_mark_grade</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i7" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i25">
  <Assigned_class>
    <ap239:External_class ref="i26" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Class ref="i23" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Class id="i23">
  <id>/IGNORE</id>
  <Name>"INT" or "NON"</Name>
  <Description>/IGNORE</Description>
</ap239:Class>
```

```
<ap239:Classification_assignment id="i22">
  <Assigned_class>
    <ap239:Class ref="i23" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i3" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>

<ap239:External_class id="i19">
  <Id>/IGNORE</Id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i15" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i18">
  <Assigned_class>
    <ap239:External_class ref="i19" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i16" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:Organization_or_person_in_organization_assignment id="i16">
  <Assigned_entity>
    <ap239:Organization ref="i9" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i3" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
</ap239:uos>
```

### 4.30 Creation date (Trailer Record.File Date)

#### 4.30.1 Instance diagram



**Figure 35 File Date assigned to individual Ull identified part**

The date on which the Ull data and metadata is created is held in @21.assigning\_calendar\_date.day/month/year. The date assignment is classified, using reference data, as "Date\_actual\_creation". NB The identification\_assignment entity instances are (in this diagram) included within the assigning\_identification templates.

## 4.30.2 Part 21 data file

```

ISO-10303-21;
HEADER;
FILE_DESCRIPTION(('Description'),'2;1');
FILE_NAME('creation_date.stp','2006-01-13T20:35:21',('Eurostep Limited'),$,,$,
'GraphicalInstance 1.0 Beta 4',$);
FILE_SCHEMA(('AP239_PRODUCT_LIFE_CYCLE_SUPPORT_ARM_LF'));
ENDSEC;
DATA;
#1 = PRODUCT_AS_INDIVIDUAL('/IGNORE','/IGNORE','/IGNORE');
#3 = IDENTIFICATION_ASSIGNMENT('uii_DATA','/IGNORE',$,(#1));
#5 = CLASSIFICATION_ASSIGNMENT(#6,(#3),'/IGNORE');
#6 = EXTERNAL_CLASS('/IGNORE','UID','/IGNORE',#7);
#7 = EXTERNAL_CLASS_LIBRARY('urn:plcs:rdl:std',$);
#9 = ORGANIZATION('/IGNORE','/IGNORE');
#11 = IDENTIFICATION_ASSIGNMENT('org_id_DATA','/IGNORE','/IGNORE',(#9));
#13 = CLASSIFICATION_ASSIGNMENT(#14,(#11),'/IGNORE');
#14 = EXTERNAL_CLASS('/IGNORE','CAGE_code','/IGNORE',#7);
#27 = CALENDAR_DATE(2006,1,1);
#25 = EXTERNAL_CLASS('/IGNORE','Date_actual_creation','/IGNORE',#7);
#24 = CLASSIFICATION_ASSIGNMENT(#25,(#22),'/IGNORE');
#22 = DATE_OR_DATE_TIME_ASSIGNMENT(#27,'/IGNORE',(#3));
#16 = ORGANIZATION_OR_PERSON_IN_ORGANIZATION_ASSIGNMENT(#9,'/IGNORE',(#3));
#18 = CLASSIFICATION_ASSIGNMENT(#19,(#16),'/IGNORE');
#19 = EXTERNAL_CLASS('/IGNORE','Owner_of','/IGNORE',#7);
ENDSEC;
END-ISO-10303-21;

```

## 4.30.3 Part 28 data file

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<ap239:uos xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:exp="urn:iso:std:iso:10303:28:ed-2:2005:schema:common"
xmlns:ap239="urn:iso:10303-28:xs/Product_life_cycle_support" xsi:schemaLocation="urn:iso:10303-28:xs/Product_life_cycle_support
arm_lf_p28xsd.xsd">
  <ap239:Product_as_individual id="i1">
    <Id>/IGNORE</Id>
    <Name>/IGNORE</Name>
    <Description>/IGNORE</Description>
  </ap239:Product_as_individual>
  <ap239:Identification_assignment id="i3">
    <Identifier>uii_DATA</Identifier>
    <Role>/IGNORE</Role>
    <Items>
      <ap239:Product_as_individual ref="i1" xsi:nil="true"/>
    </Items>
  </ap239:Identification_assignment>
  <ap239:Classification_assignment id="i5">
    <Assigned_class>
      <ap239:External_class ref="i6" xsi:nil="true"/>
    </Assigned_class>
    <Items>
      <ap239:Identification_assignment ref="i3" xsi:nil="true"/>
    </Items>
    <Role>/IGNORE</Role>
  </ap239:Classification_assignment>
  <ap239:External_class id="i6">
    <Id>/IGNORE</Id>
    <Name>UID</Name>
    <Description>/IGNORE</Description>
    <External_source>
      <ap239:External_class_library ref="i7" xsi:nil="true"/>
    </External_source>

