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RM 1814/TC 3
January 1976

INTERNATIONAL ELECTROTECHNICAL COMMISSION

TECHNICAL COMMITTEE No. 3: GRAPHICAL
SYMBOLS

Unconfirmed Minutes of the meeting
held in The Hague
on 26th September 1975

Present:

Chairman : Mr. E. GEORGII (Switzerland)
Secretary : Mr. E. RUOSCH (Switzerland)

<u>COUNTRY</u>	<u>DELEGATES</u>
AUSTRALIA	Mr. T. Baitch
FINLAND	Mr. E. Hellgrèn
FRANCE	Mr. P. Cornu Mr. J.J. Ludwig Mr. C.A. Pannier Mr. J.J. Thurwanger
GERMANY	Mr. W. Amann Mr. G. Herder Mr. H. Hoepf Mr. J.G. Kleinschmidt
ITALY	Mr. G. Chiarella
NETHERLANDS	Mr. S.A. Junius Mr. R. Numan Mr. L.R. Polis
NORWAY	Mr. Jan Pettersen
SWEDEN	Mr. J. Nordelöf
SWITZERLAND	Mr. M. Ducommun
UNITED KINGDOM	Mr. S.J. Aries Mr. G.B. Nicholson
U.S.A.	Mr. C.A. Fricke Mr. G. Shapiro
<u>Observer</u>	
CCIR (International Telecommunication Union)	Mr. P. Guillot

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I. OPENING OF THE MEETING

The Chairman opened the meeting. Mr. Polis welcomed the delegates on behalf of the Netherlands National Committee and expressed the wish that the meeting would be fruitful.

II. APPROVAL OF THE DRAFT AGENDA (DOCUMENT 3(CENTRAL OFFICE)549)

The draft agenda was approved without any amendments.

III. CONFIRMATION OF THE MINUTES OF THE MEETING HELD IN ISTANBUL ON 20TH SEPTEMBER 1973 - RM 1650/TC 3

The Minutes were confirmed without any amendments.

IV. REPORT FROM THE CHAIRMAN OF THE CCI/IEC JOINT WORKING GROUP:
GRAPHICAL SYMBOLS FOR TELECOMMUNICATIONS

The Chairman of the Joint Working Group, Mr. Aries, read out his report (see Document 3(Secretariat)411).

Decision

- a) TC 3 accepted the new designation:

Groupe de Travail mixte CCI/CEI pour les Symboles graphiques et les schémas utilisés en électrotechnique y compris les télécommunications.

CCI/IEC Joint Working Group on Graphical symbols and diagrams used in electrotechnology including telecommunications.

(Sub-clause 4.3 of the report).

- b) It was agreed that "Preparation of diagrams, charts and tables for maintenance purposes" should be the new title of the new Publication being prepared by the Joint Working Group. This document would be sent to CCITT 4 and CCIR 9 for information.

(Sub-clause 2.1 of the report).

V. REPORTS FROM SUB-COMMITTEE 3A: GRAPHICAL SYMBOLS FOR DIAGRAMS AND ITS WORKING GROUPS

- a) Sub-Committee 3A

The Chairman of SC 3A, Mr. Georgii, read out his report:

- The following eight Central Office documents are ready for printing: 3A(Central Office)48, 49, 50, 51, 52, 53, 54, 55.
- SC 3A is awaiting the results of the voting on two Central Office documents: 3A(Central Office)56 and 58.
- Ready for circulation under the Six Months' Rule: Document 3A(Secretariat)46.
- Document 3A(Secretariat)47 has been withdrawn.

- b) Working Group 2: Graphical symbols for information processing

Mr. Reefman read out the report from the Chairman of WG 2 (see Document 3A(Secretariat)52). x

- c) Working Group 4: Reorganization of IEC Publication 117

The Chairman of WG 4, Mr. Aries, read out his report (see Document 3A(Secretariat)55). x

VI. REPORT FROM SUB-COMMITTEE 3B: PREPARATION OF DIAGRAMS, CHARTS AND TABLES. ITEM DESIGNATION

The Chairman of SC 3B, Mr. Fricke, read out his report (see Document 3(Secretariat)412). x

VII. REPORT FROM SUB-COMMITTEE 3C: GRAPHICAL SYMBOLS FOR USE ON EQUIPMENT, AND ITS WORKING GROUP

- a) Sub-Committee 3C

The Secretary of SC 3C, Mr. Polis, read out his report (see Document 3(Secretariat)413). x

- b) Working Group 1: Graphical symbols for use on washing machines and dish washers

Working Group 1 dealt with new proposals.

