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INTERNATIONAL ELECTROTECHNICAL COMMISSION

TECHNICAL COMMITTEE NO. 3: INFORMATION STRUCTURES, DOCUMENTATION AND GRAPHICAL SYMBOLS

SUBCOMMITTEE NO. 3D: DATA SETS FOR LIBRARIES

Quick Reference Manual for the Validation Team for IEC CDD (IEC 61360-4-DB)

Version V2.00

NOTE This version 2.00 of the document is in accordance with the revised rules for definition writing of IEC CDD Data Element Types as agreed at the 2008 Prague meeting of IEC SC3D. These rules are part the upcoming IEC 61360-1 Ed.3. It was decided at the meeting that the revised rules shall be effective after publication of this version of the "Quick Reference Manual for the Validation Team for IEC CDD".

This Quick Reference Manual is intended to provide a "hands-on" guideline for members of the Validation Team for IEC 61360, as the fulfilment of the tasks of a Validation Team member is not a daily task.

1 Introduction

The database for the publication and maintenance of *IEC 61360-4-DB Component Data Dictionary*, is available at <http://std.iec.ch/iec61360>.

Validation team members have an access right to the maintenance area of the database that allows them to **read** all Change Requests (CR) with all status, and to download any documents attached to the CR.

The database itself contains the most basic instructions for its use: see the *Introduction* and the *General description*. Primarily intended for readers/subscribers they are also applicable for the validation team members. Those instructions are maintained in the database and are therefore not repeated in this document.

A complete description of the validation procedure is available in the ISO/IEC Directives, IEC Supplement, Annex J and document 3D/XXX/INF containing supplementary instructions.

The validation team members are listed on the IEC website under the General information of the SC3D dashboard: [VT 61360](#).

Correspondence within the Validation Team is carried out by means of e-mail.

NOTE - The distribution list contains all validation team members including deputies. It is very important that a change of e-mail address is reported immediately to the Secretary of SC3D in order to keep this distribution list updated.

2 Tasks of the Validation Team

The tasks of the Validation Team are the following, according to document 3D/145/DC:

Evaluation task: to determine whether the CR is within the scope of the database and valid for further work.

Validation task: validation with regard to the technical content and the formal voting on behalf of the National Committees.

Each member of the Validation Team has one vote (one vote per P-member) where a majority of votes is required for lifecycle changes to Change Requests and proposed items.

This document will describe step by step what to do for these tasks.

3 Evaluation of proposal and selection of procedure

A proposal for a new dictionary item or modification of an existing dictionary item has been forwarded to the Secretary of SC3D. The proposal is entered into the database as a Change Request (CR). The term "Change Request" is used in all cases, irrespective of whether it is a new dictionary item or a modification of an existing. (It is in any case a change of the database content). The CR gets automatically an identification number on the form Cnnnnn (e.g. C00056), which is to be used for referencing and the status is automatically set to "Submitted".

When the proposal is considered good enough for processing, the Secretary sets the status of the CR to "For evaluation", and informs the validation team members via the e-mail, that the Change request Cnnnnn, is ready for evaluation before a stipulated date (normally 8 weeks ahead).

Evaluation, step 1 - On receipt of the e-mail from the secretary the validation team member should enter the maintenance area of the [IEC 61360-4-DB](#) database, which is accessible from the button "Maint." at the top of the opening page. The username and password as validation team member shall be used in order to get the correct access to the Change requests.

NOTE - Once logged on to the database it will remember who you are until your web browser is stopped.

In the left-hand panel, select "Maintenance: CR for action", and a list of the change requests open for evaluation and validation will appear, together with the date before which this should be done. Click on the number of the CR to open it. It will open in a separate, smaller, window.

Evaluation, step 2 - Study the proposal. Note that there is an Excel spreadsheet attached (Evaluation sheet) that should be used for commenting and voting. Other supplementary files can also be added to the CR when appropriate. The spreadsheet and other files attached to the CR cannot be directly edited on the IEC website. You must save an attached file locally using "save target as" under the right mouse button. You can also select "open link in new window" and then save the file locally.

Within the Excel spreadsheet the relevant dictionary item numbers are listed in column A and are blue, i.e. you can click on them and jump directly to the proposed dictionary item. In the Evaluation stage these items are visible in a Test database environment, which is an exact copy of the IEC 61360-4-DB and includes on top of that proposed content that is in preparation and evaluation. In this step you are expected to give your opinion on two things:

1. Evaluate the proposal: should the proposal be accepted for further work or rejected? If you think that it should be accepted for further work, simply indicate so. If you think that it should be rejected, also give the reason, since the proposer has the right to be informed about the reason for rejection according to the procedures.

For the Evaluation a vote column is available for each country separately. Votes can be cast on proposed items contained in the CR separately.

Vote: Does the National Committee agree to accept the proposal for further work:
Y = In favour; N = Against; A = Abstention.

Only votes received before the closing date are counted in determining the decision.

Abstentions are not taken into account when totalizing the votes.

