IR95003
4/19/95

ASC X3 Technical Committee
1994 International TAG Annual Report
(Covers 2/94 through 4/95)
For Technical Committees X3T10. X3T11, & X3T12
TAG for JTC 1/SC 25/WG 4

I. Executive Summary

The SC 25/WG 4 work continues at an agonizing slow pace. The US positions continue to achieve favorable responses. There have been three principal impediments to a more aggressive pace:

1) The prior SC 25 Secretary was new to the ISO arena, gave enthusiastic support at the meetings, but then was not available for telephone or fax communication. He has been replaced by a new secretary who, except during a month or so during office moves, has been supportive both at meetings and in between meetings.

2) The bulk of the work in WG 4 is based upon ANS documents. This may contribute to the fact that only a few member bodies regularly participate in the meetings. This does not cause any operational problem since the standards are widely accepted and widely applied. However it does contribute to a procedural problem in that many member bodies indicate on the NWI ballots that they will not contribute to the development of the standard. Thus we have had the experience of widely claimed standards projects being technically declared as having failed the NWI solely on the basis of failing to have five member bodies indicating they will contribute to the development of the standard.

3) Perhaps the most critical factor is the difficulty in maintaining adequate technical editor resources on some of the standards until the ISO/IEC document is published. This is complicated by the fact that many of the specialist who contribute to the standards are well versed in domestic specifications such as those published by the EIA but not well versed in the international component standards of the IEC. Interest and participation wane after the needed technical definition and before the publication labyrinth is transversed.

II. Projects

* Project 25.13.01.03 / 379 M

a) Project Title - Fiber Distributed Data Interface (FDDI) Physical Layer Protocol (PHY)

b) Target date for CD to ISO:

Original target date:	1985
Previous target date:	1988
Current target date:	1988

c) Project Description - to develop the physical layer including medium characteristics, driver / receiver requirements, encode/decode and clocking, requirements

for a high bandwidth (>50 Megabits per second) interconnection among computers and high performance block transfer peripherals distributed over distances of a few kilometers circumference. The PHY will be based upon fiber optic techniques, while allowing cost effective implementations.

d) Publications During Past Year - Not applicable.

e) Accomplishments During Past Year - Reconfirmed.

f) Status - In maintenance phase with a published international standard ISO/IEC 9314-1:1989-04 FDDI Physical Layer Protocol (PHY)
.

g) Future Plans - None. Follow on PHY standards are being addressed as separate and alternative standards.

h) Reasons for Delay - Not applicable.

*** Project 25.13.01.04 / 380 M**

a) Project Title - Fiber Distributed Data Interface (FDDI) Media Access Control

b) Target date for CD to ISO:

Original target date: 1985
Previous target date: 1986
Current target date: 1986

c) Project Description - to develop the protocol required to access the physical layer including device addresses and frame check sequences for a high bandwidth (=>100 Megabits per second) interconnection among computers and high performance block transfer peripherals distributed over distances of a few kilometers circumference.

d) Publications During Past Year - Not applicable.

e) Accomplishments During Past Year - Reconfirmed.

f) Status - In maintenance phase with a published international standard ISO/IEC 9314-2:1989-05 FDDI Media Access Control (MAC).

g) Future Plans - None. Follow on PHY standards are being addressed as separate and alternative standards.

h) Reasons for Delay - Not applicable.

*** Project 25.13.01.05 / 541M**

a) Project Title - Fiber Distributed Data Interface Token Ring Physical Layer Medium Dependent (PMD) (Layer 0)

b) Target date for CD to ISO:

Original target date: 1988
Previous target date: 1988
Current target date: 1988

c) Project Description - To develop the physical layer including medium characteristics, and driver/receiver requirements based upon fiber optic techniques, while allowing cost effective implementations.

d) Publications - None.

e) Accomplishments - Not applicable.

f) Status - Published IS 9314-3:1990-10. Editorial errors have been discovered. A recommendation is being developed on low priority.

g) Future Plans - Recommend disposition of editorial errors. Reconfirm.

h) Reasons for Delay - Not applicable.