VIII. RESULTS OF THE ISO/IEC CO-ORDINATION MEETING HELD ON 2ND OCTOBER, 1974
IN ZURICH

The results of this meeting are given in Document O2(Central Office)148. (Appendix A to these Minutes).

IX. OTHER BUSINESS

Since he would be leaving the Chairmanship of TC 3 in 1977, Mr. Georgii said it would be necessary to find a successor.

Dr. Funck would be attending his last SC 3C meeting in 1976 and Mr. Polis would have to resign.

A new Chairman and a new Secretary for SC 3C were therefore needed.

X. DATE OF NEXT MEETING

No date was arranged for the next meeting.

XI. CLOSE OF MEETING

The Chairman thanked the delegates for their excellent work and closed the meeting.

APPENDIX A

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O2(Central Office)148
April 1975

COMMITTEE OF ACTION

Recommendations resulting from the
co-ordination meeting between
ISO/TC 145, Graphic Symbols and
IEC/TC 3, Graphical Symbols, held in
Zurich on 3rd October, 1974

Note.- Similar recommendations are submitted for approval to the ISO
Council.

1. A graphic symbol with a specific concept (definition and application) shall be standardized by one organization only.
2. For symbols in the electrotechnical field, the IEC is responsible.
3. For symbols in the non-electrotechnical field, ISO is responsible.
4. For symbols applicable to both fields, the responsible body should be determined by consultation between the Secretariats. IEC and ISO National Committees have the possibility of submitting comments.
5. Within the IEC, TC 3 is the only Committee having authority to publish graphic symbols.
6. Within the ISO, TC 145 is the only Committee having authority to publish graphic symbols on single sheets.
7. The initiative for the formulation of graphic symbols should be taken either by the various Technical Committees or by the Technical Committee responsible for the preparation of symbols within IEC or ISO.
8. The initiative may result in:
 - a) An unambiguous description of the function or subject to be symbolized, or
 - b) A complete proposal for the symbol including its meaning and application.
9. Between the Secretariats of IEC/TC 3 and ISO/TC 145 a continuous communication including information, consultation and exchange of documents shall exist.
10. The meeting proposes to ISO Council to take into consideration the financial consequence in setting up a symbol data bank.

JP/er

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3A(Secretariat)52
January 1976

INTERNATIONAL ELECTROTECHNICAL COMMISSION

TECHNICAL COMMITTEE No. 3: GRAPHICAL
SYMBOLS

SUB-COMMITTEE 3A: GRAPHICAL SYMBOLS
FOR DIAGRAMS

Report from the Chairman of WG 2 -
Graphical symbols for information
processing

Note.- This report was handed round at the meeting of SC 3A held in The Hague,
September 1975 as Document SC 3A/WG 2(The Hague/Chairman)16.

1. Recent Meetings

One meeting has been held during this year in The Hague from
the 26th - 30th of May 1975

2. Results achieved

The group dealt with:

- Document 3A(Secretariat)41, "Graphical symbols for analogue
and hybrid elements", resulting in a draft for document
3A(Secretariat)46A.
- Document 3A(Secretariat)42, "Second supplement to Publication
117-15", resulting in a draft for a Central Office document.

Further, new concepts and symbols were discussed, resulting in
drafts for Secretariat-documents on:

- Open collector/emitter output designation
- SET-/RESET-dependency
- Recommended additional information for complex functions
- Magnitude comparators
- Bistable elements with special switching properties
- ENABLE - input
- Galvanic separation
- FREE-state dependency
- Monostable elements with synchronized control
- Escape character
- Associative memories (query input and compare output)
- Qualifying symbol for an adder

3. The next meeting will be held in Paris in 1976.

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3A(Secretariat)53
December 1975

INTERNATIONAL ELECTROTECHNICAL COMMISSION

TECHNICAL COMMITTEE No. 3: GRAPHICAL
SYMBOLS

SUB-COMMITTEE 3A: GRAPHICAL SYMBOLS FOR
DIAGRAMS

Report from the Chairman of WG 4 -
Re-organisation of Publication 117

Note. - This report was handed round at the meeting of SC 3A held in The Hague,
September 1975 as Document 3A(The Hague/WG 4)12.

