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3CM(Prague/Secretariat)4A

REPORT OF MEETING

2008-10-16

INTERNATIONAL ELECTROTECHNICAL COMMISSION

Technical Committee No. 3 Information structures, documentation and graphical symbols

Revised daily report from the co-ordination meeting of TC3 held in Prague 2008-10-10

Meeting documents are found via <http://tc3.iec.ch> > TC3 > Meeting documents.

Participated:

Mr. Brückner (Chairman), Mr. Reuter, Mr. Doebrich, Ms. Schwuchow, Mr. Nerke (DE),
Mr. Ikeda, Mr. Murayama, Mr. Nakamura (JP),
Mr. Selvik (NO),
Mr. Svensson, Mr. Lejdeby (Secretaries) (SE)

<i>Item</i>	<i>Title / Notes</i>	<i>Relevant documents</i>
1	Opening of the meeting The Chairman of TC 3 Hans Brückner open the meeting	
2	Approval of the agenda The agenda of the additional meeting was approved.	3CM(Prague/Secretariat)1
3	Discussion of improvement of the SBP + new RSMB + PW The "programme of work" presented by the CO shall be filled in and returned. The TC is also requested to prepare an RSMB after the meeting. It is compiled by the TC3 secretary. Input to the RSMB is needed from the sub committees. Next RSMB shall be sent to CO before end of November (in order to be distributed in time for the next SMB meeting in February) so the input to TC3 secretary is needed before the end of October. The compiled RSMB can then first be circulated to TC3 officers for review before submission to the CO. Update of the SBP after the TC meetings is required. The SBP shall be reviewed and, if necessary modified. Suggested changes shall be sent to the TC3 secretary at once , since the revised version has to be sent to the IEC/CO 2008-10-15.	
4	Discussion of review of the scope TC 3 present scope as shown in SMB/3396/R was reviewed. The changes suggested by Mr Ikeda in 3C(Prague/Secretariat)8 were accepted and should be included. Additional changes to the scope of SC3D were discussed. A new paragraph shall be added "Maintenance of repositories for graphical symbols, data element types and generic product concepts."	3C(Prague/Secretariat)8

Action:

A proposal for a new wording of the scope should be prepared by the Secretariat until the next co-ordination meeting in April and then submitted to the NCs in advance of the next plenary meeting in order to be included in the agenda for that meeting. After decision it will then have to be submitted to the SMB for approval.

5 **Discussion of possible remaining limitations with regard to the dictionary versus the application issues for the IEC 61360DB**

The data model (concept) used in the IEC 61360 database was discussed.

Questions:

- Can the defined "feature classes" ("blocks") be referenced from the GSIP?
- Can feature classes be defined by the user?
- Shall feature classes be identified and stored in the database?
- If all feature classes (and product properties) can not be defined in the database, how to reference to these data elements (when required)?

Action:

Generic feature classes (blocks) shall be defined and identified in the IEC 61360 database, in order to allow referencing from the GSIP.

Additional blocks may be added on request from product committees, in the same way as additional DETs can be added.

6 **Discussion of possible impact from ISO 8000 on the existing databases in TC3**

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3CM(Prague/Murayama)3

ISO 8000 was shortly presented by Mr Nerke and Mr Murayama. Scope: data quality, including data quality activities, terminology, characteristics (criteria) and testing.

Used data is often of poor quality. ISO 8000 aims to standardise the definition, integration and quality management of information that is shared and exchanged. ISO 8000 is aligned with ISO 9000 with regard to terminology, etc.

ECCMA (US) requires certification for ISO 8000-110 compliance (eOTD)

Action:

We need to make review the documents in preparation in the ISO 8000 series (from ISO(TC184/SC4), to ensure that our databases fulfil the requirements. To be discussed at the next meeting

7 **Discussion on how to proceed with "quantity-unit issue" that was raised during the SC3D/WG2 and SC3D meeting**

Question: How to deal with the representation of quantities and units?

"Units" should be connected to the "quantity" (in the specific sense this term is used in the standards for quantities and units, i.e. IEC 60027, ISO 31, ISO/IEC 80000), but "quantity in general sense" is not a part of the present data model.

Presently a default unit is specified together with each DET, but there is

now a need to manage additional units.

The unit today defined as attribute to a DET is considered as **recommended** unit, but that is not explicitly stated in the text of IEC 61360-1 or in the introductory page to the database. The use of this unit is by many considered as mandatory.

(There are comments to the CDV that give an opening for change to the FDIS.)

If additional units are required, then we need to manage them in such a way that we do not create an over whelming maintenance burden; that is: that we create a need to update the definition of a DET every time a new unit is requested.

(In order to show where it may lead a reference was made to UN/CEFACT Recommendation 20, which lists "units" used in commercial (EDI) transactions.

See http://www.unece.org/cefact/recommendations/rec20/rec20_rev4E_2006.pdf , and http://www.unece.org/cefact/recommendations/rec20/rec20_rev4E_2006.xls

which lists approx 1000 + 1400 "units".)

This problem can be solved if the quantities and units are kept separate from the DET database, and referenced from that. Quantities and units can be dealt with as external list(s) or in a separate database (a dictionary of quantities and units). Both quantities (such as length, mass, current, etc) and units (such as m, kg, A, etc) should have unambiguous identifiers in order to allow flexible referencing.

An additional part of the problem is the use of "decimal prefixes" for SI units. Either each practically used combination of basic unit (e.g. A) and the decimal prefix (such as μ , m, k, M, etc) need to be defined (e.g. μ A, mA, A, kA, etc.) in order to unambiguously specify a value (= measure + "combined unit"), or the decimal prefix sign has to be dealt with as a separate element (=measure value + prefix sign + basic unit). The prefix sign is then a "coded representation of a numerical value" that for presentation purposes needs to be combined with the symbol for the unit and for calculation purposes needs to be multiplied with the measure.

("Coded representation of numerical values" are required also in order to allow the representation of things like $1/\sqrt{3}$ (for some voltages), e, etc.)

In the discussion there was not any full agreement with regard to the nature and magnitude of these issues.

It was noted that the present concept of the DET dictionary has been fully set up and accepted. Changes will be complicated and may result in delay of the project. The creation of a separate database will need some time and at least a temporary solution is needed before that.

It was also noted that the responsible committees for quantities and units are TC12 in ISO and TC25 in IEC. These committees are presently co-operating in the preparation of the (ISO/IEC) 80000 series so there might be an opportunity for a co-ordinated approach. None of these TCs seem, however, to be especially "database-minded". Also, such a database needs to contain other units than SI-units (but the quantities are the same in all cases).

Actions:

Item Title / Notes

Relevant documents

The SC3D representatives were asked to bring up the problem for discussion at the upcoming meeting with ISO/TC184/SC4/WG2 in Busan, and to try to create an action for a UoM database from the ISO side.

TC3 representatives should similarly contact TC25 in IEC.

As DIN is presently working on a similar solution, Mr, Doebrich should contact the relevant groups to see how this solution is specified.

8 Next co-ordination meeting

Next meeting will be in Geneva around April 20 (close to the MoU meeting).

9 Close of the meeting

The Chairman closed the meeting with thanks to the participants for their contributions at the meeting.