INTERNATIONAL ELECTROTECHNICAL COMMISSION

Technical Committee No. 3 Documentation and graphical symbols

Report on the Workshop held in Kyoto 1999-10-25

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1. Opening of the workshop

Mr. J. Bodin, Chairman of TC3, welcomed the participants to the workshop.

"The green leaves have not yet disappeared from the countryside around Kyoto, however, the green meeting documents have disappeared from the meetings."

For the demonstration of database for graphical symbols that we were first to work on, he wanted to give credit to:

• The experts that has created the model for the database

• The IEC/CO experts for the database set up

• The experts for the loading, including IEC/CO and the experts from the NCs

• Professor Ikeda, who this time has made arrangements for video broadcast via the Multicast Backbone on Internet, making it possible also to show the workshop internally in the conference centre.

The Secretary presented the program, slightly revised.

The number of participants was 35 (including the Chairman and the Secretary).

2. Presentation and demonstration of the operative version of the graphical symbols database

Mr. A. Maislisch, responsible for the development of the database at the IEC/CO, gave first an introduction to the work in accordance with annex A (also available as PowerPoint slides as 3(Kyoto/Maislisch)22)

He then started the demonstration of the database by showing the different possibilities to use the search function, continuing with the different "views" of the database.

The Chairman thanked Mr. Maislisch for the demonstration.

Mr. Fornalski then gave a description on how the information from the description field has been structured into different data fields.

SEABB/KS 19087-840 3(kyoto)4 report on the tc3 workshop.doc
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Keywords: tc3, work shop, day report, kyoto

The Secretary pointed out that the major difference between the printed publication and the database, is that the printed publication often explicitly as well as implicitly makes use of the sequence between the different symbols and the sequence between the symbols and notes. In the database this cannot be, and therefore the content of the notes and the structure may have to be changed editorially to cope with this.

3. Information on the marketing policy and discussion

Mr. Maislisch gave a short introduction to the subject:

- IEC management has not yet taken any decision on how the database will be made available to the public.

- The National Committees will consider carefully the access to the database, since a lot of income is related to the sales of IEC 60617, and its National versions.

He could see three scenarios:

1. Because of the nature of graphical symbols we want them to be used, therefore free access in some form should be allowed.

2. Access is only granted to those who have a paid subscription.

3. Only some part is for free, others have to be paid for.

One possibility is to provide snapshots, e.g. yearly, as publications (in any desired form: electronic on the net, on a CD-ROM, or printed).

Different renditions of the symbols files, (e.g. gif, pdf, dxf, stp) have different market value.

Comments:

Mr. Reuter: If the more advanced forms of files will be made available, someone has to make investments, and this has to be considered by the IEC management.

In the future the database can also be used to simplify the provision of National language versions.

Chairman: The IEC management consists of the National Secretaries: we should nationally give advice to the National secretaries in order to clarify the possibilities.

Mr. Reuter: The decision on the marketing has to cover the needs of the industrial end users.

Chairman: Should we provide some common guidance?

Mr. Radley: In the UK IEC 60617 provides a lot of income to the National organisation. The money earned on the database (managed centrally in Geneva) will not pass through the NCs.

The Secretary: We should look at the possibilities more than the difficulties.

Brigham: When is the strategy for 60417 being addressed? It seems as CO has a time table in mind, when should we make it concrete?

Chairman: We note the need for this.

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Chairman: There will be a day report from this meeting, where we can formulate marketing requirements. We urge you to comment on it.

4. Demonstration of the database procedure

The Secretary introduced this item by the set of slides available as document 3(Kyoto/Secretariat)16.

Mr. Scholz then demonstrated the procedure with the assistance of Mr. Maislisch. This demonstration showed which actions need to be taken when a new symbol is proposed, the communication between Secretary and Validation Team members and the related differences in status of the symbol and the change request.

Comments:

The way to enter a proposal has to be made clear to the NCs as well as other TCs.

Definitions are needed for some of the terms. For this an introduction page available from the database entry side (FAQ) can be used.

A question was raised about the number of Validation Team members. Not all the P-members have appointed members yet, but the invitation is open. It was concluded that the abstention by an NC from appointing a VT member, is practically comparable with abstention from voting on all FDISes on graphical symbols. This has to be clarified t the NCs.

