

# Guide for International Representatives for ISO/IEC JTC1/SC25 and INCITS T10 and T11:

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T10 and T11, (T1n), develop national, INCITS/ANSI standards. T1n then has the opportunity to contribute these standards to ISO/IEC JTC1 to be converted into international standards. The International Representative, IR, of T1n is the person that has the responsibility to facilitate this conversion process. The conversion process usually begins when the T1n standard is in the ANSI Public Review process. There are multiple processes the IR can use for the conversion and in fact the starting point does not have to be an ANSI standard, it can be a specification or a modification of an ANSI standard.

There are procedures for converting a T1n document, draft standard, standard, amendment, technical report, ISP, or technical corrigendum into an international standard. The conversion process is not difficult but the procedures and definitions used in the international standardization process are different from those used in T1n. The following paper includes a description of all of the possible processes as well as the one process that T1n usually follows. It also includes excerpts from the JTC1 Directives version 5 as well as templates for T1n motions and forms.

## SECTION I: DISCUSSION

The international standards community is comprised of 3 Standards Developing Organizations, SDOs:

1. The International Telecommunications Union, ITU, which is a member of the United Nations.
  - a. The ITU makes standards covering the telephone system, among others and is mandatory.
  - b. Countries are members, such as the U.S. State dept. Companies can send experts
2. The International Electrotechnical Commission, IEC.
  - a. The IEC develops standards for electric and electronic components such as cables, connectors, among other things.
  - b. The IEC also maintains safety standards which, in the US, UL bases its requirements.
  - c. IEC standards are voluntary.
  - d. Members are organizations within countries, in the US, ANSI is the member
3. The International Organization for Standardization, ISO (which is a word meaning unity and not an acronym).
  - a. ISO develops a broad range of standards for over 200 item groups
  - b. ISO standards are voluntary.
  - c. Members are organizations within countries, in the US, ANSI is the member

For the world of computers, known as the Information Technology, IT, sector, ISO and IEC have joined together to form Joint Technical Committee 1, JTC1. There are about 15 active Sub Committees, SCs, in JTC1 covering languages, code sets, storage media, compression coding, device interfaces, and many more. SC25 is responsible for home networking in Working Group 1, WG1; premises wiring in WG3; and device interfaces and microcomputer systems in WG4.

T10, T11, and the IEEE Computer Society Microprocessor sub committee, MSC, formally relate to SC25/WG4. T13 and some consortia also relate to SC25/WG4 via T11, these include, but are not limited to, SNIA, RapidIO, and DMTF. See explanation of this liaison in Section IV of this document.

For each committee in JTC1 where the US has an interest a Technical Advisory Group, TAG, is formed. The TAG for JTC1 is INCITS. The TAG for SC25, SC25/WG1 and SC25/WG3 is EIA/TIA. The TAG for SC25/WG4 is INCITS. INCITS, in turn, relies upon T10 and T11 (and sometimes IEEE MSC) for recommendations.

Therefore all correspondence between T10, T11 and JTC1 is via the WG4 TAG which is INCITS. INCITS in turn corresponds between itself and SC25 via ANSI. The detailed process is that during a T10 or T11 meeting the IR uses part of Agenda to execute TAG business such as approving ballots in JTC1. An overview of one example, the most common, of the processing path between T1n, INCITS, ANSI, and SC25 is as follows:

1. A NWIP, New Work Item Proposal, is processed in SC25 with default acceptance by JTC1. Therefore T1n generates a NWIP and recommends that INCITS accept it and forward it to the SC25 TAG which sends it to SC25. A copy of the draft standard, not necessarily the final version, should also be attached for information to familiarize the National Members with the proposed standard. *At least 5 National Members/countries must vote YES AND at least 5 National Members must vote YES on Question 3 of the NWIP ballot form for the project to be added to the Program of Work.*
2. A FCD, Final Committee Draft, is processed in SC25. Therefore T1n generates a FCD and forwards it to INCITS which forwards it to the SC25 TAG, which forwards it to SC25. The FCD is an editable and PDF document in JTC1 style
3. The FCD ballot is voted upon in T1n with a recommendation to INCITS to accept its decision. INCITS then forwards its vote to the SC25 TAG, which forwards it to SC25. The FCD is an editable and PDF document in JTC1 style. *This T1n ballot can be YES, NO or Abstain. Comments, on a Comments Form, can be included with a YES vote but must be included with a NO vote.*
4. A FDIS, Final Draft International Standard, is processed in JTC1. Therefore T1n generates the FDIS and forwards it to the SC25 Secretariat which requests the JTC1 Secretariat to generate a FDIS ballot in JTC1. The FDIS is an editable and PDF document in JTC1 style. Any comments received with the FCD ballot must be resolved and modifications, if any, must be included in the FDIS document.
5. The FDIS ballot is voted upon in T1n with a recommendation to INCITS to accept its decision. INCITS, now acting as JTC1 TAG, then forwards its vote to JTC1. *This ballot is limited to YES, NO, or Abstain.* Therefore the document cannot be modified in this phase.

The process described above is but one of many processes in JTC1, such as:

- A. Develop standard in JTC1
- B. Contribute a design to JTC1 for further development
- C. Contribute a document to JTC1/SC25 and go through their complete process
- D. Contribute a completed and national standard to JTC1 and use their Fast Track process.

Path A. is not used very often in SC25/WG4, the T1n community prefers to start and work out the details within T1n meetings and then forward the complete document to SC25/WG4.

Path B. is not used very often in SC25/WG4 for the same reasons as above in Path A.

Path C. this is the process which T1n will probably use most often. It is called the classic path. This path, based upon the latest JTC1 Directives, is very fast and allows a short turn around time if comments have to be resolved. It also enables early distribution of the potential standard for discussion, questions, and “socialization” which leads to more acceptance by the National Members.

Path D. is the Fast Track process, but since Path C. is just as fast, this path is only used when someone wants to for their own reasons. Basically the Fast Track process inserts an ANSI approved standard into the JTC1 process at the FDIS level. But the FDIS is not final, therefore it is a DIS, and the ballot period for a DIS is much longer than for a FDIS. Also a DIS allows comments. These comments must then be resolved by a special ballot resolution committee which is formed just for this purpose. The Fast Track process can take much longer if there is any controversy due to the longer process to resolve comments and the possibility of comments is greater due to lack of “socialization” inherent in the classic process, Path C.

## SECTION II. DETAILED DISCUSSION

Below is a description of the process usually followed in T1n:

Process Path C, Classic Path:

- 1) T1n decides to contribute a document to JTC1 which may or may not be an ANSI approved standard.
  - a) The trigger for this is when a draft standard goes to Public Review in the US.
  - b) The T1n committee votes to initiate an international project (Attachment A) and requests that the IR generate a NWIP. New Work Item Proposal. *This step can be informal within T1n and not a ballot.*
  - c) A T1n editor shall be defined. This is the person that is responsible for generating the text needed for each phase of the JTC1 process and is the technical support for the JTC1 Project Editor which is usually the IR.
  - d) If there are any patents essential for this project the letters of assurance must be addressed to ISO/IEC Central Secretariat.
  - e) The IR generates an NWIP which will be contributed to JTC1/SC25. (Attachment B)
  - f) T1n must have a role call motion to forward the project to JTC1/SC25 and to recommend that the USA JTC1/SC25 TAG vote to support when the ballot is issued. This is defined as a SubCommittee originated NWIP. (Attachment C)
  - g) The JTC1 Project Editor will be the IR unless someone else wants the responsibility.
  - h) The NWIP and the role call motion are sent to INCITS for their ballot.
- 2) The IR sends the NWIP to SubCommittee 25 via INCITS for ballot.
- 3) JTC1/SC25 TAG ballots on the NWIP
  - a) When the NWIP is approved in JTC1/SC25, T1n contributes the document via INCITS as a FCD, Final Committee Draft. ( If a document is contributed at the same time as the NWIP it must be a CD, Committee Draft, and will be balloted with the NWIP which is an unnecessary extra step for T1n.)
  - b) The text for the FCD must be in ISO/IEC style. This style replaces most INCITS and/or ANSI front matter with ISO/IEC front matter. Furthermore, all references to US standards and other US

related information needs to be converted to references to ISO or IEC standards or should be removed. (See Sample at end of this document)