*** Project 25.13.01.06 / 651 M**

a) Project Title - Fiber Distributed Data Interface Token Ring Physical Layer Medium Dependent, Single-Mode Fiber (PMD-SMF) (Layer 0)

b) Target date for CD to ISO:

Original target date: 6/89
Previous target date: 5/89
Current target date: 5/89

c) Project Description - To develop the physical layer including medium characteristics, and driver/receiver requirements for a high bandwidth (>50 Megabits per second) interconnection among computers and high performance block transfer peripherals distributed over distances of many kilometers in distance. The PMD will be based upon single-mode fiber optic techniques, while allowing cost effective implementations. As an alternative to the present FDDI PMD, the FDDI SMF-PMD is intended to extend transmission capabilities by at least an order of magnitude.

d) Publications During the Past Year - None.

e) Accomplishments During Past Year - None.

f) Status - Published ANS X3.184:1993 FDDI Single Mode Fiber Physical Medium Dependent layer (SMF-PMD). In protracted preparation for DIS by ISO/IEC.

g) Future Plans- Complete DIS and publication of the ISO/IEC DIS 9314-4.

h) Reasons for Delay - The prior editor had a priority problem. The document was transitioned to a second technical editor. The second editor has also had some priority problems. However the work on the DIS preparation is nearly complete now.

*** Project 25.13.01.07 / 573M**

a) Project Title - Fiber Distributed Data Interface (FDDI- II) Hybrid Ring Control (Layer 2)

b) Target date for CD to ISO:

Original target date: 1989
Previous target date: 1989
Current target date: 1989

c) Project Description - to develop the protocol required to access the physical layer based upon fiber optic techniques, while allowing cost effective implementations. The FDDI-II mode adds the super-set capability to provide for circuit switching. The additional circuit switching capability is intended to provide enhanced operation for real time voice and other real time analog processes.

d) Publications -

e) Accomplishments - Assigned action item to SC 25 Secretary to determine why IS 9314-6 has not been published..

f) Status - Submitted the resolution of DIS letter ballot comments and a camera ready IS 9314-6 FDDI HRC Rev 6.3 in 1993 but the IS has not been published.

g) Future Plans - Complete the processing of the ISO document.

h) Reasons for Delay - Change of SC 25 Secretary and unknown at ITTF.

*** Project 25.13.01.08 / 503M**

a) Project Title - Fiber Distributed Data Interface (FDDI) Token Ring Station Management (SMT) (Managing Layers 0- 3)

b) Target date for CD to ISO:

Original target date: 1990
Previous target date: 1992
Current target date: 1992

c) Project Description - to develop the protocol required to access the physical layer including device addresses and frame check sequences based upon various techniques appropriate for implementation of the FDDI within a station. The SMT will provide protocols necessary for the management within a station of the FDDI Layers 0-3.

d) Publications - FDDI Station Management (SMT) CD 9314-6.

e) Accomplishments - Completed CD 9314-6 letter ballot.

f) Status - Addressing CD letter ballot comments.

g) Future Plans - Prepare the DIS and complete processing of the ISO document.

h) Reasons for Delay - Not applicable.

*** Project 25.13.01.09 / 834 D**

a) Project Title - FDDI Low-cost Fiber - Physical Medium Dependent Standard (LCF-PMD)

b) Target date for CD to ISO:

Original target date: 1993
Previous target date: 1993
Current target date: 1993

c) Project Description - to develop a lower cost version of the Physical Medium Dependent sublayer of FDDI. The minimum acceptable operating distance requirement is less than that of the X3.166-1990 FDDI PMD. This standard will be (optically) interoperable with the existing PMD and will not require changes to the current FDDI PHY and FDDI MAC. This new standard will be optimized for the 62.5/125 mm fiber referenced by the current FDDI multimode PMD and the horizontal wiring requirements specified by the EIA/TIA-568 building wiring standards.

d) Publications During Past Year - None.

e) Accomplishments During Past Year - None.

f) Status - FDDI LCF-PMD dpANS sent to the X3 Secretariat as a contribution for a CD letter ballot 4/22/93 but the letter ballot has not been issued.

g) Future Plans - Determine the location of the missing CD letter ballot and probably substitute the edited ANS version..

h) Reasons for Delay - Unknown administrative hold.