2. Select procedure: should the normal or the extended database procedure be used? The normal procedure is the default and expected to be most frequently used. Only in the case that you think that the extended one should be used, indicate this in the comments column and also give the reason. A comments column is available for each country separately. Comments can be made on proposed items contained in the CR separately.

NOTE – It is also possible to cast a generic vote and give generic comments that apply to all items contained in the CR. This can be done in the row indicated with the identifier of the change request. When a generic vote is cast, then this is the default vote for all items contained in the CR unless indicated otherwise on the individual item, which overwrites the default.

Evaluation, step 3 – Any additional comments concerning a proposed item can be added to the appropriate comment field in the spreadsheet.

Evaluation step 4 - Save your comments and votes by saving the Excel spreadsheet locally. Send the spreadsheet to the Secretary of IEC SC3D. You have then completed your part of the evaluation. The secretary will provide a consolidated Excel sheet including the comments and votes from all NCs in one overview.

Important! The CR can be used for discussion among the VT members. You can give your observations to the comments from other VT members, and you are of course free to add (or change) comments until the end of the evaluation period. For this update your original Evaluation sheet and send the updated version to the secretary.

At the end of the evaluation period the secretary will draw the conclusion of the comments made, and decides on how to proceed. These conclusions and the decision will be documented at the end of the box "Comments at evaluation" directly on the CR itself.

4 Validation of dictionary items at the normal procedure

If the evaluation has resulted in a decision to use the normal procedure, the secretary will make the final preparation of the proposed items. This includes the transition of the proposed items from the Test database to the IEC 61360-4-DB where the items will be included with the status "draft".

When ready, the secretary distributes an e-mail message to the validation team members that the Change Request Cnnnnn is ready for validation, with a stipulated closing date, and this is where your part of the work starts.

Validation, step 1 - On receipt of this message the VT member should re-visit the Change Request in the same way as in "Evaluation, step 1".

Validation, step 2 - Study the proposal. Note that there is an Excel spreadsheet attached specifically for validation (Validation sheet) that should be used for commenting and voting. The voting is done in the same way as is described in "Evaluation, step 2". One VT-member per National Committee has the obligation to vote just as National Committee P-members are obliged to vote on an FDIS.

Validation, step 3 - Any additional comments concerning a proposed item can be added to the appropriate comment field in the spreadsheet. As in the case of FDISes, negative votes should be accompanied by a technical justification.

Validation, step 4 - Save your comments and votes by saving the Excel spreadsheet locally. Send the spreadsheet to the Secretary of IEC SC3D. You have then completed your part of the validation. The secretary will provide a consolidated Excel sheet including the comments and votes from all NCs in one overview.

Important! The CR can be used for discussion among the VT members. You can give your observations to the comments from other VT members, and you are of course free to add (or change) comments until the end of the validation period. For this update your original Validation sheet and send the updated version to the secretary.

At the end of the validation period the Secretary summarises the votes and draws the conclusions on the result. This is documented in "Voting at validation" directly on the CR itself.

The status of the CR is then changed to "Resolved", which makes it write protected, and the CR constitutes therefore the record of the complete evaluation and validation procedure.

The change requests are not accessible for normal subscribers to the database, but IEC technical officers (i.e. Chairmen, Secretaries, and Convenors who have applied for and got "IECTech" access to the database) can read them, and follow the procedures. This is for the support of the co-operation with other Technical Committees.

If the change request has been positively met the dictionary item(s) or modification(s) will be immediately implemented in the IEC 61360-4-DB database.

5 No action from the Validation Team at the extended procedure

If the decision at the evaluation has been to apply the extended procedure, the validation team is not involved in the subsequent procedure.

In this case formal documents (CD, CDV, FDIS) with references to the relevant Change request are circulated to the National Committees. These documents will be dealt with in accordance with the normal IEC procedure and result documents (RVC, RVD) prepared. The difference compared to the paper based IEC procedure is that the actual proposed dictionary items will be contained in the database only. References to the circulated documents will be included in the Change Request.

6 Remarks on assessment of content

6.1 Key elements of IEC CDD entries

Key elements of IEC CDD entries are the attributes that assign meaning to properties and classes (DETs – Data Element Types). The so called semantic attributes (see IEC 61360-1) contain the definitional elements of the IEC CDD entries. Because of their importance the related parts of IEC 61360-1 are repeated here. The most important attributes are:

- definition;
- note;
- remark.

The quality of a IEC CDD entry mainly depends on the information given within these attributes. Thus, it is highly advisable to review their content carefully.

6.1.1 Semantic attributes (see also IEC 61360-1, Clause 4.3)

Figure 1 shows the possible attributes of a data element type used to clarify the semantics of a data element type.