- c) The T1n editor sends the JTC1 style text to the IR in both PDF and editable forms such as Frame or WORD. The IR forwards the text to SC25 via INCITS as a FCD for letter ballot.
- d) T1n must then have a role call Motion to recommend to JTC1 SC25 TAG to vote yes on the FCD, (Attachment D)

#### 4) SC25 ballots on the FCD

- a) SC25 generates a ballot tally (Results of Voting) and a list of comments (Collation of Comments), if any.
- b) The Project Editor and the T1n editor then review the list of comments and generate a Disposition of Comments, DoC, which either accepts or rejects each comment along with an explanation of a change or why rejected.
- c) If any changes must be made to the document, a vote by T1n is necessary.
- d) The T1n editor then incorporates the changes, if any, into the document and the Project Editor forwards the document in PDF and editable form along with the DoC to SC25. The FCD now becomes a FDIS, Final Draft International Standard.
- e) T1n then must have a role call Motion to recommend to JTC1 TAG to vote yes on the FDIS. (Attachment E)

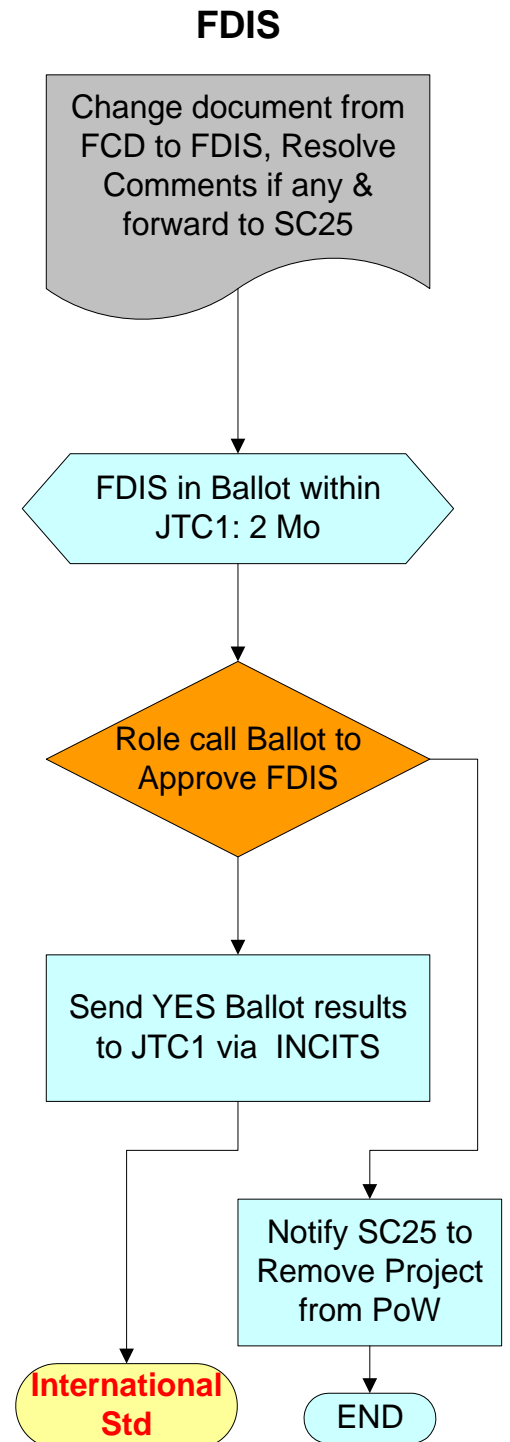
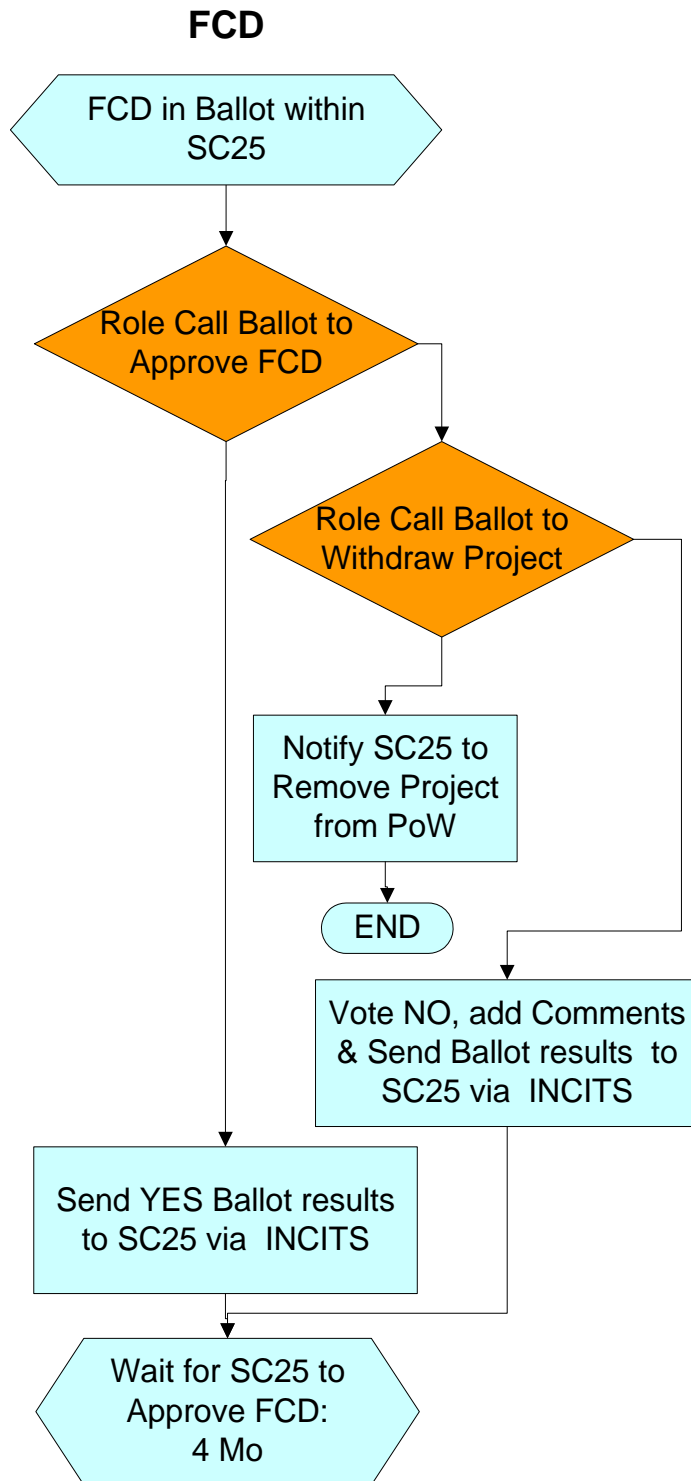
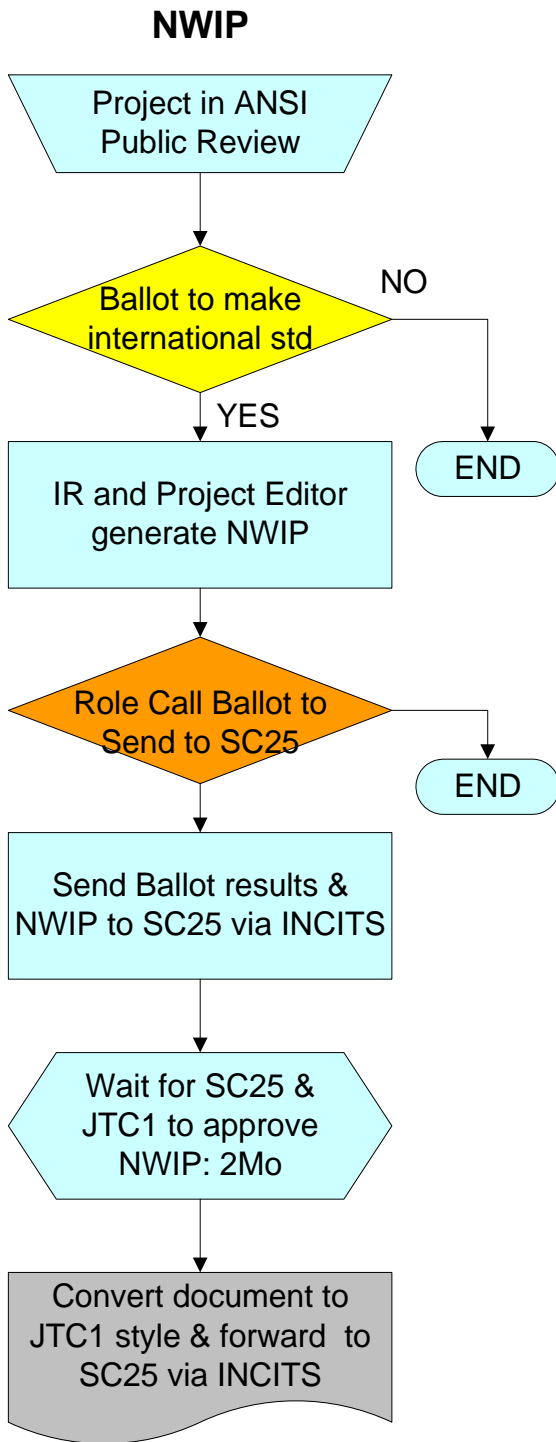
#### 5) JTC1 (ITTF) ballots on the FDIS