*** Project 25.13.01.10 / 833 D**

a) Project Title - FDDI Twisted Pair - Physical Medium Dependent Standard (TP-PMD)

b) Target date for CD to ISO:

Original target date: 12/93
Previous target date: 12/93
Current target date: 6/95

c) Project Description - to develop a twisted pair version of the Physical Medium Dependent (PMD) sublayer of FDDI, suitable for use in horizontal distribution applications. The FDDI TP-PMD will be interoperable in a network utilizing the other PMD alternatives and will not require changes to the FDDI PHY or MAC.

d) Publications During Past Year - X3.263.199X dpANS FDDI TP-PMD Rev 2.1

e) Accomplishments During Past Year - None at ISO level.

f) Status - The 6/95 working group meeting will consider the NWI proposal.

g) Future Plans - Complete processing an international standard. Expect France to propose an additional cable type at the 6/95 meeting

h) Reasons for Delay - Withheld NWI pending the resolution of how to deal with the lack of member bodies indicating they intend to contribute to interface standards.

*** Project 25.13.01.11 / 684D**

a) Project Title - Fiber Distributed Data Interface (FDDI) Media Access Control -2 (MAC-2)

b) Target date for CD to ISO:

Original target date: 1991
Previous target date: 1993
Current target date: 1993

c) Project Description - to develop the protocol required to access the physical layer including device addresses and frame check sequences. The MAC-2 will be based upon and downward compatible with FDDI MAC X3.139-1987.

d) Publications - CD 9314-8 FDDI MAC-2.

e) Accomplishments - Completed CD letter ballot.

f) Status - Resolving CD letter ballot comments and preparing DIS..

g) Future Plans - Complete a DIS ballot and publish the IS.

h) Reasons for Delay - Not applicable.

*** Project 25.13.01.12 / 761M**

a) Project Title - Fiber Distributed Data Interface (FDDI) Physical Layer Protocol -2 (PHY-2)

b) Target date for CD to ISO:

Original target date: 1991
Previous target date: 1992
Current target date: 1992

c) Project Description - to develop the physical layer protocol based upon and downward compatible with FDDI PHY X3.148-1988. It will, however, incorporate footnotes of contemplated changes to X3.148-1988 into the body of the document and provide a fully compatible superset which documents the services associated with FDDI SMT and HRC.

d) Publications - CD 9314-7 FDDI PHY-2.

e) Accomplishments - Completed CD letter ballot.

f) Status - Resolving CD letter ballot comments and preparing a DIS.

g) Future Plans - Complete a DIS ballot and publish the IS.

h) Reasons for Delay - Not applicable.

*** Project 25.13.01.13 / N/A**

a) Project Title - Reserved for FDDI UTP-PMD

b-h) This reserved project is no longer needed. Will request that it be deleted unless the expected proposal from France impacts this reservation.

*** Project 25.13.01.14 / 765 D**

a) Project Title - Reserved for FDDI SONET Mapping (SPM)

b-h) This reserved project is no longer needed. (See X3T12 annual report) Will request that it be deleted unless the survey being circulated by the SC 25 Secretariat uncovers a champion.

*** Project 25.13.01.15 / 797 D**

a) Project Title - Conformance Test for FDDI Interfaces (FDDI-CT)

b) Target date for CD to ISO:

Original target date: 6/92
Previous target date: 12/93
Current target date: 12/93

c) Project Description - to develop a proposed Standard which will define the conformance test requirements that an implementor of FDDI products must meet to ensure the implementation under test will perform all required functions as stated in the FDDI standards. The Conformance Test Standard will be made up of a family of interconnected sections that will cover testing from a broad perspective to a fine grain detailed test procedure.

d) Publications During Past Year - CD 9314-13 FDDI Conformance Test PICS Proforma (FDDI CT-PICS).

e) Accomplishments During Past Year - Completed CD letter ballot.

f) Status - Resolving CD comments and preparing DIS.

g) Future Plans - Complete a DIS ballot and publish the international standard.

h) Reasons for Delay - Not applicable.