```

```
<ap239:External_class_library id="i7">
  <Id>urn:plcs:rdl:std</Id>
</ap239:External_class_library>
<ap239:Organization id="i9">
  <Id>/IGNORE</Id>
  <Name>/IGNORE</Name>
</ap239:Organization>
<ap239:Identification_assignment id="i11">
  <Identifier>organization_identifier_DATA</Identifier>
  <Role>/IGNORE</Role>
  <Description>/IGNORE</Description>
  <Items>
    <ap239:Organization ref="i9" xsi:nil="true"/>
  </Items>
</ap239:Identification_assignment>
<ap239:Classification_assignment id="i13">
  <Assigned_class>
    <ap239:External_class ref="i14" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Identification_assignment ref="i11" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i14">
  <Id>/IGNORE</Id>
  <Name>CAGE_code</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i7" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Calendar_date id="i27">
  <Year_component>2006</Year_component>
  <Month_component>1</Month_component>
  <Day_component>1</Day_component>
</ap239:Calendar_date>
<ap239:External_class id="i25">
  <Id>/IGNORE</Id>
  <Name>Date_actual_creation</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i7" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
<ap239:Classification_assignment id="i24">
  <Assigned_class>
    <ap239:External_class ref="i25" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239>Date_or_date_time_assignment ref="i22" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239>Date_or_date_time_assignment id="i22">
  <Assigned_date>
    <ap239:Calendar_date ref="i27" xsi:nil="true"/>
  </Assigned_date>
  <Role>/IGNORE</Role>
```

```
</Items>
  <ap239:Identification_assignment ref="i3" xsi:nil="true"/>
</Items>
</ap239:Date_or_date_time_assignment>

<ap239:Organization_or_person_in_organization_assignment id="i16">
  <Assigned_entity>
    <ap239:Organization ref="i9" xsi:nil="true"/>
  </Assigned_entity>
  <Role>/IGNORE</Role>
  <Items>
    <ap239:Identification_assignment ref="i3" xsi:nil="true"/>
  </Items>
</ap239:Organization_or_person_in_organization_assignment>
<ap239:Classification_assignment id="i18">
  <Assigned_class>
    <ap239:External_class ref="i19" xsi:nil="true"/>
  </Assigned_class>
  <Items>
    <ap239:Organization_or_person_in_organization_assignment ref="i16" xsi:nil="true"/>
  </Items>
  <Role>/IGNORE</Role>
</ap239:Classification_assignment>
<ap239:External_class id="i19">
  <id>/IGNORE</id>
  <Name>Owner_of</Name>
  <Description>/IGNORE</Description>
  <External_source>
    <ap239:External_class_library ref="i7" xsi:nil="true"/>
  </External_source>
</ap239:External_class>
</ap239:uos>
```

## 5 Conclusions

As this document demonstrates, the PLCS model is powerful enough to capture all the semantics of UIIs and related metadata and allows for fine grained tracking of arbitrary properties over the lifetime of a product. The import and export of data in PLCS can be conducted in XML - either as standard PLCS XML Schema or as a customized domain specific schema, e.g. the UID XML Schema.

All the example file fragments specified above could be combined into a single file carrying all the relevant information. Such a file has all the necessary information to allow it in turn to be consolidated into a single database containing many such records.

A PLCS application can easily function as a local UID registry and the use of PLCS as the basis for such an UID registry would facilitate the through-life configuration management of products from product requirements definition, through product design, to product manufacture and in service product use.

The ISO standard 10303-239:2005 (PLCS - Product Life Cycle Support) is suited to many different business contexts and is deliberately generic in character. It is also very large - with a scope that is wider than most applications are designed for. In order to address these issues, DEXs have been developed in order to enforce the appropriate use of PLCS for particular constellations of data exchanged or shared in various real world scenarios (see 7). DEXs define both restrictions in PLCS scope and restrictions in PLCS semantics for specific purposes. There are, for example, DEXs corresponding to product structures, maintenance plans, and work requests. A data item that in PLCS is simply described as an “identifier” might in a DEX be further classified as a “part number” or “serial number” or UID.