5. Marketing and implementation of standards developed within TC3 with SCs

Mr. Brückner introduced the workshop on marketing issues: We are not satisfied with the present situation with regard to marketing. People do not know our standards sufficiently well, industry does not support the work.

Four working groups were created as proposed in document 3(Kyoto/Secretariat)17. These groups met for internal discussions of the questions proposed in this document and after that they reported as follows:

Group A (Mr Nakamura)

Mr. Nakamura presented the result in accordance with annex B (also available as PowerPoint slides as document 3(Kyoto/WS Group A)23.)

Comments:

Mr. Reuter: Do you think that the CO and NC help promote the standards enough? Would it not be better with direct contacts from the committee with companies and other user organisations?

Mr. Ikeda: Are further activities needed to promote the sales?

Mr. Cordelier: 417 is a best seller in IEC, but we do not know about the NC sales.

Chairman: If the TCs ore SCs should do more promotion work, would it not be too much for the Secretary?

Mr. Cordelier: The database can make the traditional work load a little easier, and this might give the Secretary more time. I do not think that IEC/CO would object to promotion outside of the CO.

Mr. Brückner: Do you think that the promotion work is part of the work of the committee?

Mr. Ikeda: The number of accesses to the database on symbols for equipment based on IEC 60417 on the Chiba server indicates that it is very popular. However, would like to stop the promotion as soon as IEC/CO database for this same purpose starts.

Chairman to Mr Nakamura: Do you think that you have enough manpower?

Nakamura: I do not think so.

Group B (Mr Fornalski)

Mr. Fornalski used the same set of slides (annex B) as Mr. Nakamura and gave the following comments.

To item 2: Add technical schools, add CAD developers

To item 3: The group thought that they need to be paid for.

To item 4: Agrees to all that is mentioned, add that this information should be available also on the web site.

To item 5: CO, NC

To item 6: The same.

To item 7: Quick, fast and good quality

Comments:

Mr. Reuter: I am disappointed to your comment to 3: The experts are already paid (The companies should be paid.) The industry must have interest in the subject. It can not be entirely left to the CO.

Mr. Brückner: Is there a real interest from industry to take part in marketing issues? We must figure out the advantages for industry.

Group C (Mr. Selvik)

Mr Selvik presented the slides in accordance with annex C (also available as PowerPoint slides as document 3B(Kyoto/WS Group C)24.

Mr. Cordelier: I would like to have a copy, since it summarises a number of important issues.

The naming question can change. Experts have not been named in IEC standards, but earlier the countries were named.

Mr. Reuter: The names could be used to give a point of contact.

Group D (Mr Radley)

"Standards come from the people, made for the people and used by the people."

Marketing is now primarily from the National Committees. This might change with electronic dissemination.

3(Kyoto/Secretariat)4

Other ways will be necessary for the NCs to find their income. They could make consultancy work, and then they will come closer to the marketing.

Resources for marketing are related to turn-over. Therefore the resources from the IEC/CO and also from the NCs are limited. We need methods that are cheap and cost effective.

Threats: consortia and groups that make ad hoc standards. If IEC cannot produce timely this is a real threat.

The copyright issue. With increasing electronic documentation it is much easier to disseminate, copy etc. There are possibilities to limit this, but they are not yet in place practically.

In SC3D we see a problem with marketing to the CAE vendors: As soon as a standard is embedded in a software packages the standards looses its identity.

Summary (Mr. Brückner)

Quite different issues have come up for discussion. We need more marketing, but it is not sure who should do it.

It is also a question how much we shall do in the committees. How many experts are available and has the appropriate skills for this kind of work. The NCs need to be involved.

Comments:

Mr. Reuter: The DE has positive experience of organising seminars for limited fees (e.g. for IEC 61360).

Mr. Thorn: I agree with Mr. Reuter. In Denmark we are preparing a seminar and next year we will have experiences.

Mr. Reuter: Make a priority list for marketing items.

The Chairman thanked the groups for their work. We have got four very interesting reports. A short priority list will be proposed in the report from the workshop, see annex E.