*** Project 25.13.01.20 / 976 D**

a) Project Title - Abstract Test Suite for FDDI Physical Medium Dependent Conformance Testing (FDDI PMD ATS)

b) Target date for CD to ISO:

Original target date: 8/94
Previous target date: 8/94
Current target date: 5/95

c) Project Description - to develop an abstract test suite standard for FDDI PMD ports using a lower level point of control and observation.

d) Publications During Past Year - X3.255 (X3T9.5/92-099) dpANS FDDI PMD ATS Rev 2.3.

e) Accomplishments During Past Year - Resolution by SC 25 to issue CD 9314-20.

f) Status - Submitting CD contribution.

g) Future Plans - Complete processing.

h) Reasons for Delay - Error on the part of the IR.

*** Project 25.13.01.21 / 977 D**

a) Project Title - Abstract Test Suite for FDDI Physical Layer Protocol Conformance Testing (FDDI PHY ATS)

b) Target date for CD to ISO:

Original target date: 4/93
Previous target date: 8/94
Current target date: 5/95

c) Project Description - to develop an abstract test suite for FDDI PHY ports using a lower layer test operating through the FDDI PMD sublayer.

d) Publications During Past Year - X3.248 (X3T9.5/92-100 dpANS FDDI PHY ATS Rev 2.6.

e) Accomplishments During Past Year - Resolution by SC 25 to issue CD 9314-21.

f) Status - Submitting CD contribution.

g) Future Plans - Complete processing.

h) Reasons for Delay - Error on the part of the IR.

*** Project 25.13.01.22-24 / 837, 839, & 838 D**

a) Project Title - Reserved for FFOL SMUX, IMAC, & AMAC

b-h) It is not clear whether or not NWI proposals will ever be processed for these reserved projects. See the X3T12 annual report.

*** Project 25.13.01.25 / 975 D**

a) Project Title - Abstract Test Suite for FDDI Station Management Conformance Testing (FDDI SMT ATS)

b) Target date for CD to ISO:

Original target date: 6/95
Previous target date: 6/95
Current target date: 6/95

c) Project Description - to develop an abstract test suite for FDDI SMT entities using a lower layer test operating through the FDDI PMD, PHY, and MAC sublayers.

d) Publications During Past Year - dpANS FDDI SMT ATS (X3T9.5/92-102) Rev 1.2

e) Accomplishments During Past Year - Continued work towards the completion of the dpANS.

f) Status - Conducting a letter ballot for forwarding to X3.

g) Future Plans - Submit a CD contribution for an international standard.

h) Reasons for Delay - Not applicable.

*** Project 25.13.01.26 / 978 D**

a) Project Title - Abstract Test Suite for FDDI Media Access Control Conformance Testing (FDDI MAC ATS)

b) Target date for CD to ISO:

Original target date: 8/94
Previous target date: 8/94
Current target date: 5/95

c) Project Description - to develop an abstract test suite for the FDDI MAC using a lower layer test operating through the FDDI PMD and PHY sublayers.

d) Publications During Past Year - X3.245 (X3T9.5/92-101) dpANS FDDI MAC ATS.

e) Accomplishments During Past Year - Resolution by SC 25 to issue CD 9314-26.

f) Status - Submitting CD contribution.

g) Future Plans - Complete processing.

h) Reasons for Delay - Error on the part of the IR.

*** Project 25.13.07.03 / N/A**

a) Project Title - IS 6951:1986-12 Eurobus A

b-h) This is not an active project but it will be up for review by 12/95 and is expected to be addressed at the June meeting.

*** Project 25.13.10.01 / 0052 M**

a) Project Title - IS 9315:1989-06 Flexible Disk

b-h) This is not an active project. It was reconfirmed in 1994. See X3T10 annual report.

*** Project 25.13.10.03 / 0053M**

a) Project Title - Storage Module Drive Enhanced (SMD-E) Interface

b) Target date for CD to ISO:

Original target date: 1987
Previous target date: 1987
Current target date: 1987

c) Project Description - the interface definition between disk drives and their controllers.

d) Publications - None.

e) Accomplishments - Processed request to withdraw the project.

f) Status - Awaiting withdrawal.

g) Future Plans - None.

h) Reasons for Delay - X3T9 had been given an incorrect summary of the ISO Fast Track procedure. This led to them not being prepared for the extra steps required in completing a Fast Track Document.