- a) ISO/IEC JTC1 (ITTF) generates a ballot tally and a list of comments, if any.
- b) ISO/IEC JTC1 ITTF Central Secretariat then reviews any comments and makes the necessary changes. It now becomes an IS, International Standard.

#### 6) The document is now an International Standard

#### 7) There are also motions required for ISO/IEC issues which require a role call vote, such as:

- a) Approved list of delegates to a JTC1 meeting (Attachment F)
- b) Five (5) year review of a standard. Where one can Reconfirm, withdraw, or revise. (Attachment G)
- c) Fast Track project where JTC1/SC25/WG4 is the responsible body as defined by JTC1.



## SECTION III Motion and Form Templates:

### ATTACHMENT A

*MOTION: T11 recognizes the completion of Fibre Channel Backbone (FC-BB) and requests that the IR prepare a NWIP that will be forwarded to JTC1/SC25 TAG upon approval by T1n. The T1n editor will be Gary S. Robinson. Document T11/06-nnnv0 for information.*

### ATTACHMENT B

#### Proposal for a new work item

Date of presentation of proposal YYYY-MM-DD	Proposer: SC25
Secretariat: DIN National Body	ISO/IEC JTC 1 N XXXX ISO/IEC JTC 1/SC XX N XXX

<p><b>A proposal for a new work item</b> shall be submitted to the secretariat of the ISO/IEC joint technical committee concerned with a copy to the ISO Central Secretariat.  <b>Presentation of the proposal</b> - to be completed by the proposer. .</p>	
<p><b>Title</b> (subject to be covered and type of standard, e.g. terminology, method of test, performance requirements, etc.)          Specification of Data Value Domain</p>	
<p><b>Scope</b> (and field of application)</p>	
<p><b>Purpose and justification</b> - attach a separate page as annex, if necessary</p>	
<p><b>Programme of work</b>          If the proposed new work item is approved, which of the following document(s) is (are) expected to be developed ?  <input type="checkbox"/> a single International Standard  <input type="checkbox"/> more than one International Standard (expected number: ..... )  <input type="checkbox"/> a multi-part International Standard consisting of ..... parts  <input type="checkbox"/> an amendment or amendments to the following International Standard(s) .....  <input type="checkbox"/> a technical report , type .....</p> <p>And which standard development track is recommended for the approved new work item?  <input type="checkbox"/> a. Default Timeframe  <input checked="" type="checkbox"/> b. Accelerated Timeframe  <input type="checkbox"/> c. Extended Timeframe</p>	
<p><b>Relevant documents to be considered</b></p>	
<p><b>Co-operation and liaison</b></p>	
<p><b>Preparatory work offered with target date(s)</b></p>	
<p><b>Signature:</b></p> <p>Will the service of a maintenance agency or registration authority be required? .....          - If yes, have you identified a potential candidate? .....          - If yes, indicate name .....</p> <p>Are there any known requirements for coding? .....          -If yes, please specify on a separate page</p> <p>Does the proposed standard concern known patented items? .....          - If yes, please provide full information in an annex</p>	
<p><b>Comments and recommendations of the JTC 1 or SC XXSecretariat</b> - attach a separate page as an annex, if necessary</p> <p><b>Comments with respect to the proposal in general, and recommendations thereon:</b>          It is proposed to assign this new item to JTC 1/SC XX</p> <p><b>Voting on the proposal</b> - 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).</p>	
<p><b>Date of circulation:</b> YYYY-MM-DD</p>	<p><b>Closing date for voting:</b> YYYY-MM-DD</p>
<p><b>Signature of Secretary:</b></p>	

<b>NEW WORK ITEM PROPOSAL - PROJECT ACCEPTANCE CRITERIA</b>		
<b>Criterion</b>	<b>Validity</b>	<b>Explanation</b>
<b>A. Business Requirement</b>		
A.1 Market Requirement	Essential <input checked="" type="checkbox"/> Desirable <input type="checkbox"/> Supportive <input type="checkbox"/>	
A.2 Regulatory Context Essential <input type="checkbox"/>	Desirable <input type="checkbox"/> Supportive <input type="checkbox"/> Not Relevant <input checked="" type="checkbox"/>	
<b>B. Related Work</b>		
B.1 Completion/Maintenance of current standards	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
B.2 Commitment to other organisation	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
B.3 Other Source of standards	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
<b>C. Technical Status</b>		
C.1 Mature Technology	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
C.2 Prospective Technology	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
C.3 Models/Tools	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
<b>D. Conformity Assessment and Interoperability</b>		
D.1 Conformity Assessment	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
D.2 Interoperability	Yes <input type="checkbox"/> No <input type="checkbox"/>	
<b>E. Adaptability to Culture, Language, Human Functioning and Context of Use</b>		
E.1 Cultural and Linguistic Adaptability	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
E.2 Adaptability to Human Functioning and Context of Use	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
<b>F. Other Justification</b>		

### Notes to Proforma

**A. Business Relevance.** That which identifies market place relevance in terms of what problem is being solved and or need being addressed.

A.1 Market Requirement. When submitting a NP, the proposer shall identify the nature of the Market Requirement, assessing the extent to which it is essential, desirable or merely supportive of some other project.

A.2 Technical Regulation. If a Regulatory requirement is deemed to exist - e.g. for an area of public concern e.g. Information Security, Data protection, potentially leading to regulatory/public interest action based on the use of this voluntary international standard - the

proposer shall identify this here.

**B. Related Work.** Aspects of the relationship of this NP to other areas of standardisation work shall be identified in this section.

B.1 Competition/Maintenance. If this NP is concerned with completing or maintaining existing standards, those concerned shall be identified here.

B.2 External Commitment. Groups, bodies, or fora external to JTC 1 to which a commitment has been made by JTC for Co-operation and or collaboration on this NP shall be identified here.

B.3 External Std/Specification. If other activities creating standards or specifications in this topic area are known to exist or be planned, and which might be available to JTC 1 as PAS, they shall be identified here.

**C. Technical Status.** The proposer shall indicate here an assessment of the extent to which the proposed standard is supported by current technology.

C.1 Mature Technology. Indicate here the extent to which the technology is reasonably stable and ripe for standardisation.

C.2 Prospective Technology. If the NP is anticipatory in nature based on expected or forecasted need, this shall be indicated here.

C.3 Models/Tools. If the NP relates to the creation of supportive reference models or tools, this shall be indicated here.

**D. Conformity Assessment and Interoperability** Any other aspects of background information justifying this NP shall be indicated here.