6. Update on the situation with regard to STEP

Mr. Reuter showed and comment the slides presented in annex D (also available as PowerPoint slides as document 3(Kyoto/Reuter)25.)

There were no questions.

7. Concluding panel discussion

The Chairman asked: Was the workshop useful? The answer was Yes.

Mr. Reuter: I would like to see a more active participation from participants. Should we have a more detailed agenda? Should we limit the time for general information?

The Secretary proposed that we for the next workshop should circulate a question requesting proposals for the agenda on the TC3 exploder. This was accepted as a good suggestion, and will be tried next year.

3(kyoto/secretariat)4

Mr. Radley: A lot of items ought to be passed on to CA.

The Chairman thanked the participants: This workshop was useful, especially with regard to the new track we are now entering with the database. It also brings additional duties, because more and more people will watch us.

He then closed the workshop.

3(Kyoto/Secretariat)4

IEC | **International Electrotechnical Commission**

Graphical Symbols Database

Alan Maislisch

Manager, IT Strategy and Operations

Graphical Symbols Database

1999-10-25

IEC | ## Objectives

● **Support development and maintenance of graphical symbols (life cycle management)**

● **Allow easy consultation of graphical symbols by IEC technical community and other end users**

Graphical Symbols Database

1999-10-25

Scope

- **Initially to include IEC 60617, parts 2-11**

- **Possible inclusion of IEC 60417**

- **Possible inclusion of other collections of standardized items**

Graphical Symbols Database   1999-10-25

Project phases (IEC 60617)

1. Define data model (Task Force)

2. Build prototype (C.O.)

3. Feedback and enhancements (Task Force / C.O.)

4. Initial loading (C.O.)
   (1300 symbols with associated graphics, unstructured text)

5. Structured data loading (Loading Team)

6. Consistency check and validation (Validation Team)

7. Public release

Graphical Symbols Database   1999-10-25

IEC

Data entities

- **Symbol:**
  - **A concept with an associated graphical representation**
  - **Attributes (name, usage, keywords, etc.)**
  - **Links to other entities**
- **Application note**
- **Change request**
- **DET definition**
- **Organization**

Graphical Symbols Database
1999-10-25

IEC

Data model relationships

Symbol B — *other form(s)* ← **Symbol A** → *has* → Application note(s)

Symbol C ← *example(s)* — **Symbol A** → Change request(s)

Symbol D ← *is an example of* — **Symbol A** → DET definition(s)

Proposing organization

Graphical Symbols Database
1999-10-25

Annex A
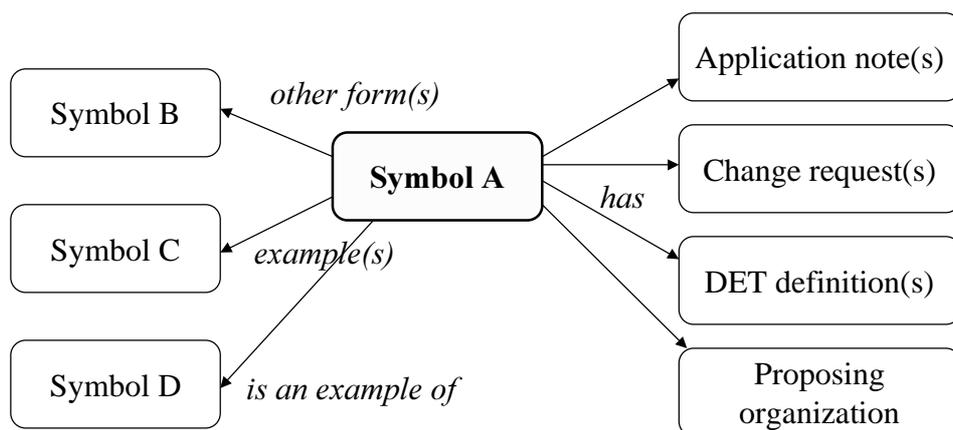
IEC *Status information*

● **Symbol**:
   – **In preparation**
   – **Proposed**
   – **Accepted for work**
   – **Rejected**
   – **Released**
   – **Withdrawn**