*** Project 25.13.10.04 / N/A**

a) Project Title - IS 9316:1989-07 Small Computer System Interface (SCSI)

b-h) This is not an active project. It is being replaced by IS 9316-1 SCSI-2 under project 25.13.11.01.

*** Project 25.13.10.05 / 378D**

a) Project Title - Streamer Cassette Tape Device Interface (SCTD)
b) Target date for CD to ISO:

Original target date: 1987
Previous target date: 1987
Current target date: 1987

c) Project Description - the definition of the interface between streaming cassette tape devices and their controllers.

d) Publications - None

e) Accomplishments - Not applicable.

f) Status - Project terminated.

g) Future Plans - Not applicable. Final report from 1993.

h) Reasons for Delay - The project editor changed employers and depends upon his former employer for electronic document processing. The X3T9 IR recommended that the project be terminated. However an interested industry group volunteered a different editor who has since quit the employer. SC 25 members were polled but did not provide an editor.

*** Project 25.13.10.06 / 370M**

a) Project Title - Intelligent Peripheral Interface (IPI) Physical Layer (PL)

b) Target date for CD to ISO:

Original target date: 1987
Previous target date: 1987
Current target date: 1987

c) Project Description - the definition of a master slave interface between hosts and their intelligent peripherals.

d) Publications - DIS 9318-1

e) Accomplishments - Obtained SC 25 support to discontinue this project.
.

f) Status - SC 25 has decided that the Enhanced IPI Physical layer 9318-6 should be published in lieu of 9318-1.

g) Future Plans - None.

h) Reasons for Delay - 9318-6 overtook 9318-1.

*** Project 25.13.10.07 / 467M**

a) Project Title - Intelligent Peripheral Interface, Device Specific Command Set for Magnetic Disk (IPI-2 DISK)

b) Target date for CD to ISO:

Original target date: 1987
Previous target date: 1987
Current target date: 1987

c) Project Description - the definition of a master slave command set between disk controllers and their intelligent disk peripherals.

d) Publications - None.

e) Accomplishments - Obtained SC 25 support to reconfirm the standard.

f) Status - Published standard IS 9318-2:1990-12.

g) Future Plans - Submit NWI proposal for Enhanced IPI-2 DISK.

h) Reasons for Delay - Not Applicable.

*** Project 25.13.10.08 / 496M**

a) Project Title - Intelligent Peripheral Interface, Device Generic Command Set for Magnetic and Optical Disk (IPI-3 DISK)

b) Target date for CD to ISO:

Original target date: 1987
Previous target date: 1987
Current target date: 1987

c) Project Description - the definition of a master slave high level command set between hosts and their intelligent disk peripherals.

d) Publications - None.

e) Accomplishments - Obtained SC 25 support to reconfirm the standard.

f) Status - Published standard IS 9318-3:1990-12.

g) Future Plans - Submit a contribution for a revised IPI-3 DISK.

h) Reasons for Delay - Not Applicable.

*** Project 25.13.10.09 / 505M**

a) Project Title - Intelligent Peripheral Interface, Device Generic Command Set for Magnetic Tape (IPI-3 Tape)

b) Target date for CD to ISO:

Original target date: 1987
Previous target date: 1987
Current target date: 1987

c) Project Description - the definition of a master slave high level command set between hosts and their intelligent tape peripherals.

d) Publications - None.

e) Accomplishments - Obtained SC 25 support to reconfirm the standard.

f) Status - Published standard IS 9318-4:1990-12.

g) Future Plans - Submit a contribution for a revised IPI-3 Tape.

h) Reasons for Delay - Not Applicable.

*** Project 25.13.10.10 / 504M**

a) Project Title - Intelligent Peripheral Interface Device Generic Communications Command Set (IPI-3 COM)

b) Target date for CD to ISO:
Original target date: 1989
Previous target date: 1991
Current target date: 1991

c) Project Description - the definition of a master slave interface command set between hosts and their intelligent communication peripherals.

d) Publications - None.

e) Accomplishments - Not applicable.

f) Status - Discontinued the project in 1992 due to lack of sufficient interest to provide a project editor.

g) Future Plans - Not applicable.

h) Reasons for Delay - Not applicable.

