SLOVENSKI STANDARD

SIST EN 61360-2:2003/A1:2004

september 2004

Standardni tipi podatkovnih elementov s pripadajočo klasifikacijsko shemo za električne komponente – 2. del: Slovarska shema EXPRESS (IEC 61360-2:2002/A1:2003)

Standard data element types with associated classification scheme for electric components - Part 2: EXPRESS dictionary schema (IEC 61360- 2:2002/A1:2003)

ICS 29.100.20

Referenčna številka
SIST EN 61360-2:2003/A1:2004(en)

EUROPEAN STANDARD **EN 61360-2/A1**

NORME EUROPÉENNE

EUROPÄISCHE NORM March 2004

ICS 31.020

English version

Standard data element types with associated classification scheme for electric components
Part 2: EXPRESS dictionary schema
(IEC 61360-2:2002/A1:2003)

Types normalisés d'éléments de données avec plan de classification pour composants électriques
Partie 2: Schéma d'un dictionnaire EXPRESS
(CEI 61360-2:2002/A1:2003)

Genormte Datenelementtypen mit Klassifikationsschema für elektrische Bauteile
Teil 2: EXPRESS-Datenmodell
(IEC 61360-2:2002/A1:2003)

This amendment A1 modifies the European Standard EN 61360-2:2002; it was approved by CENELEC on 2004-03-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

CENELEC
European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Ref. No. EN 61360-2:2002/A1:2004 E

Foreword

The text of document 3D/117/FDIS, future amendment 1 to IEC 61360-2:2002, prepared by SC 3D, Data sets for libraries, of IEC TC 3, Information structures, documentation and graphical symbols, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A1 to EN 61360-2:2002 on 2004-03-01.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2004-12-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2007-03-01

Endorsement notice

The text of amendment 1:2003 to the International Standard IEC 61360-2:2002 was approved by CENELEC as an amendment to the European Standard without any modification.

INTERNATIONAL STANDARD

IEC 61360-2

2002-01

AMENDMENT 1
2003-12

Amendment 1

Standard data element types with associated classification scheme for electric components –

Part 2: EXPRESS dictionary schema

International Electrotechnical Commission, 3, rue de Varembé, PO Box 131, CH-1211 Geneva 20, Switzerland
Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: inmail@iec.ch Web: www.iec.ch

Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

PRICE CODE R

For price, see current catalogue

FOREWORD

This amendment has been prepared by subcommittee 3D: Data sets for libraries, of IEC technical committee 3: Information structures, documentation and graphical symbols.

The text of this amendment is based on the following documents:

FDIS	Report on voting
3D/117/FDIS	3D/126/RVD

Full information on the voting for the approval of this amendment can be found in the report on voting indicated in the above table.

The committee has decided that the contents of the base publication and its amendments will remain unchanged until 2005. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

INTRODUCTION

This amendment introduces corrections which are needed to align with ISO 13584-42 in order to keep the common ISO 13584-IEC 61360 dictionary schema common across both committees.

In a number of clauses, where the common EXPRESS model allows more freedom, IEC has defined more restrictions which are found in the methodology part of IEC 61360-1.

Page 5

INTRODUCTION

Replace the quotations from IEC 61360-1 and ISO 13584-42 by the following more recent ones:

"This part of IEC 61360 provides a firm basis for the clear and unambiguous definition of characteristic properties (data element types) of all elements of electrotechnical systems from basic components to subassemblies and full systems. Although originally conceived in the context of providing a basis for the exchange of information on electric/electronic components, the principles and methods of this standard may be used in areas outside the original conception such as assemblies of components and electrotechnical systems and subsystems."

and

"This part of ISO 13584 provides rules and guidelines for library data suppliers to create hierarchies of families of parts according to a common methodology intended to enable multi-supplier consistency. These rules pertain to the following: the method for grouping parts into families of parts to form a hierarchy; the dictionary elements that describe the families and properties of parts."

Page 6

1.1 Scope

Delete, in the first sentence of the first bullet, the words "but without modelling the definitions of the terms*".*

Delete the last paragraph.