● **Change Request**:
   – **Submitted**
   – **Accepted**
   – **Rejected**
   – **Withdrawn**
   – **Resolved**

Graphical Symbols Database   1999-10-25

IEC *Graphics*

● **Currently GIF**
(extracted from original publications)

● **In the future, could include vector formats:**
   – **PDF**
   – **CGM**
   – **DXF**

Graphical Symbols Database   1999-10-25

Annex A

Roles

- **Reader:**
  - *Consultation only*

- **Editor:**
  - *Create/modify symbols, application notes, change requests, DET definitions*

- **Administrator:**
  - *Modify status of symbols and change requests*

Graphical Symbols Database

1999-10-25

Annex B

Marketing and implementation of standards developed

..The aim for marketing can be identified;
   * To increase the use of our standards
   * To improve the quality of the standards

2. Potential target-groups;
   * Device manufacturer
   * Other technical committee
  (End user)

- 3. * Quicker progress
-    * Cost effective participation

- 4. *Electric information
-    (Internet, Web page , Independent SC3C web page)
-    *Seminars, Exibitions

- 5. *Central Office, National Committee

- 6. *Money, skill , manpower

- 7.*To complete the electronic database delivering system
-    as soon as possible

Our understanding

- Standards are driven by industry needs
  - Come from the people
  - Made for the people
  - Used by the people

Slide 1 Hans Brückner, Ib Jørgensen,
Fritz Reuter, Eirik Selvik

Aims for marketing

- Users of the standards
- Software implementations
- Disseminate the standards to other standardisation committees
- Get more countries involved in the standardisation work

Slide 2 Hans Brückner, Ib Jørgensen,
Fritz Reuter, Eirik Selvik

Potential target groups

- Industry users (all branches, first E/E)
  - SME
  - Consultants
  - Users associations
- ECAD/PDM system vendors
- Universities / technical schools

IEC TC3 Workshop 1999-10-15   Slide 3   Hans Brückner, Ib Jørgensen,
                                                      Fritz Reuter, Eirik Selvik

Way of information

- Articles
- Press releases
- Address relevant companies directly
- Key wording our standards on the web in order to get acknowledge by search machines
- ...

IEC TC3 Workshop 1999-10-15   Slide 4   Hans Brückner, Ib Jørgensen,
                                                      Fritz Reuter, Eirik Selvik

Needs to be done (1)

- Naming relevant software vendors and contacts per country
  - Establishing a questionnaire
    - availability
    - implementation plans
    - experiences
    - publish the result (on the web)
  - Continuously updating
- Naming relevant users associations
- Selection of relevant international periodicals

IEC TC3 Workshop 1999-10-15   Slide 5   Hans Brückner, Ib Jørgensen, Fritz Reuter, Eirik Selvik

Needs to be done (2)

- Running seminars … on the topic
  - Describe the industry needs
  - Describe the possibilities of the standards
    - leaflet containing potential benefits
  - Provide the strategy for implementation
    - Modular approach
    - Conformance issues
      - Additions to be included in the standards
- Prepare "standard" presentations

IEC TC3 Workshop 1999-10-15   Slide 6   Hans Brückner, Ib Jørgensen, Fritz Reuter, Eirik Selvik

Who shall do marketing

- TC
- NC
- Experts

- National committees should change their role
  - More serving as consultant (in use of standards)
- Co-ordinate activities between national committees (per region ???)

IEC TC3 Workshop 1999-10-15   Slide 7   Hans Brückner, Ib Jørgensen, Fritz Reuter, Eirik Selvik

Resources

- Support from marketing departments
- Support by NC and/national organisations

YES we need resources

IEC TC3 Workshop 1999-10-15   Slide 8   Hans Brückner, Ib Jørgensen, Fritz Reuter, Eirik Selvik

Attract experts

- Experts have to be recognised outside of the committee
  - Names of the experts (WG, TC/SC) should be given in the publication
  - Use of www-pages, both by IEC/CO and NC
- Expert acknowledgement within their companies
  - Explicit letters to the experts companies providing official thanks etc

IEC TC3 Workshop 1999-10-15   Slide 9   Hans Brückner, Ib Jørgensen,
                                                      Fritz Reuter, Eirik Selvik