*** Project 25.13.10.11 / 591M**

a) Project Title - Intelligent Peripheral Interface Device Specific Tape Command Set (IPI-2 Tape)

b) Target date for CD to ISO:

Original target date: 1988
Previous target date: 1988
Current target date: 1988

c) Project Description - the definition of a master slave interface command set between controllers and their intelligent tape peripherals.

d) Publications - None.

e) Accomplishments - SC 25 resolution authorizing publication.

f) Status - Preparing IS for publication.

g) Future Plans - Publish the IS.

h) Reasons for Delay - Technical editor's employer had change in priorities. Obtained additional editorial support.

*** Project 25.13.10.12 / 587M**

a) Project Title - Enhanced Small Disk Interface (ESDI)

b) Target date for CD to ISO:

Original target date: 1989
Previous target date: 1989

Current target date: 1989

c) Project Description - the definition of an intelligent disk device interface.

d) Publications - None.

e) Accomplishments - None.

f) Status - Hung up at ANSI due to reluctance to provide camera ready copy to the ITTF and due to amendment history.

g) Future Plans - Publish the IS or discontinue the project.

h) Reasons for Delay - Lower priority to new interfaces and apparent lack of precedence in providing camera ready copy from ANSI to the ITTF.

*** Project 25.13.10.13 / 375M**

a) Project Title - Small Computer System Interface version 2 (SCSI-2)

b) Target date for CD to ISO:

Original target date: 1989
Previous target date: 1989
Current target date: 1989

c) Project Description - to develop the downward compatible revision of SCSI providing additional capabilities and additional devices.

d) Publications - DIS 9316-1 SCSI-2.

e) Accomplishments - Completed DIS letter ballot.

f) Status - Arranged for a hired document editor to facilitate the laborious preparation of the ISO version. Addressing the DIS letter ballot comments.

g) Future Plans - Submit IS and resolution of comments for publication.

h) Reasons for Delay - Encountered unexpected delay due to change in editorial procedures in ANS publication. This diverted resources needed to prepare the CD for letter ballot. It also caused recall of the dpANS necessitating resynching the international process.

*** Project 25.13.10.14 / 790M**

a) Project Title - Intelligent Peripheral Interface (IPI) Enhanced Physical Layer

b) Target date for CD to ISO:

Original target date: 1989
Previous target date: 1989
Current target date: 1993

c) Project Description - the definition of a master slave interface between hosts and their intelligent disk peripherals based upon the IPI PL but with additional data transfer capability.

d) Publications - CD 9318-6 IPI Enhanced Physical

e) Accomplishments - Completed CD letter ballot.

f) Status - Resolving CD letter ballot comments and preparing DIS.

g) Future Plans - Complete DIS ballot and publish IS..

h) Reasons for Delay - Project editor resources, priorities, and finalizing 9318-1 versus 9318-6 strategy coupled with the project editor's organization downsizing.

*** Project 25.13.12.01 (was 25.13.10.15) / 667M**

a) Project Title - High Performance Parallel Interface (HIPPI) Physical Layer (PH)

b) Target date for CD to ISO:

Original target date: 1991
Previous target date: 1991
Current target date: 1991

c) Project Description - to develop the physical layer protocol of a high speed parallel channel.

d) Publications - DIS 11518-1

e) Accomplishments - Completed DIS ballot.

f) Status - IS text at the ITTF for publication. Awaiting resolution of comments letter.

g) Future Plans - Submit resolution of comments report and publish IS.

h) Reasons for Delay - Delayed by transition of administrators.

*** Project 25.13.12.02 / 702M**

a) Project Title - High Performance Parallel Interface (HIPPI) Framing Protocol (FP)

b) Target date for CD to ISO:

Original target date: 1992
Previous target date: 1992
Current target date: 1992

c) Project Description - to develop the framing protocol of a high speed parallel channel.

d) Publications - CD11518-2

e) Accomplishments - Completed CD ballot.

f) Status - Resolving CD ballot comments and preparing DIS.

g) Future Plans - Complete DIS ballot and publish the IS..

h) Reasons for Delay - Delayed by transition of administrators.