1. Recent Meetings

Two meetings have been held since my last report - one in Berlin in October 1974 and the other in London in May of this year.

2. Results achieved

The Group has continued its systematic revision of Publication 117 and has prepared proposals for Parts 2, 3 and 4 of the new Publication as follows:-

Part 2 Conductors and Connecting Devices

Part 3 Resistors, Capacitors and Inductors

Part 4 Electronic Tubes and Semiconductors.

WG 4 proposes to hold these drafts until a more substantial quantity of the new publication is available for circulation to the National Committees. Document 3A(Secretariat)45 has been revised in minor detail to take account of comments received from the National Committees and to effect improvements proposed by members.

3. Formation of Graphical Symbols

The Group studied document 3A(Finland)18 at its meeting in London. It was considered that parts of the general principles could well be included in the introduction to the revised publication but the Group did not agree with the proposal to standardize a basic pattern (clause 4), nor with the rules for forming symbols (clause 5). It was considered that in view of the many different ways of producing symbols and of the multiplicity of applications no attempt to impose precise limits as to form and size should be made. However the Group has still to consider a paper prepared by Mr Herder as he was unfortunately unable to be present at the last meeting.

4. Publication 416

In connection with the study reported in paragraph 3 above, the Group noted that clause 1c relating to the scope of Publication 416 implies that the basic pattern given in the Publication applies also to graphical symbols used on diagrams. WG 4 considers that this is incorrect and wishes to suggest to SC 3A that action should be taken to propose suitable amendments to Publication 416 and the corresponding part of the draft ISO/DIS 3461.

5. Next meeting

The next meeting will be held in Paris from 29/9/75 to 1/10/75.

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3(Secretariat)412
December 1975

INTERNATIONAL ELECTROTECHNICAL COMMISSION

TECHNICAL COMMITTEE No. 3: GRAPHICAL
SYMBOLS

Report of the Chairman of SC 3B,
Diagrams, charts and tables, Item
designation

Note.— This report was handed round at the meeting of TC 3 held in The Hague, September 1975 as Document 3(The Hague/SC 3B)3.

1. New Publications

Since SC 3B reported to TC 3 in September 1973, the following Publications, prepared by SC 3B, have been issued:

Publication 113-3, First edition, 1974: General recommendations for the preparation of diagrams.

Publication 113-4, First edition, 1975: Recommendations for the preparation of circuit diagrams.

2. Work being dealt with

At a meeting held in Milan 20th April - 2nd May 1975, SC 3B dealt with the following subjects:

Preparation of interconnection diagrams and tables, document 3B(Central Office)12. This document has been circulated for voting according to The Six Months' Rule and received a sufficient number of favourable votes. After editorial revisions a manuscript has been forwarded for printing as IEC Publication 113-5.

Preparation of unit wiring diagrams and tables, document 3B(Secretariat)10. All comments, received from National Committees, have been considered. A revised document is being circulated for voting according to The Six Months' Rule.

Item designation, Publication 113-2. On the basis of replies on a questionnaire to the National Committees the following matters have been thoroughly discussed:

- a) List of second-letters or two-letter combinations for the identification of kind of item.

SC 3B decided not to do any further work on international standards for such lists. TC 44 has been informed about this decision and about the main reasons for it.

b) Guidance in the use of item designation.

SC 3B considered that no work on revision of Publication 113-2 should be started, but that a guidance, forming an appendix to Publication 113-2, would be useful. The CCI/IEC - Joint Working Group has been requested to prepare a proposal for a guidance.

Terms and definitions for various types of logic diagrams, document 3B(Secretariat)8. A revised edition of this document, including a proposal for classification, will be circulated to the National Committees for comments.

Preparation of various types of logic diagrams, Doc. 3B(Secretariat)9

A revised edition of this document, including diagram examples, will be circulated to the National Committees for comments.

3. Future work

In addition to work in progress, the following matters are on the immediate programme:

Amendment to Publication 113-1, Definitions and classification.

Preparation of explanatory diagrams.

Preparation of diagrams, charts and tables for maintenance purposes.

The next meeting of SC 3B is planned to be held in 1976, but date and place are not yet fixed.

