## VOTE ON A PROPOSED NEW WORK ITEM ISO/IEC JTC 1 / SC 34 N 432

Date of Circulation of NP: 2003-07-28 Date of Ballot Close: 2003-10-28

Please return all votes and comments directly to the JTC 1/SC 34 Secretariat (sdesaute@ansi.org) by the due date indicated.

### Proposal for a new work item on

**Title:** ISO/IEC TR 9573-13 - Information technology – SGML support facilities – Techniques for using SGML – Part 13: Public entity sets for mathematics and science (2<sup>nd</sup> Edition)

# \* please note that ISO/IEC PDTR 9573-13 is being balloted in parallel to this NP. See document SC 34 N 433 \*

Any proposal to add a new item to the programme of work shall be voted on by correspondence, even if it has appeared in the agenda of a meeting.

| A. Vote             |  |       |               | YES | NO | Comments |
|---------------------|--|-------|---------------|-----|----|----------|
| Q.1                 | Do you accept the proposal in document SC 34 432 as a sufficient definition of the new work item? (If you have responded "NO" to the above question, you are required to comment.) |       |               |     |    |          |
| Q.2                 | Do you support the addition of the new work item to the programme of work of the joint technical committee?  |       |               |     |    |          |
| B.<br>Participation |  |       |               |     |    |          |
| Q.3                 | Do you commit yourself to participate in the development of this new work item?  |       |               |     |    |          |
| Q.4                 | Are you able to offer a project editor who will dedicate his/her<br>efforts to the advancement and maintenance of this project? (If<br>"YES," please identify)                     |       |               |     |    |          |
| C.<br>Documentation |  |       |               |     |    |          |
| Q.5                 | Do you have a major contribution or a reference document ready for submittal?  |       |               |     |    |          |
| Q.6                 | Will you have such a contribution in ninety days?  |       |               |     |    |          |
| P-member Voting:    |  | Date: | Submitted by: |     |    |          |
| National Body       |  |       | Name          |     |    |          |

## L2/03-439

#### PROPOSAL FOR A NEW WORK ITEM

| 1 1 1                | Proposer:<br>ISO/IEC JTC 1/SC 34 |  |  |
|----------------------|----------------------------------|--|--|
| Secretariat:<br>ANSI | ISO/IEC JTC 1/SC 34 N 432        |  |  |

A proposal for a new work item shall be submitted to the secretariat of the ISO/IEC joint technical committee concerned with a copy to the ISO Central Secretariat.

#### Title

TR 9573-13 - Information technology – SGML support facilities – Techniques for using SGML – Part 13: Public entity sets for mathematics and science (2<sup>nd</sup> Edition)

#### **Scope** (and field of application)

Tens of thousands of graphic characters are used in publishing text, a large proportion of which have been defined in ISO/IEC 10646. Even where standard coded representations exist, however, there may be situations in which they cannot be keyboarded conveniently or accurately, or in which it is not possible to display the desired visual depiction of the characters.

To help overcome these barriers to the successful interchange of SGML and related documents, this part of ISO/IEC 9573 defines character entity sets for some widely uses special graphic characters regularly used in the production of scientific and mathematical documents.

In many instances upper- and lower-case is used to differentiate the names of entities. It is assumed that any SGML concrete syntax used in conjunction with these entity names will be case sensitive, as is the case with the W3C XML subset of SGML

#### Purpose and justification

ISO/IEC 10646 was not available when the original Part 13 of ISO/IEC TR 9573-13 was prepared, so the standard could contain no form of standardized mapping to characters sets. Until the full range of mathematical and scientific characters were added to ISO/IEC 10646 no standard mappings could be described. As a result, different people have created different mappings over time, with the effect that certain applications have trouble in interworking.

Now that ISO/IEC 10646 has been updated to include the majority of characters defined in ISO/IEC TR 9573-13 it is possible to a) provide standardized mappings to ISO/IEC 10646 characters b) resolve inconsistencies between the different entity sets in ISO/IEC TR 9573-13 which have, over time, become mapped to the same ISO/IEC 10646 character, meaning that two standard entity names have been defined for the same character. This will create a second edition of the new work

#### Programme of work

If the proposed new work item is approved , which of the following document(s) is (are) expected to be developed?

- \_\_\_\_\_a single International Standard more than one International Standard (expected number: .......)
- \_\_\_\_a multi-part International Standard consisting of .......... parts

#### Relevant documents to be considered

ISO/IEC TR 9573-13

ISO/IEC 10646:2000 + Amd. 1

#### Cooperation and liaison

This work is being undertaken in collaboration with members of the W3C Math Working Group who are responsible for maintaining the W3C Mathematical Markup Language (MathML). The work is being reviewed by the American Mathematical Society (AMS), who advised on the development of the first edition of ISO/IEC 9573-13. Liaison has also been with the developers of the DocBook application for electronic publication, who use the original entity definitions for scientific publication applications.

JTC1 SC2 will be asked to review work

#### Preparatory work offered with target date(s)

PDTR (CD) ballot simultaneous with NP (see SC 34 N 433)

#### Signature:

- If yes, indicate name .....

Are there any known requirements for coding? ......NO....... -If yes, please specify on a separate page

Does the proposed standard concern known patented items? ......NO....... - If yes, please provide full information in an annex

Comments and recommendations of the JTC 1 Secretariat - attach a separate page as an annex, if necessary

**Comments with respect to the proposal in general, and recommendations thereon:** It is proposed to assign this new item to JTC 1/SC34 WG1

**Voting on the proposal** - Each P-member of the ISO/IEC joint technical committee has an obligation to vote within the time limits laid down (normally three months after the date of circulation).

| Date of circulation: | Closing date for voting: | Signature of JTC 1/SC 34 Secretary: |
|----------------------|--------------------------|-------------------------------------|
| 2003-07-28           | 2003-10-28               | Sara Desautels                      |

| NEW WORK ITEM PROPOSAL -<br>PROJECT ACCEPTANCE CRITERIA |  |  |
|---|--|--|
| Criterion   | Validity   | Explanation  |
| A Business Requirement                                  |  |  |
| A.1 Market Requirement                                  | Essential<br>Desirable _X_<br>Supportive                 | Meeting needs of users, who<br>have specifically asked for<br>clarification on interpretation of<br>TR in new environments |
| A.2 Regulatory Context                                  | Essential<br>Desirable _X_<br>Supportive<br>Not Relevant | Will ensure more consistent use<br>of ISO/IEC 10646 character sets<br>in structured document<br>applications               |
| B. Related Work   |  |  |
| B.1 Completion/Maintenance of current standards         | Yes _X_<br>No  | Will extend existing standard to make it easier to apply   |
| B.2 Commitment to other organization                    | Yes _X_<br>No  | Request from W3C working group   |
| B.3 Other Source of standards                           | Yes _X_<br>No  | Used in W3C XML standards such as MathsML  |
| C. Technical Status                                     |  |  |
| C.1 Mature Technology                                   | Yes _X_<br>No  | Widely used in industry today  |
| C.2 Prospective Technology                              | Yes<br>No_X_   |  |
| C.3 Models/Tools  | Yes _X_<br>No  | Existing Internet tools support the entity sets  |
| D. Conformity Assessment and<br>Interoperability        |  |  |
| D.1 Conformity Assessment                               | Yes _X_<br>No  |  |
| D.2 Interoperability                                    | Yes X  |  |
| E. Other Justification                                  |  |  |