D.1 Indicate here if Conformity Assessment is relevant to your project. If so, indicate how it is addressed in your project plan.

D.2 Indicate here if Interoperability is relevant to your project. If so, indicate how it is addressed in your project plan

## **E. Adaptability to Culture, Language, Human Functioning and Context of Use**

NOTE: The following criteria do not mandate any feature for adaptability to culture, language, human functioning or context of use. The following criteria require that if any ISO/IEC Directives, 5th Edition, 95 features are provided for adapting to culture, language, human functioning or context of use by the new Work Item proposal, then the proposer is required to identify these features.

E.1 Cultural and Linguistic Adaptability. Indicate here if cultural and natural language adaptability is applicable to your project. If so, indicate how it is addressed in your project plan. ISO/IEC TR 19764 (Guidelines, methodology, and reference criteria for cultural and linguistic adaptability in information technology products) now defines it in a simplified way: “ability for a product, while keeping its portability and interoperability properties, to: - be internationalized, that is, be adapted to the special characteristics of natural languages and the commonly accepted rules for their use, or of cultures in a given geographical region; - take into account the usual needs of any category of users, with the exception of specific needs related to physical constraints” Examples of characteristics of natural languages are: national characters and associated elements (such as hyphens, dashes, and punctuation marks), writing systems, correct transformation of characters, dates and measures, sorting and searching rules, coding of national entities (such as country and currency codes), presentation of telephone numbers and keyboard layouts. Related terms are localization, jurisdiction and multilingualism.



E.2 Adaptability to Human Functioning and Context of Use. Indicate here whether the proposed standard takes into account diverse human functioning and diverse contexts of use. If so, indicate how it is addressed in your project plan.

NOTE:

1. Human functioning is defined by the World Health Organization at <http://www3.who.int/icf/beginners/bg.pdf> as:

<<In ICF (International Classification of Functioning, Disability and Health), the term functioning refers to all body functions, activities and participation.>>

2. Content of use is defined in ISO 9241-11:1998 (Ergonomic requirements for office work with visual display terminals (VDTs) – Part 11: Guidance on usability) as: <<Users, tasks, equipment (hardware, software and materials), and the physical and societal environments in which a product is used.>>

3. Guidance for Standard Developers to address the needs of older persons and persons with disabilities).

**F. Other Justification** Any other aspects of background information justifying this NP shall be indicated her

## ATTACHMENT C

### Motion to Approve Forwarding of NWIP to JTC1/SC25 and Recommend SC25 TAG Vote YES on SC25 Ballot

MOTION: T11 has reviewed the New Work Item Proposal, and recommends the NWIP (T11/06-nnnv0) as a US contribution to JTC1/SC25 and to approve the NWIP to be issued by SC25, answering the first 6 questions 'Yes' and naming Gary S. Robinson as project editor, and question 7 as "Accelerated Timeframe".

**Q.1** Do you accept the proposal in document JTC 1 (SC) N XXXX 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. 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 efforts to the advancement and maintenance of this project? (If "YES," please identify .....)

\_\_\_\_\_

**C. 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? \_\_\_\_\_

**Q.7** Which standard development track is proposed \_\_\_\_\_

## ATTACHMENT D

### Motion to Approve or Disapprove FCD

*MOTION: T10 recommends that the JTC1/SC25 TAG vote to approve FCD SC25 14776-326 (RBC), Reduced Block Commands*

OR

*MOTION: T10 recommends that the JTC1/SC25 TAG vote to disapprove FCD, SC25 14776-362 (MMC-2), Multi-Media Command Set – 2 and include the following comments to the ballot:*

These comments must be on the JTC1 Comments form.

Date: 2001-10-21	Document: <b>ISO/ FCD, SC25 14776-362</b>
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Member body	Clause/ subclause	Paragraph/ Figure/ Table	Type of comment (general/ technical/ editorial)	Comment	Proposed change	Observations of the secretariat on each comment submitted
ANSI	6.1.33	Table 369	Editorial	. The opcode for command SEND EVENT is wrong	The opcode for command SEND EVENT should be A2, not 5D (5D is opcode for command Send Cue Sheet)	
ANSI	6.1.33	Table 370	Editorial	The Notification class is wrong	The Notification Class should not be 01h, it should be 011h(for Class External Request)	

**ATTACHMENT E**

**Motion to Approve FDIS**

*MOTION: T10 recommends that the JTC1 TAG vote to approve FDIS, SC25 14776-331 (SCC), SCSI Stream Commands*

OR

*MOTION: T10 recommends that the JTC1 TAG vote to disapprove FDIS, SC25 14776-331 (SCC), SCSI Stream Commands with the following comments: (see form below)*

Date: 2001-10-21	Document: <b>ISO/ FDIS, SC25 14776-362</b>
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Member body	Clause/ subclause	Paragraph/ Figure/ Table	Type of comment (general/ technical/ editorial)	Comment	Proposed change	Observations of the secretariat on each comment submitted
ANSI	All6.1.33	na	general	This document has been superseded by ....	Remove this project from the PoW	



## **ATTACHMENT F**

### **Motion for Delegation to SC25/WG4**

*MOTION: T10 recommends the following list of delegates to the JTC1/SC25 and WG4 meeting the last week of August 2001 in Germany.*

*Gary S Robinson EMC<sup>2</sup> Corporation. Address, email, tel. numbers*

*.....*

*.....*

## **ATTACHMENT G**

### **Motion for Reaffirmation of a Standard**

*MOTION: T1n has reviewed the IS 14776-331 (SSC) and recommends that the JTC1 TAG vote to reaffirm IS 14776-331 (SCC), SCSI Stream Commands*

## **ATTACHMENT H**

### **Motion for Withdrawal of a Standard**

*MOTION: T1n has reviewed the IS 14776-331 (SSC) and recommends that the JTC1 TAG vote to withdraw IS 14776-331 (SCC), SCSI Stream Commands from the Program of Work, PoW.*

## **ATTACHMENT I**

### **Motion to Revise a Standard**

*MOTION: T1n has reviewed the IS 14776-331 (SSC) and will begin a new project in order to revise IS 14776-331 (SCC), SCSI Stream Commands*

## **SECTION IV T10 and T11 as SC25/WG4 TAG, Technical Advisory Group**

On the question of why T11 is asked to vote to approve a recommendation to the US National Body to approve documents that have not originated in T11 such as ISO/IEC FCD 24755, Information Technology - Storage Management (SMS).

T11 does this because ANSI has appointed INCITS to be the Technical Advisory Group (TAG) to the ISO/IEC Joint Technical Committee 1 (JTC1), and to SC25/WG4 (with the exception of Sub Committee 25, SC25 and two of its WGs, WG1 and WG3, for which TIA/EIA has been appointed the TAG). INCITS relies on T10 and T11, and sometimes IEEE Computer Society Microprocessor Sub Committee (MSC), for recommendations as to what it should contribute and how to vote on projects in SC25/WG4 and JTC1 with respect to SC25/WG4. The INCITS Executive Board actually makes the final decision as TAG to votes.

In addition to SNIA and its project, ISO/IEC FCD 24755, Information Technology - Storage Management (SMS) T10 and T11 has begun to include in their ISO/IEC Agenda ballots on other projects that do not originate within T10 and T11. Other consortia include RapidIO RIO 1.3 and possibly DMTF. T13's ATA-7 is included as a sister organization without an IR..

These projects were submitted by INCITS to JTC1 on behalf of these non T10/T11 organizations because of a partnership they have with INCITS. INCITS acts on their behalf as the result of a conscientious strategy to serve the community that is closely related to the members and work of T10 and T11 to develop valuable standards for IT.

INCITS often engages these partners in the INCITS Fast Track program to transpose their specifications to become ANSI standards. Each non T10/T11 organization is asked to work with a T10 or T11 committee to facilitate the process, and to allow the T10 or T11 committee to monitor and report progress to the INCITS Executive Committee. The T10 or T11 committee then extends the partnership to bringing ballots to ISO/IEC, primarily through SC25.