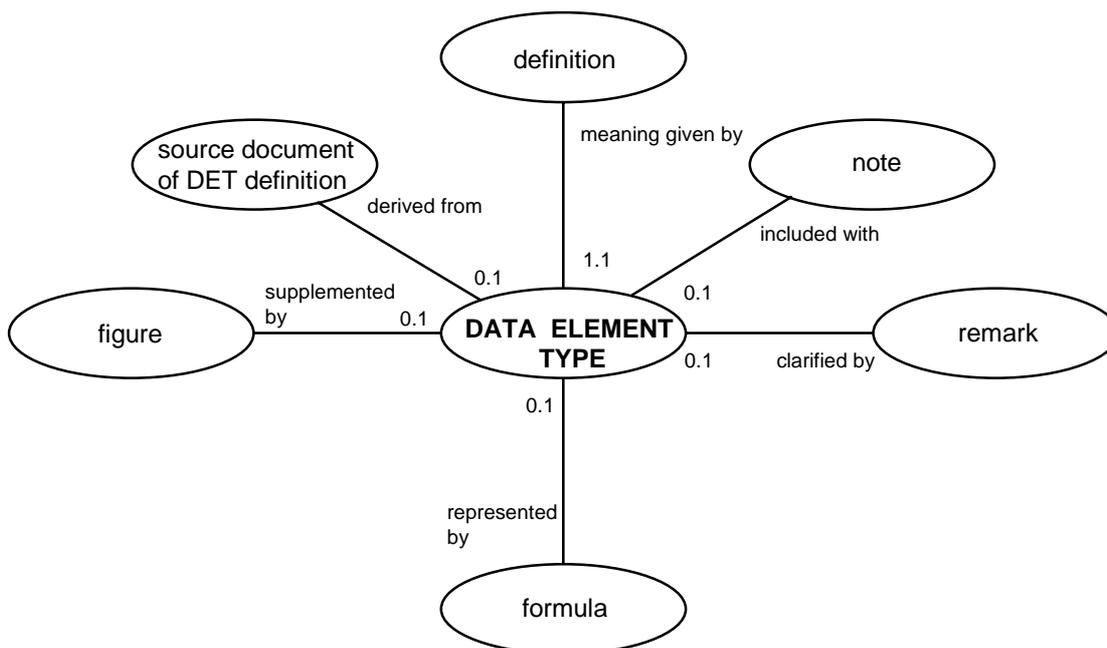


Figure 1 - Semantic attributes for data element type

6.1.2 Definition

Attribute name: definition

Attribute definition: statement that describes the meaning of a data element type in an unambiguous and unique manner to permit its differentiation from all other data element types

EXAMPLE Definition of the quantitative data element type "arcing distance":

arcing distance

value of the shortest distance in air external to the insulator between metallic parts normally having the operating voltage between them

Comments: conventions and requirements:

- a) The definition of a data element type shall be derived from the original definition as appearing in the latest corresponding IEC or ISO standards, if available.
- b) ISO 704 and ISO/IEC 11179-4 standards should be used as a basis for the writing of the definition.
- c) The unit of measure of the DET shall not be included in the DET definition.
- d) If the Level_type attribute is specified, the level information need not be repeated in the definition.
- e) The semantic context(s) should be included in the DET definition, if this is essential for the understanding of its meaning.
- f) If the concept requires a limitation of its applicability this shall be explicitly expressed in the definition.

EXAMPLE There exist different semantics by using the term "rated voltage"; within products ≥ 1 kV the terms rated voltage express the maximum voltage for which a product is being designed and can be operated (see IEC 60694). This is currently not applicable to products less than 1kV.

- g) If dependency relations are an inherent part of the concept, these shall be included in the definition.

EXAMPLE Definition of the quantitative data element type "reverse recovery time":

reverse recovery time

value of the time required for the reverse current of a diode to recover to a specified value, when switched from a specified forward current to a specified reverse voltage, at specified conditions

- h) In the case conditions are specified, the definition ends with the wording "at specified condition(s)".
- i) If the concept represents a mean value, the type of average shall be specified by using a qualifier (e.g. arithmetic) either in the preferred name or be given in the definition..

NOTE A DET standardized under former editions of IEC 61360-1 may be updated only in case of change requests.

Obligation: mandatory

Character type of values: those characters from the character set of ISO/IEC 10646-1, as defined in annex A

6.1.3 Note

Attribute name:	note
Attribute definition:	statement which provides further information on the definition, which is essential to the understanding of that definition
Comments:	EXAMPLE The data element type reverse recovery time is further clarified by a note: "The reverse recovery time is measured as the time interval between t_0 , the point where the forward current crosses the zero current axis, and the instant when for decreasing values of i_R a line through the points for $0.9 I_{RM}$ and $0.25 I_{RM}$ crosses the zero current axis."
Obligation:	optional
Character type of values:	those characters from the character set of ISO/IEC 10646-1, as defined in annex A

6.1.4 Remark

Attribute name:	remark
Attribute definition:	explanatory text to further clarify the meaning of the definition
Comments:	remarks shall not influence the meaning of the definition
Obligation:	optional
Character type of values:	those characters from the character set of ISO/IEC 10646-1, as defined in annex A

6.1.5 Additional conventions (see also IEC 61360-1, Annex G)

- a) The term "value" shall not be written in plural even if it is a level type (e.g., minimum, typical and maximum value)
- b) Always include the term "value" in the definition for quantitative DETs except for conditional data element types.
- c) Changing attributes to conform to the new conventions of this part of IEC 61360 is by default a revision change (minor change) unless specified otherwise, and will only be done along with a change request associated with the relevant data element type.