DEX specifications are constructed from building blocks known as “capabilities”. These are used to accelerate DEX development and to avoid different interpretations of equivalent concepts in different DEX Specifications. Capabilities ensure a common interpretation of PLCS, avoid multiple dialects of PLCS, and reduce the amount of documentation required.

In order to complete the documentation of UIIs and related metadata using PLCS, it is recommended that an additional “Business DEX” (Data EXchange specification) for use with the UID registry be developed and contributed to the [OASIS PLCS Technical Committee](#)'s DEXlib<sup>16</sup>. This can be constructed from existing capabilities. The creation of additional templates is recommended for assigning cost properties (see Figure 26 and Figure 27). The examples in this document have been constructed using templates from existing capabilities:

Template	Capability
assigning_address	(C016): representing_person_organization
assigning_calendar_date	(C036): assigning_date_time
assigning_code	(C093): assigning_codes
assigning_contract	(C083): representing_contract
assigning_dated_effectivity	(C006): assigning_effectivity
assigning_descriptor	(C095): assigning_descriptor
assigning_identification	(C001): assigning_identifiers
assigning_location	(C049): assigning_location
assigning_organization	(C094): assigning_organization
assigning_person_in_organization	(C016): representing_person_organization
assigning_product_property	(C076): assigning_product_properties
assigning_reference_data	(C010): assigning_reference_data

Note that at the time of writing, these capabilities and templates are not all completely documented.

Such a Business DEX would extend existing PLCS documentation to include UII data sets and processes and would provide an exhaustive formal specification for the representation, storage, sharing, and exchange of UII data using PLCS.

## 6 Recommendations for future work

The following recommendations are made:

1. The creation of a business DEX to cover the scope presented in this document, to enable the use of PLCS with the UID Registry.
2. The creation of additional capability and templates for assigning cost properties.
3. Contribution of effort, alongside other nations and organizations, to ensure that the core capabilities required for are documented and complete.

## 7 Document List

Reference	Document id	Title
1	Eurostep.ESUKPC08.000104	Information Management Procedure
2	DOD, UII Guide, Version 1.5, June 7, 2005	Department of Defense Guide to Uniquely Identifying Items
3	<a href="http://www.gbiv.com/protocols/uri/rfc/rfc3986.html">http://www.gbiv.com/protocols/uri/rfc/rfc3986.html</a>	Uniform Resource Identifier (URI): Generic Syntax
4	IUID Schema Version 3.0 Flat File Specification Version 1	IUID Flat File Specification: Unique Identification (UID) Integration
5	<a href="http://www.acq.osd.mil/dpap/UID/">http://www.acq.osd.mil/dpap/UID/</a>	Unique Identification (UID)
6	ISO 10303-239	Product Data Representation and Exchange – Application Protocol – Product Life Cycle Support
7	<a href="http://www.plcs-resources.org/">http://www.plcs-resources.org/</a>	Product Life Cycle Support website
8	iuid-registry-brief-20060101.pdf	The IUID Registry
9	ISO 10303-11	Product Data Representation and Exchange – EXPRESS Language Reference Model
10	ISO 10303-21	Product Data Representation and Exchange – Implementation methods: Clear text encoding of the exchange structure
11	ISO 10303-28	Product data representation and exchange — Part 28: Implementation methods: XML representations of EXPRESS schemas and data, using XML schemas
12	<a href="http://www.w3.org/XML/Schema#dev">http://www.w3.org/XML/Schema#dev</a>	XML Schema: Specifications and Development
13	<a href="http://www.w3.org/OWL/specs#">http://www.w3.org/OWL/specs#</a>	OWL Specification Development
14	ISO TC184/SC\$ N492	Product Data Representation and Exchange – EXPRESS-I Language Reference Model
15	ISO 4217	Codes for the representation of currencies and funds
16	<a href="http://sourceforge.net/projects/dexlib">http://sourceforge.net/projects/dexlib</a>	DEXlib – held as a Open Source project on sourceforge in XML. Navigable HTML version available at 7