In support of these relationships, the consortia (but not T13 because it is part of INCITS) sign Memorandums of Understanding (MoU) with INCITS. These MoU solicit T10 and T11 support to process the standards from these non T10/T11 groups in their capacity as SC25/WG4 TAGs and include a statement such as:

“The Sponsor agrees to work with INCITS T10 (the US Co-TAG to SC25/WG4) for processing the Sponsor's documents in ISO/IEC-JTC 1 as International standards, and requests that RAPIDIO projects be placed in the INCITS T10 international program of work.”

As such, T10 and T11 vote to bring partner specifications to ISO/IEC based upon process and not the technical content of the document. If someone in T10 or T11 is interested in the technical content they have the right to join that outside group and/or INCITS EB. The Fast Track process in INCITS gives any T10 or T11 member, or anyone else, a chance to review and comment during the ANSI Public Review process.

## SECTION V Converting an ANSI standard to a JTC1 Draft, FCD or FDIS

The JTC1 style is very similar to the ANSI style with the following changes.

1. Remove all content (ANSI/INCITS front boiler plate) up to but not including the Table of Contents.
2. Remove all content from the end of the Table of Contents, (ANSI/INCITS Copyrights, etc) to the Scope.
3. Replace the pre Table of Contents with the JTC1 title page shown in the following sample.
4. Replace the post Table of Contents with the JTC1 Foreword and Introduction page shown in the following sample.
5. Replace any ANSI headers and footers with JTC1 versions shown in the following sample.
6. Review the Reference section so that the references are ISO/IEC if they exist.
7. Convert to A4 paper size
  - a. Here is how to generate an A4 size pdf from a frame file. If the left and right margins are setup to be 0.9 inches or greater then there will be no change in the number for pages or the page layout.

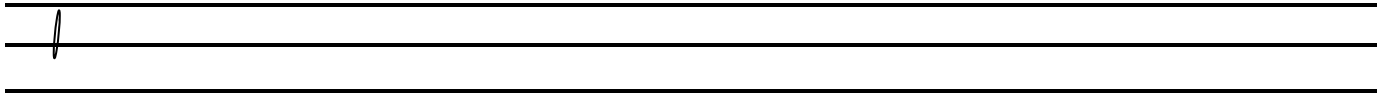
One time only

- 1- Open Acrobat Distiller
- 2- Select Settings/JobOptions/General
- 3- In the Default Page Size box select units as centimeters
- 4- In the Default Page Size box set width to 21
- 5- In the Default Page Size box set height to 29.7
- 6- Select Save As and then make a name up (e.g., A4 Format)
- 7- Select OK

After one time setup then do the following when you what to make an A4 pdf:

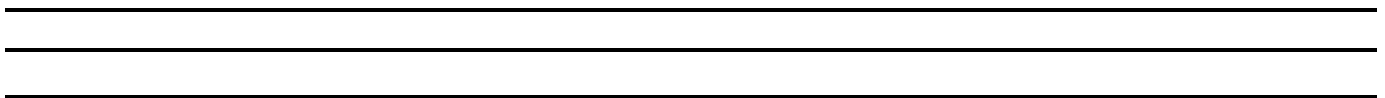
- 1- Open Acrobat Distiller
- 2- From the Job Options pull down select the option that contains your A4 settings (e.g., A4 Format)
- 3- Open Frame
- 4- Select Format/Page Layout/Page Size
- 5- From the page size pull down select A4
- 6- Select set
- 7- Select File/Print Setup
- 8- From the name pull down select Acrobat Distiller
- 9- From paper size pull down select A4
- 10 - Select OK
- 11 - Select File/Save As
- 12- From Save as type pull down select .pdf
- 13- Name the file then select Save
- 14- Fill in any of the PDF Setup information as usual
- 15- Select Set
- 16- After generating the A4 pdf
- 17- Put the Acrobat Distiller Job Options back to what it was
- 18- Put the Frame Page Size back to Letter

19- Put the Frame Print Setup back to your normal printer with your normal page size.



**Information technology — Small Computer System Interface – Part 232 Serial Bus Protocol 2 (SBP- 2)**

*Technologies de l'information — Interface small computer systems – Partie 232 (SBP-2)*





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## Foreword

ISO (the International Organisation for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organisations, governmental and nongovernmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardisation.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

ISO (the International Organisation for Standardisation) and IEC (the International Electrotechnical Commission) form the specialised system for worldwide standardisation. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organisation to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organisations, governmental and nongovernmental, in liaison with ISO and IEC, also take part in the work.

## **Introduction**

This standard defines a transport protocol within the domain of Serial Bus, IEEE Std 1394-1995, that is designed to permit efficient, peer-to-peer operation of input output devices (disks, tapes, printers, *etc.*) by upper layer protocols such as operating systems or embedded applications. Vendors that wish to implement devices that connect to Serial Bus may follow the requirements of this and other normatively referenced standards to manufacture an SBP-2 compliant device.

## 1 Scope and purpose

### 1.1 Scope

This standard defines a protocol for the transport of commands and data over High Performance Serial Bus, as specified by IEEE Std 1394-1995. The transport protocol, Serial Bus Protocol 2 or SBP-2, requires implementations to conform to the requirements of the aforementioned standard as well as to ISO/IEC 13213:1994, Control and Status Register (CSR) Architecture for Microcomputer Buses, and permits the exchange of commands, data and status between initiators and targets connected to Serial Bus.

### 1.2 Purpose

Original development work for Serial Bus Protocol (SBP) was initiated out of a desire to adapt SCSI capabilities and facilities to a particular serial environment, IEEE Std 1394-1995. Serial interconnects offer a migration path for SCSI into the future because they may be better suited to cost reduction and speed increases than the parallel interconnects first utilized by SCSI.

As development of the standard progressed, the working group recognized the solutions provided by SBP-2 were of general applicability to large classes of Serial Bus peripheral devices. With this in mind, the development work was redirected to provide mechanisms for the delivery of commands, data and status independent of the command set or device class of the peripheral. SBP-2 provides a generic framework that may be referenced by other documents or standards that address the unique requirements of a particular class of devices. The enhanced goals set for the design of SBP-2 are ranked below:

- The protocol should permit the encapsulation of commands, data and status from a diversity of command sets, legacy as well as future, in order to preserve the investment in an existing application and operating system software base;
- The protocol should enable the initiator to form an arbitrarily large set of tasks without consideration of implementation limits in the target;
- The protocol should allow the initiator to dynamically add tasks to this set while the target is active in execution of earlier tasks. The addition of new tasks should not interfere with the target's processing of tasks currently active;
- Although the protocol should enable varying levels of features and performance in target implementations, strong focus should be kept on a minimal set deemed adequate for entry-level environments;
- Within the constraints posed by the preceding goal, the hardware and software design of the initiator should not be unduly affected by variations in target capabilities;
- In order to promote the scalability of aggregate system performance, the protocol should distribute the DMA context from the initiator adapter to the target devices.

Although SBP-2 has been designed for Serial Bus as currently specified by IEEE Std 1394-1995, the Technical Committee anticipates that it will be appropriate for use with future extensions to Serial Bus as they are standardized.

## 2 Normative references

### 2.1 Normative References Overview

The following standards contain provisions that, through reference in the text, constitute provisions of this international standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this international standard are encouraged to investigate the possibility of applying the most recent editions of the standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards.

### 2.2 Approved references

The following approved international and regional standards (ISO, IEC, CEN/CENELEC and ITUT) may be obtained from the international and regional organizations that control them.

IEEE Std 1394-1995, Standard for a High Performance Serial Bus

ISO/IEC 9899:1990, Programming Languages—C

ISO/IEC 13213:1994, Control and Status Register (CSR) Architecture for Microcomputer Buses

### 2.3 References under development

At the time of publication, the following referenced standards were still under development.