28. Jan. 1976

INTERNATIONAL ELECTROTECHNICAL COMMISSION

TECHNICAL COMMITTEE No. 3: GRAPHICAL
SYMBOLS

Report from the Chairman of SC 3C
to the Chairman of TC 3, on the
meeting held in The Hague on
22nd and 23rd September 1975

Note.- This report was handed round at the meeting of TC 3 held in The Hague,
September 1975 as Document 3A(The Hague/SC 3C)5.

1. Secretariat documents

The meeting dealt with 7 Secretariat documents containing altogether 37 symbols of which 16 have been approved for circulation under the Six Months' Rule, 12 are to be turned over to ISO/TC145, 7 are to be submitted to the CCI/IEC-JWG as these should primarily be dealt with by the CCITT/WG Human Factors, 4 are to be submitted to IEC/TC14, 61, 64 and the CEE for further advice, and finally 7 will be deleted.

For a survey of the situation see Appendix A.

Document 3C(Secretariat)42: Draft - Symbols for educational equipment, caused some problems with respect to the formulation of the proper symbols. It was the opinion of the meeting that this could only be done efficiently when experts of SC60C participate in the work.

The meeting therefore decided to seek approval from TC 3 to set up a Preparatory Working Group: "Symbols for educational equipment" with the task to prepare a document containing symbols for the functions as needed for educational equipment keeping in mind that for most of them a more general application may be possible.

2. Central Office documents

Of four documents (51, 53, 54, 55) containing twelve symbols eleven are in the process of printing (IEC Publ. 417B).

Document 3C(Central Office)56: Draft - Symbol for transformer.
Voting period due in August 1975.

Votes in favour : 6
against : 0
abstention : 1 (USA)

Document 3C(Central Office)60: Draft - Symbols for earth (ground), chassis and equipotential terminal.

Voting period due in November 1975.

Actual position:
in favour : 1
against : 1 (effecting symbol 5021 only)

Symbol 5184: Clock; Time switch; Timer
was finally approved for printing.

3. New documents

3C(Secretariat)45: Draft - Symbols for washing machines, circulating since July 1975, containing 13 symbols.

3C(Secretariat)47: Draft - Amendment of symbols 417-IEC-5001, 5004, 5063 and 5064, circulating since September 1975.

4. Report from the Secretariat on the co-ordination meeting of representatives of IEC/SC3C, ISO/TC145 and ISO/TC95, held in Zurich, October 1974

The Secretary reported on the matters dealt with and read the text of document O2(Central Office)148. He mentioned the change made in the text of item 10, because the actual text does not represent what was really agreed upon between the parties concerned in Zurich.

The Secretary of ISO/TC145 strongly emphasized the future need for a joint IEC/ISO Graphical Symbols Data Bank, which was strongly supported by the Secretary of SC3C. It was not even possible to agree in principle.

5. Document 3C(Finland)6

The Finish proposal was turned down as the meeting considered this matter beyond the scope of SC3C.

6. Criteria for the acceptance of proposals

France and USA expressed their Concern regarding the formulation of symbols the necessity of which may be considered to be doubtful. To get things under control the meeting agreed that proposals from National Committees shall no longer be published directly by the Secretariat of SC3C, but must first be circulated as a National proposal. For each of the proposed symbols a motivation for its need shall be given in order to enable the National Committees to evaluate these motives against their National practices. The meeting expects thus to obtain sufficient filtering previous to the Secretariat document stage.

APPENDIX A

SURVEY OF THE POSITION OF THE SYMBOLS CONTAINED IN THE SECRETARIAT DOCUMENTS CONCERNED

	6MR	ISO/TC145	JWG	TC14, 61, 64 CEE	Deleted
<u>30(Sec)36</u>					
5196	X				
5197	X				
5198	X				
5199	X				
5200	X				
5201	X				
5202	X				
5203		X			
5204	X				
5205		X			
<u>30(Sec)38</u>					
5206			X		
5207			X		
5208			X		
5209			X		
5210			X		
5211			X		
5212			X		
<u>30(Sec)39</u>					
5151	X				
5152	X				
5153	X				
5154	X				
<u>30(Sec)40</u>					
5213	X				
5214					X
5215					X
5216					X
5217					X
5218					X
5219					X
5220					X
<u>30(Sec)41</u>					
5073	X				
5074	X				
5075	X				
<u>30(Sec)43</u>					
5221				X	
5222				X	
5223				X	
5224				X	
5225				X	

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