Annex D

Update of STEP AP 210

- Released for publication as IS with double logo of ISO and IEC
- More technical background information available upon request
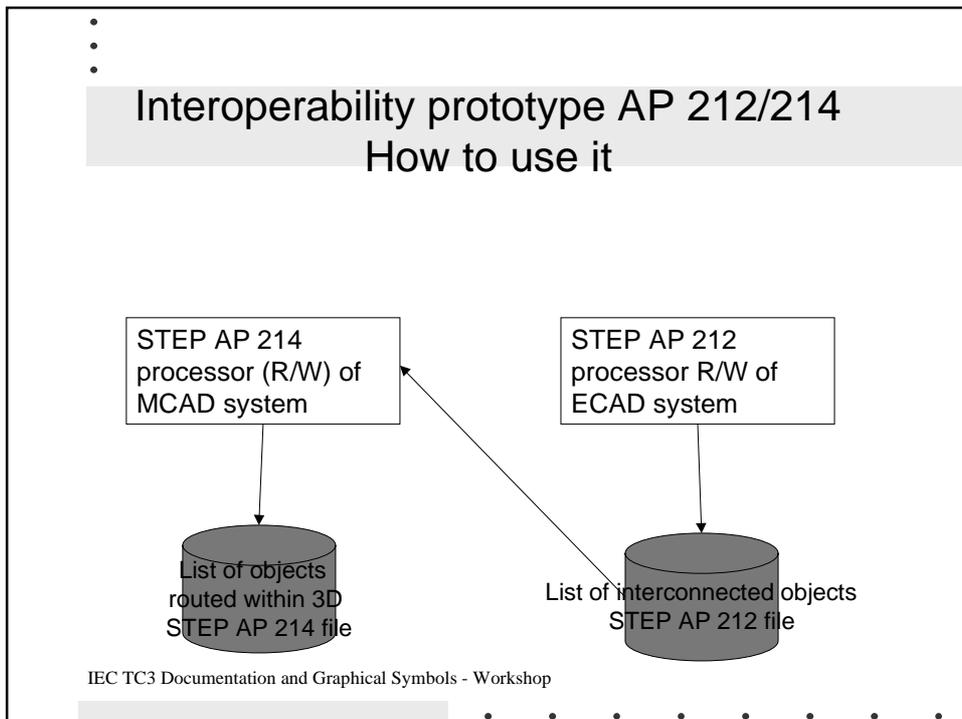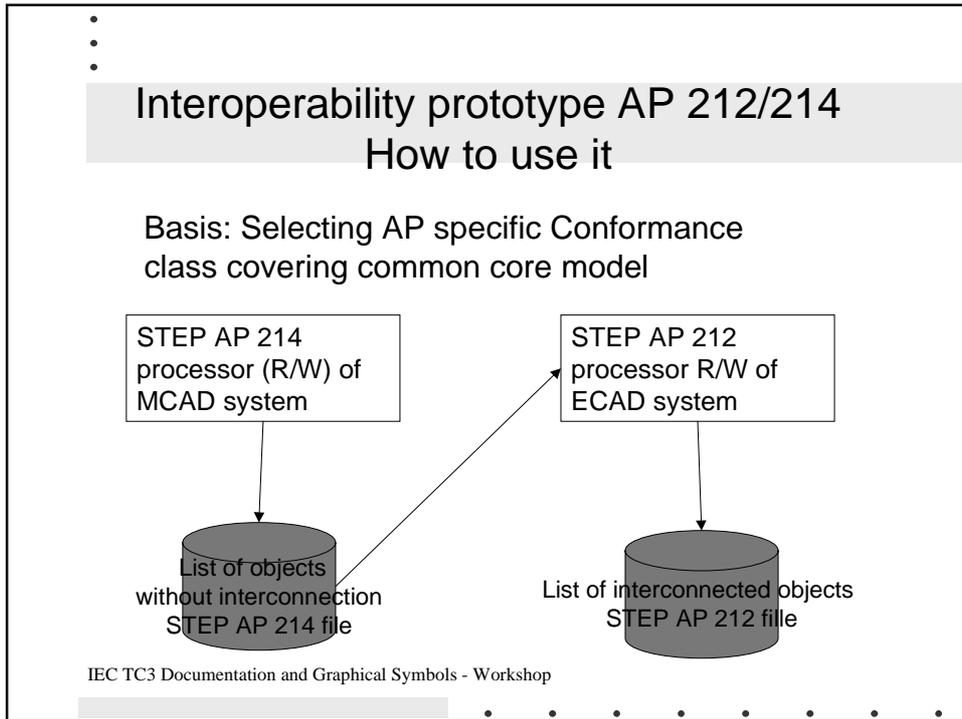
IEC TC3 Documentation and Graphical Symbols - Workshop