IEEE P1394a, Draft Standard for a High Performance Serial Bus (Supplement)

ISO/IEC 14776-412, SCSI Architecture Model 2 (SAM-2)

ISO/IEC 14776-312, SCSI Primary Commands 2 (SPC-2)

**SECTION VI: EXCERPTS From JTC 1 DIRECTIVES:**

**Standards Development Stages**

Stage	Standard	Amendment	Fast Track	Technical Report	ISP	Technical Corrigendum
Stage 0						
Stage 1 - Proposal Stage	NP	NP		NP	NP	
Stage 2 - Preparatory Stage	WD	WD		WD	WD	Defect Report
Stage 3 - Committee Stage	CD FCD	PDAM FPDAM		PDTR	PDISP FPDISP	DCOR
Stage 4 - Approval Stage	FDIS	FDAM	DIS	DTR	FDISP	
Stage 5 - Publication	IS	AMD	IS	TR	ISP	COR

**NOTES:**

- 1) Prior to the WD stage, new work is introduced into the programme of work via either a New Work Item Proposal (NP) for JTC 1 letter ballot (see 6.2.1) or a programme subdivision document for JTC 1 endorsement (see 6.2.2). In the case of NPs which are developed by an SC, the approval ballot will be conducted at the subcommittee level (see 9.3)
- 2) NPs, CDs, FCDs, PDAMs, FPDAMs, PDTRs, PDISPs, FPDISPs and DCORs are balloted at the subcommittee level.
- 3) NPs and DTRs are balloted at the JTC 1 level.  
DIS, FDIS, FDAMs and FDISPs are balloted at the ISO/IEC National Body level and the JTC 1 level using the combined voting procedure
- 5) Subsequent to the publication of an IS, AMD or ISP, Technical Corrigenda may be published to correct technical defects which adversely affect implementation.
- 6) The text of each abbreviation is given in full on vi.

**12.2 General**

12.2.1 The social and economic long-term benefits of an IS should justify the total cost of preparing, adopting and maintaining the standard. The technical consideration should demonstrate that the proposed standard is technically feasible and timely and that it is not likely to be made obsolete quickly by advancing technology or to inhibit the benefits of technology to users.

12.2.2 It is vital for the success of the technical work, and thus for the general reputation of ISO and IEC, that ISs be published without delay. To this end all persons involved shall ensure the rapid and smooth passage of technical documents from one stage to another. Consultation shall be maintained between those responsible for decisions at the different stages.

12.2.3 In the interest of rapid progress of work, JTC 1 shall avoid discussion of a document successively at more than two levels -- WG/SC. Discussion at two levels is appropriate and adequate. These two levels are the expert level where technical proposals are discussed and drafts prepared (i.e., WG) and the committee level (i.e., SC) at which final NB vote on the draft is expressed within JTC 1. If no WG is



involved, discussion shall be limited to one level. Care shall be taken to ensure that all parties and P-members have been involved at those levels, and their views properly considered.

Except for fast-track processing, stage 3 is the last at which submission of comments is permissible (including editorial comments and those of ITTF editors). JTC 1 P-members and the ITTF shall try to input their comments at the earliest possible stage.

12.2.4 In order to facilitate the examination of successive versions of CDs at various stages of processing, JTC 1 and its SCs shall suitably identify all parts of the text which have been changed since the previous version by issuing the appropriate disposition of comments report.

12.2.5 Every effort shall then be made by JTC 1 or the SC to ensure that the results of its deliberations will achieve the necessary majority for their publication as ISs. (The provisions concerning WG experts (see 2.5.1.3) and coordination (see 3.4) are particularly important in this respect.)

12.2.6 Both NBs and any representatives presenting views at previous levels shall attempt to avoid confusion and delay that could result from different positions being declared (see 2.5.1.3) at different levels. NBs shall fulfill their obligation as P-members to vote (see 3.1.1).

12.2.7 In order to accelerate the approval process in cases where an SC already has a draft that it considers to be of suitable maturity, the SC may choose, by letter ballot or agreement at a meeting, to accompany an NP with a complete technical specification and initiate simultaneous NP and CD ballots. In this event, the SC Secretariat shall so inform the JTC 1 Secretariat and forward the NP and its related technical specification to the JTC 1 Secretariat for NP ballot in accordance with 6.2. The SC Secretariat shall simultaneously circulate a CD ballot on the technical specification in accordance with 12.6.3.2 bearing the SC's N number only. [Note: In this case, the CD ballot is distributed prior to registration with ITTF and assignment of a project number. For clarity, the JTC 1 NP and the SC CD should cross reference each other's document numbers. Simultaneous NP and FCD ballots are not permitted.]

12.2.7.1 If the result of the JTC 1 NP ballot is negative, the results of the CD ballot are disregarded and the work item is not added to the JTC 1 programme of work.

12.2.7.2 If the NP is approved and the CD receives substantial support, the project is registered in accordance with 12.5.1 and processing continues with an FCD in accordance with 12.6.1.2.

12.2.7.3 If the NP is approved and the CD does not receive substantial support, the project reverts to Stage 2 and processing continues in accordance with 12.5.

### 12.3 Stage 0, Study Period Underway

This stage is usually optional. An SC may approve a study period when it is too early to identify precise NPs, but agreement exists that the subject area is likely to need future standardization (see 6.2.1.3). Under certain conditions, a study of a new work area should be undertaken (see 6.2.3.1).

### 12.4 Stage 1, NP under Consideration

This stage is described in 6.2.

### 12.5 Stage 2, WD under Consideration

12.5.1 Upon approval of the NP by JTC 1, the project will be assigned to an SC.

12.5.1.1 ITTF shall be informed of the assignment, shall register the project in the JTC 1 programme of work and shall advise the secretariat of the responsible SC, and the secretariat of JTC 1, of the assigned project number. For this purpose, ITTF shall be informed of the relationship of the NP to existing JTC 1

standards, i.e., whether the NP is a completely new project (requiring a new number) or a revision, extension (new part) or amendment of an existing standard.

12.5.1.2 The number assigned to a project shall be subject to the following:

- The number allocated to a project shall remain the same throughout subsequent reporting stages (WD, CD and DIS) and for the published IS. No number shall be allocated to a project for a new standard which has already been used for a DIS or an IS.
- The number allocated to a project shall be a pure registration and reference number and has no meaning whatsoever in the sense of classification or chronological order.
- The numbers allocated to withdrawn projects shall not be used again, unless this is a consequence of restructuring of a multipart standard.

12.5.1.3 Registration and numbering of projects at the ITTF is undertaken on the basis of the following criteria:

- For new standards: ITTF will assign a completely new project number.
- For revisions to existing standards: The project will carry the same number as the existing IS. If, however, the scope is substantially changed, the revision shall require an NP and a new project number may be assigned.
- For amendments: The project will carry the number of the existing IS followed by "/PDAM" and the sequential number of the PDAM (e.g., ISO/IEC 1234/PDAM 1).
- For standards to be published in separate parts: ITTF will assign a project number which shall be suffixed by a hyphen followed by the relevant part number (e.g., ISO/IEC 1234-1).

12.5.1.4 When, in the course of its preparation, the title of a project is modified, ITTF shall immediately be informed so that the new title can be registered in the JTC 1 programme of work.

12.5.2 The SC may assign the project to a WG or develop the document within the SC itself. For simplicity, the following sections assume assignment to a WG, but in cases where the SC does the development, references to the WG should be understood as references to the SC. Similarly, in rare instances a WG may report directly to JTC 1 rather than to an SC; in such cases, references to the SC should be understood as references to JTC 1.

12.5.3 A Project Editor should be identified (see 5.7). The WG develops one or more WDs of the standard. Usually, a WD undergoes several revisions before the WG recommends that it be progressed to stage 3. As decisions are made regarding the content of the WD, the convener should take care to assure consensus, not only of the individual participating experts, but also of the NBs represented in the WG. This will enhance the likelihood of achieving successful CD/FCD and FDIS ballots.

12.5.4 Successive WDs on the same subject shall be marked "second working draft," "third working draft," etc., and the original WD number shall be supplemented by .2, .3, etc. (e.g., WD 1234.2).

12.5.5 In the preparation of a WD, every effort shall be made to ensure that it will not require substantial redrafting in JTC 1 or the SC, in particular by ensuring that from the very beginning the draft is in conformity with the rules for the presentation of ISs (see ISO/IEC Directives, Part 3 - Drafting and presentation of International Standards).