Page 9

4.2 Compatibility with ISO 13584-42

Replace, in the second sentence of the second paragraph, "IEC 61360 implementation, whether it conforms to conformance class 1, or to conformance class 2 that includes" *by* "IEC 61360 implementation that conforms to conformance class 1 that includes"

Page 10

4.4 Main structure of the common dictionary schema

Replace, on page 11 in the third paragraph, "(see figure 1 to figure 12)" *by* "(see figure 1 to figure 11)"

Page 12

5.2 Constant definitions

Replace, in the EXPRESS specification, “short_name_len: INTEGER:= 15;” *by* “short_name_len: INTEGER:= 30;”

Page 13

5.3.2 Three-level architecture of the dictionary data

Replace, in the fourth bullet, the words “property_DETs” *by* “**property_DETs**”.

Page 14

5.3.2.1 basic_semantic_unit

Replace, in the first line, “dictionary_element” *by* “**dictionary_element**”.

Page 15

5.3.2.2 dictionary_element

Add, on page 16, at the end of this subclause, the following note:

NOTE The time_stamps attribute will be used as a starting-point to encode in the dates entity the property and class attributes "Date of Original Definition", "Date of Current Version" and "Date of Current Revision" (see 5.8.2).

Page 17

5.3.4 Identification of dictionary element: three-levels structure

Replace in the last sentence, “entities in 5.3 through 5.7” *by* “entities in 5.3 through 5.6”.

Page 26

5.6.1 property_BSU

Replace, on page 27, the formal proposition WR1 by the following new formal proposition WR1:

WR1: any class referenced by the describes_classes attribute of a property_BSU either is the class referenced by its name_scope attribute, or it is a subclass of this class.

Page 27

5.6.2 property_DET

*Replace, in the EXPRESS specification, “*synonymous_symbols: SET [0:2] OF mathematical_string;” *by* “synonymous_symbols: SET [0:?] OF mathematical_string;”.

Page 29

5.6.3.2 dependent_DET[19]

Replace the existing title of this subclause by the following new title:

5.6.3.2 dependent_P_DET[19]

Page 30

5.6.3.3 non-dependent_DET

Replace the existing title of this subclause by the following new title:

5.6.3.3 non-dependent_P_DET".

Page 32

5.7.1.1 data_type_BSU

Replace the fourth attribute definition ('defining class') by the following new definition:

defining_class: SET OF class FOR defined_types.

Page 41

Figure 11 – Overview of non-Quantitative data element types

Replace figure 11 by the following new figure:

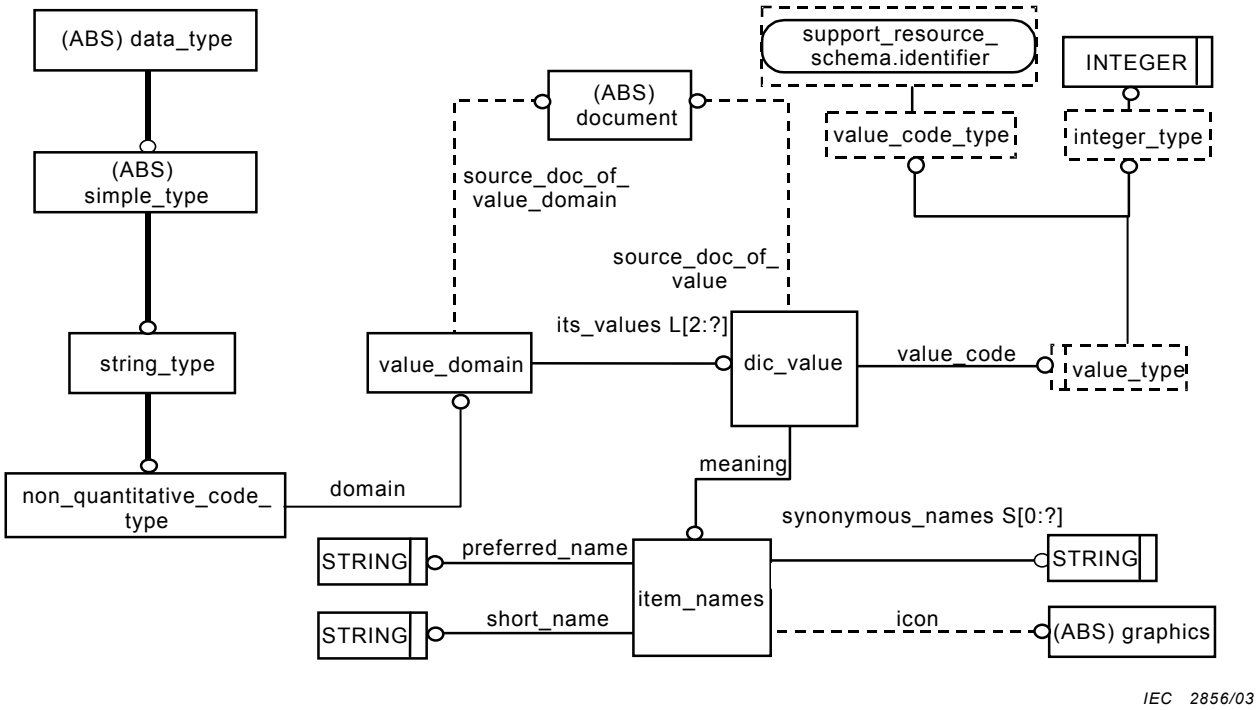

Figure 11 – Overview of non-Quantitative data element types

Page 42

5.7.3.1 value_domain[25]

Add, to the WHERE rules in the EXPRESS specification, the following:

```
WR3:  EXISTS(languages) OR (QUERY(v <* its_values |

        EXISTS(v.meaning.languages)) = []);
```

Replace the first attribute definition ('its_values') *by the following new definition:*

its_values: LIST [1:?] OF dic_value;

Add to the list of formal propositions:

WR3: if no languages are provided, the value meanings shall not be assigned any language.

Page 53

5.8.2.5 item_names

Replace WR1 and WR3 of the WHERE rules in the express specification by the following:

```
WR1:  NOT (EXISTS(languages )) OR  (
      ('ISO13584_IEC61360_LANGUAGE_RESOURCE_SCHEMA'
      + '.TRANSLATED_LABEL' IN TYPEOF(preferred_name) )
            AND (languages :=: preferred_name\translated_label.languages)
            AND (NOT (EXISTS(short_name) )
```

```
        OR ('ISO13584_IEC61360_LANGUAGE_RESOURCE_SCHEMA'
        + '.TRANSLATED_LABEL' IN TYPEOF(short_name) )
        AND (languages :=: short_name\translated_label.languages ) )
        AND (QUERY (s <* synonymous_names
        | NOT ('ISO13584_IEC61360_DICTIONARY_SCHEMA'
        +'.LABEL_WITH_LANGUAGE' IN TYPEOF(s) ) ) = [ ] ) );
```

```
WR3:  EXISTS(languages) OR (('SUPPORT_RESOURCE_SCHEMA.LABEL' IN
        TYPEOF(preferred_name)) AND (NOT(EXISTS(short_name)) OR
        ('SUPPORT_RESOURCE_SCHEMA.LABEL' IN
        TYPEOF(short_name))) AND (QUERY(s <* synonymous_names |
        'ISO13584_IEC61360_DICTIONARY_SCHEMA.LABEL_WITH_LANGUAGE' IN
        TYPEOF(s)) = []));
```

Replace, in the list of attribute definitions, the third definition ('short_name') *by the following new definition:*

```
short_name: OPTIONAL short_name_type;
```

Replace, in the list of formal propositions, WR3 by the following:

WR3: if no languages are provided, preferred_name, short_name and synonymous_names shall not be translated;

Page 55

5.9.1 acyclic_superclass_relationship function

Replace, in the EXPRESS specification, "IF current.definition[1]\class IN visited THEN" *by* 'IF current.definition[1] IN visited THEN'.

Replace

```
IF EXISTS current.definition[1]\class.its_superclass)
THEN
RETURN      (acyclic_superclass_relationship (current.definition[1]\class.its_superclass,
            visited + current.definition[1]\class));
```

by

```
'IF EXISTS (current.definition[1]\class.its_superclass)
THEN
RETURN      (acyclic_superclass_relationship (current.definition[1]\class.its_superclass,
            visited + current.definition[1])); '
```

5.9.2 at_most_two_synonyms_per_language function

Delete this Subclause and renumber the following Subclauses.