Updated activities of STEP AP 212

- Implementors Forum established at ProSTEP GmbH (see ProSTEP Telegram 10/1999)

- New EU sponsored project requested for an integration environment based on AP 212/214, IEC 4490, IEC 1131-3, IEC 61360 for component description in the domain of industrial automation objects

- Proof of the interoperability concept between STEP APs 212 and 214

IEC TC3 Documentation and Graphical Symbols - Workshop

Annex D

Interoperability prototype AP 212/214
How to use it

Basis: Selecting AP specific Conformance
class covering common core model

STEP AP 214
processor (R/W) of
MCAD system

STEP AP 212
processor R/W of
ECAD system

List of objects
without interconnection
STEP AP 214 file

List of interconnected objects
STEP AP 212 fille

IEC TC3 Documentation and Graphical Symbols - Workshop

Interoperability prototype AP 212/214
How to use it

STEP AP 214
processor (R/W) of
MCAD system

STEP AP 212
processor R/W of
ECAD system

List of objects
routed within 3D
STEP AP 214 file

List of interconnected objects
STEP AP 212 file

IEC TC3 Documentation and Graphical Symbols - Workshop

Annex E

Questions and answers with regard to marketing

- 7 -

Our understanding

Standards are driven by industry needs

- Come from the people
- Made for the people
- Used by the people

Which aims for marketing can be identified?

- To increase the use of the standards
- To improve the quality of the standards
- To get software implementations of the standards
- To disseminate the standards to other standardisation committees
- To get more countries involved in the standardisation work

Who are the potential target-groups of our standards?

- Industry users (all branches (first E/E), device manufacturers (3C))
    - SME
    - Consultants
    - Users associations
- ECAD/PDM system vendors (there is a problem however: as soon as a standard is included in a software package it may loose its "identity")
- Universities / technical schools
- Other technical committees

How can experts be attracted to participate in standardization work?

- Quicker progress
- Cost-effective participation (consortia and other ad hoc groups is a threat)
- Experts have to be recognised outside of the committee
    - Names of the experts (WG, TC/SC) should be given in the publication
    - Use of www-pages, both by IEC/CO and NC
    - Names will also serve as a point-of-contact for the maintenance
- Expert acknowledgement within their companies
    - Explicit letters to the experts companies providing official thanks etc

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Which way can the target-groups be informed best?

- Articles
- Press releases
- Address relevant companies directly
- Electric information (Internet, Web page , Independent SC3C web page)
    - Key wording our standards on the web in order to get acknowledge by search machines
- Seminars, Exhibitions

The following needs to be done:

- Naming relevant software vendors and contacts per country

    Establishing a questionnaire
    - availability
    - implementation plans
    - experiences
    - publish the result (on the web)
    - continuous updating
- Naming relevant users associations

- Selection of relevant international periodicals
- Running seminars … on the topic
    - Describe the industry needs
    - Describe the possibilities of the standards
- Leaflet containing potential benefits
    - Provide the strategy for implementation
- Modular approach
- Conformance issues – Additions to be included in the standards
- Prepare "standard" presentations

Whose task is it to promote the use of our standards? Who should do what?

- CO, TC, NC
- Experts
- National committees should change their role - More serving as consultant (in use of standards)
- Co-ordinate activities between national committees (per region ???)

Which resources are needed for marketing?

- Manpower, skills, money

3(Kyoto/Secretariat)4

- Support from marketing departments (CO)
- Support by NC and/national organisations
- The resources for marketing are related to turn-over. Therefore they will be limited for both CO and NCs. We need to find cost-effective methods.

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