12.5.6 The project editor shall include an Executive Summary with information highlighting the content of the standard such that it could be used, for example, in promotional activities. This Executive Summary

shall be circulated for comment with CD, FCD and FDIS ballots but shall not affect the outcome of these ballots.

12.5.7 The WD remains in Stage 2 until:

- the main elements have been included in the document;
- it is presented in a form which is essentially that envisaged for the future IS;
- it has been dealt with at least once by JTC 1 or by a working body of JTC 1;
- the SC has decided in a resolution during a meeting or by letter ballot that the WD be forwarded to the ITTF for registration as a CD.

Optionally, an SC may authorize a WG to decide that a WD should be forwarded, via the SC Secretariat, for registration as a CD.

In cases where an SC believes that a future WD may receive substantial technical agreement, the SC may optionally authorize its Secretariat to issue a combined ballot for CD registration and consideration of the CD/FCD.

12.5.8 If a work item has not progressed to Stage 3 by the third anniversary of project initiation (NP approval or project subdivision), the SC is required to take action as specified in 6.4.1.5.

## 12.6 Stage 3, CD under Consideration

### 12.6.1 Registration of CD

12.6.1.1 The SC Secretariat forwards a copy of the WD in question to the ITTF which registers it as a CD. The ITTF shall confirm the registration to the JTC 1 Secretariat.

12.6.1.2 The project editor, after consultation with the SC secretariat and, if necessary, the SC chairman, shall indicate if it is the case that the proposed CD is intended to be the final CD (FCD) on this subject. If so, the cover letter of the FCD shall explicitly indicate this intention and consideration of the FCD shall be by letter ballot. If the criteria for finalization of the FCD are satisfied (see 12.6.3), the FCD progresses to Stage 4. In other circumstances, a further CD or FCD ballot may be required.

A similar indication shall also be made if a particular PDAM ballot is intended to be the final PDAM (FPDAM) ballot. In this case, the cover letter of the FPDAM ballot shall explicitly indicate this intention.

[NOTE: NBs wishing to conduct an enquiry may find the FCD ballot period an appropriate time for this purpose.]

12.6.1.3 Successive CDs on the same subject shall be marked "second committee draft," "third committee draft," etc., (see Form G5) and the original CD number shall be supplemented by .2, .3, etc. (e.g., CD 1234.2).

12.6.1.4 When, in the course of its preparation, the title of a CD is modified, this information shall immediately be submitted to the ITTF for amendment to the project records.

### 12.6.2 Distribution of CDs

12.6.2.1 The SC Secretariat distributes the CD (see Form G5). For an FCD (see Form G6), the Secretariat also forwards the FCD to ITTF for notification of availability to other NBs and organizations in liaison for information and comments. The introductory note should indicate, as appropriate, the sources

used as a basis for the proposal and the background and aim of the proposal. The note should include among other things:

- the date when the work item was introduced into the programme of work;
- identification of the original proposer; and
- extent of liaison with other internal and external organizations.

12.6.2.2 The CD may be distributed for discussion at an SC meeting, for comment by correspondence or for letter ballot. Frequently it will be dealt with in more than one of these ways in the course of reaching agreement.

12.6.2.3 Organizations which can make an effective contribution to the application of ISs in a given area should be expressly invited to comment on all relevant CDs.

12.6.2.4 Any editorial comments from the ITTF should be made during the FCD ballot (see 12.2.3).

### 12.6.3 Finalization of CDs

12.6.3.1 The Secretariat of the SC responsible for the CD shall ensure that the CD fully embodies the decisions reached by the majority vote either at meetings or by correspondence.

12.6.3.2 If the consideration of a CD is dealt with by correspondence, P-members and TCs and organizations in liaison are asked to submit their comments (and P-members their votes, see 9.1.5) by a specified date (see Form G7). In the case of CDs, this date should be no less than three months from the date of notification of issue. For an FCD, the ballot period shall be no less than four months. The SC may extend the ballot period in instances when the complexity of the text requires additional time for review or to allow additional time for enquiry, as long as the total ballot period does not exceed six months. Comments and votes shall be sent to the Secretariat of the SC within the period specified, and shall be summarized by the Secretariat and distributed in accordance with 8.3. The Secretariat shall also distribute a report clearly indicating the action taken as a result of the comments received and shall distribute, if necessary, a further CD. Abstention by an NB on a CD ballot does not bar the NB from voting on subsequent versions of the document (see 3.1.1).

12.6.3.3 If a CD is considered at a meeting, the Secretariat shall distribute (in accordance with 8.3) a revised CD, prepared in accordance with the decisions taken at the meeting, for consideration either by correspondence or at a subsequent meeting.

12.6.3.4 The Secretariat of the committee responsible for the draft shall decide whether to continue consideration of successive CDs by correspondence or by convening a meeting, according to the nature of the comments received. If at least three P-members disagree with the proposal of the Secretariat, and so notify the Secretariat within four weeks, the CD shall be discussed at a meeting.

12.6.3.5 Consideration of successive CDs shall continue until the substantial support of the P-members of the committee has been obtained for an FCD or a decision to abandon or defer the project has been reached.

12.6.3.6 It is the responsibility of the SC Secretariat, if necessary in consultation with the ITTF, to judge when substantial support has been obtained. In this connection attention should be given not only to the numerical voting results but also to the attempts made to resolve negative votes and the nature of success or failure to do so.

So that comments accompanying votes on a CD may be properly considered, the relevant Secretariat is instructed to refer all such comments to the SC. For an FCD, the SC shall also consider any comments received from ISO member bodies and IEC national committees. The SC shall review the comments and

make a recommendation to the relevant Secretariat before further processing. Within an SC, responsibility for the preparation of a revised CD text, disposition of comments report, and a recommendation on further processing may be delegated to a WG, OWG (see 2.5.2), or Project Editor who reports back to the SC.

The proposed or approved disposition of comments report, or both, should be produced within three months of the close of the CD or FCD ballot. When exceptional circumstances warrant a longer time frame for the preparation of the disposition of comments report, these circumstances shall be communicated to the JTC 1 Secretariat.

12.6.3.7 Substantial support for an FCD shall be obtained by correspondence; this may be either on the FCD as it was distributed or, more usually, subject to the necessary corrections being made. In the latter case, the SC may instruct its Secretariat or the Project Editor to modify the FCD. The revised FCD shall be submitted directly to the ITTF by the Secretariat of the appropriate committee (usually the SC).

12.6.3.8 Whenever appropriate, SCs entrusting tasks to WGs or OWGs should empower them to produce on behalf of the SCs the CD, FCD or FDIS text for direct submission to ITTF via the SC Secretariat.

12.6.3.9 An FCD shall be advanced to FDIS only if the text has been stabilized, consensus has been demonstrated, and the substantial support of the P-members of the SC has been obtained. The SC Secretariat shall submit the following within a maximum of three months to the ITTF for FDIS registration :

- the final electronic text, including figures and graphics, of the FCD for distribution as an FDIS, in accordance with the ITSIG guide;
- an explanatory report (see Form G8, obtainable from the ITTF).

The explanatory report shall contain:

- a brief history of the draft;
- a record of the voting on the FCD listing those P-members who voted in favour, those who voted against and those who did not vote;
- a brief statement of all technical objections which have not been resolved and the reasons why it has not been possible to resolve them; in the case of a revision of an existing IS, a summary of the main changes in the previous edition of the IS now proposed for technical revision and the reasons therefor.

12.6.3.10 If a work item has not progressed to Stage 4 by the fourth anniversary of the first CD, the SC is required to take action as specified in 6.4.1.6.

## 12.7 Stage 4, FDIS under Consideration

### 12.7.1 Registration and Distribution of FDIS

12.7.1.1 The ITTF shall register the FCD as an FDIS.

12.7.1.2 The ITTF shall distribute the FDIS (see Form G9) together with the explanatory report to all NBS for a two-month letter ballot (see Form G10). The ITTF shall at the same time send it to all other TCs and organizations in liaison with JTC 1 or the SC responsible for preparing the draft.

At this stage, the ITTF shall make no changes to the text of the FDIS, which shall be distributed as presented. If the explanatory report lacks necessary information, the ITTF shall request the relevant Secretariat to appropriately modify the explanatory report prior to distribution.

## 12.7.2 Processing of FDIS ballots

12.7.2.1 The ITTF shall implement the combined voting procedure (see 9.5).

12.7.2.2 When an FDIS ballot closes, the ITTF shall inform the JTC 1 and SC Secretariat accordingly and communicate to the SC Secretariat the results of voting. At the same time, the ITTF shall transmit the results of voting to the NBs.

12.7.2.3 If the FDIS has been approved in accordance with 9.6, the SC Secretariat shall take into consideration any minor corrections (see 9.7) and promptly forward the document to ITTF for publication. ITTF shall inform all NBs that the FDIS has been accepted for publication. The document is now at stage 5.

12.7.2.4 If the FDIS has not been approved, the document reverts to Stage 2 (12.5.2) and is referred back to the appropriate SC for consideration and recommendation for further processing.

12.7.2.5 In the absence of the necessary approval, JTC 1 may decide at any stage to request the publication of the draft as a TR, if the majority of the P-members agree (see 15).

## 12.8 Stage 5, IS Publication

The final electronic text shall be sent to the ITTF in an acceptable form for publication (see Form G13).

## 13 Preparation and Adoption of International Standards - Fast-Track Processing

13.1 Any P-member of JTC 1 or organization in Category A liaison with JTC 1 may propose that an existing standard (or amendment with the approval of the responsible SC) from any source be submitted without modification directly for vote as a DIS (or DAM). The criteria for proposing an existing standard for the fast-track procedure is a matter for each proposer to decide.

Prior to submission of a document for fast-track processing, a P-member or Category A liaison organization of JTC 1 may request that the document be submitted through the JTC 1 Secretariat to one or more SCs for informal comment or discussion among the interested parties. Any comments on format, technical content, completeness, etc. could be considered by the requester prior to formal submission of the document for fast-track procedure.

The proposer of a fast-track document is encouraged to make a recommendation concerning the assignment of the document to a given SC. The proposer of a fast-track document shall submit the name of an individual who has agreed to serve as project editor for the fast-track document. This recommendation (or in its absence, the JTC 1 Secretariat's recommendation) shall be circulated to JTC 1 NBs together with the DIS ballot (see Form G12). Separately from its vote on the technical content of the standard, NBs shall be given the opportunity to comment on the specific assignment. However, comments on assignment shall not prejudice the vote on technical content. In cases where the SC assignment is in question or where the fast-track document does not appear appropriate for any existing SC, the JTC 1 Secretariat may perform the duties normally assigned to the SC Secretariat until the final SC assignment is determined. The JTC 1 Secretariat shall ensure that the ballot resolution meeting is open to representation from all affected interests and is convened in a timely manner in keeping with the spirit of the fast-track process.

[Note: For an existing project which has not yet reached Stage 3 (see 12.1), an SC may suspend the 5-stage process in favor of the fast-track procedure (to be initiated by a P-member or a Category A liaison organization of JTC 1) provided that:

- the SC agrees that the intended fast-track document is suitable to satisfy the requirements of the existing project; and
- the SC agrees to the use of the fast-track procedure and so notifies JTC 1.]

13.2 The proposal shall be received by the ITTF which shall take the following actions:

- settle the copyright or trademark situation, or both, with the proposer, so that the proposed text can be freely copied and distributed within ISO/IEC without restriction;
- assess in consultation with the JTC 1 Secretariat that JTC 1 is the competent committee for the subject covered in the proposed standard and ascertain that there is no evident contradiction with other ISO/IEC standards;
- distribute the text of the proposed standard (or amendment) as a DIS (or DAM), indicating that the standard belongs in the domain of JTC 1 (see Form G11). In case of particularly bulky documents the ITTF may demand the necessary number of copies from the proposer.

13.3 The period for combined DIS (or DAM) voting shall be six months. In order to be accepted the document must meet the criteria of 9.6.

13.4 Upon receipt of notification from the ITTF that a document has been registered for fast-track processing, the JTC 1 Secretariat shall inform the Secretariat of the SC recommended for assignment of the project of the fast-track processed DIS (or DAM) number, title, and ballot period dates, and shall send the SC Secretariat a copy of the DIS (or DAM). The JTC 1 Secretariat shall also inform the ITTF of the SC that will deal with the ballot results, in order that the table of replies and any comments accompanying the votes may be sent by ITTF directly to the SC Secretariat as well as to the JTC 1 Secretariat.

13.5 Upon receipt of the notification from the JTC 1 Secretariat that its SC has been assigned the responsibility for dealing with a fast-track processed DIS (or DAM), the SC Secretariat shall so inform the SC NBs, and shall make plans for the handling of ballot results through the formation of a ballot resolution group, as follows. The SC Secretariat shall:

- schedule a ballot resolution group meeting to consider any comments on the DIS (or DAM);
- appoint a Convener for the ballot resolution group ;
- appoint a Project Editor for the DIS (see 13.1, third paragraph). The Project Editor shall be responsible for producing the final DIS text in case of acceptance;
- notify the SC NBs of the ballot resolution group meeting date(s), location, Convener, and Project Editor.

In some cases the establishment of a ballot resolution group is unnecessary and the SC Secretariat can assign the task directly to the Project Editor.

13.6 Upon receipt of the ballot results, and any comments, the SC Secretariat shall distribute this material to the SC NBs. The NBs shall be requested to consider the comments and to form opinions on their acceptability. The SC Secretariat shall also send notification of the ballot resolution group meeting to any NBs having voted to disapprove the DIS (or DAM) that are not NBs of the SC.

Comments received after the normal voting period will not be taken into account, except that they will be submitted to the appropriate SC Secretariat for consideration at the time of the next review of the IS in question.

13.7 NBs of the relevant SC shall appoint to the ballot resolution group one or more representatives who are well aware of the NB's position. NBs having voted negatively, whether or not an NB of the relevant SC, have a duty to delegate a representative to the ballot resolution group meeting.

13.8 At the ballot resolution group meeting, decisions should be reached preferably by consensus. If a vote is unavoidable the vote of the NBs will be taken according to normal JTC 1 procedures.

13.9 If, after the deliberations of this ballot resolution group, the requirements of 9.6 are met, the Project Editor shall prepare the amended DIS (or DAM) and send it to the SC Secretariat who shall forward it to the ITTF for publication as an IS. For its initial publication, the document is not required to be in ISO/IEC format, but can be published in the format of the submitting organization.

13.10 If it is impossible to agree to a text meeting the above requirements, the proposal has failed and the procedure is terminated.

13.11 In either case the Convener, in coordination with the Project Editor, shall prepare a full report which shall be distributed by the SC Secretariat to its NBs and to the ITTF.

13.12 The time period for these different steps shall be:

- a total of two months for the ITTF to send the results of the vote to the JTC 1 Secretariat and to the SC Secretariat, and for the latter to distribute it to its NBs;
- not less than two and one-half months prior to the date of the ballot resolution group meeting for distribution of the voting results and any comments;
- not later than one month after the ballot resolution group meeting for distributions by the SC Secretariat of the final report and the final DIS text in case of acceptance.

13.13 If the proposed standard is accepted and published, its maintenance will be handled by JTC 1.

13.14 Subsequent revisions shall be in the format prescribed by the ISO/IEC Directives - Part 3. In this case, the ITTF editor shall check the text received to ensure that it is in conformance with the ISO/IEC Directives, Part 3. If modifications are considered necessary, the ITTF editor shall submit proposals for modification to the Project Editor for approval. No IS shall be published without such approval.

ITTF shall prepare a proof of the IS and send this to the Project Editor for endorsement. The only changes permissible at this stage are corrections of recognized errors in the revised text or of errors introduced by ITTF in preparing the proof.

Upon receipt of the endorsed proof from the Project Editor, ITTF shall make any final corrections required and proceed with publication of the IS (or amendment).