*** Project 25.13.12.03 / 825M**

a) Project Title - High Performance Parallel Interface (HIPPI) Link Encapsulation of IS 8802-2 LLC Data Units

b) Target date for CD to ISO:

Original target date: 1992
Previous target date: 1992
Current target date: 1992

c) Project Description - to develop the link encapsulation protocol of a high speed parallel channel.

d) Publications - CD11518-3

e) Accomplishments - Completed CD ballot.

f) Status - Resolving CD ballot comments and preparing DIS.

g) Future Plans - Complete DIS ballot and publish the IS..

h) Reasons for Delay - Delayed by transition of administrators.

*** Project 25.13.12.04 /**

a) Project Title - High Performance Parallel Interface (HIPPI) - IPI-3

b-h) Not and active project. Reserved for HIPPI follow on.

*** Project 25.13.12.05 /**

a) Project Title - High Performance Parallel Interface (HIPPI) - Memory Interface (MI)

b-h) Project withdrawn.

*** Project 25.13.12.06 / 818 M**

a) Project Title - High Performance Parallel Interface (HIPPI) Physical Switch Control (SC)

b) Target date for CD to ISO:

Original target date: 1992
Previous target date: 1992
Current target date: 1992

c) Project Description - to develop the physical switch control protocol of a high speed parallel channel.

d) Publications - CD11518-6

e) Accomplishments - Completed CD ballot.

f) Status - Resolving CD ballot comments and preparing DIS.

g) Future Plans - Complete DIS ballot and publish the IS..

h) Reasons for Delay - Delayed by transition of administrators.

*** Project 25.13.13.01 / 755M**

a) Project Title - Fibre Channel Physical and Signaling Interface (FC PH)

b) Target date for CD to ISO:

Original target date: 1992
Previous target date: 1992
Current target date: 1992

c) Project Description - to develop the Fibre Channel physical interface definition.

d) Publications - CD 14165-1

e) Accomplishments - Completed CD ballot.

f) Status - Resolving CD ballot comments and preparing DIS.

g) Future Plans - Complete DIS ballot and publish the IS.

h) Reasons for Delay - Delayed by the issue of what constitutes contributing to the development of the standard and the resultant lack of synchronization with the applied editorial resources.

III. SD-4 Report Input

---------- X3 Project ----------			----- IEC/ISO JTC1 ----------			
			Est.	Proj.		
# Type	Title	ASC #	Complete	#	Doc. #	ECMA#
380M I/O	FDDI MAC	X3.148-1987	5/89	25.13.01.04	IS9314-2	----
379M I/O	FDDI PHY	X3.148-1988	4/89	25.13.01.03	IS9314-1	----
541M I/O	FDDI PMD	X3.166-1989	10/90	25.13.01.05	IS9314-3	----
651M I/O	FDDI SMF-PMD	X3.184-1993	2/96	25.13.01.06	CD9314-4	----
573M I/O	FDDI HRC	X3.186-1992	???	25.13.01.07	IS9314-5	----
503M I/O	FDDI SMT	X3.229-1994	2/96	25.13.01.08	CD9314-6	----
834D I/O	FDDI LCF-PMD	X3.237-199X	6/96	25.13.01.09	WD9314-9	----
833D I/O	FDDI TP-PMD	X3.263-199X	6/96	25.13.01.10~	WD9314-10	----
684M I/O	FDDI MAC-2	X3.239-1995	2/96	25.13.01.11	CD9314-8	----
761M I/O	FDDI PHY-2	X3.231-1994	2/96	25.13.01.12	CD9314-7	----
N/A I/O	FDDI UTP-PMD	N/A	Delete?	25.13.01.13	Reserved Proj.	
765D I/O	FDDI SPM	Withdraw	Withdraw?	25.13.01.14	RE9314-12	----
797M I/O	FDDI CT-PICS	X3.262-1995	2/96	25.13.01.15	CD9314-13	----
976D I/O	FDDI PMD-ATS	X3.255-199X	6/96	25.13.01.20	WD9314-20	----
977D I/O	FDDI PHY-ATS	X3.248-199X	6/96	25.13.01.21	WD9314-21	----
835D I/O	FFOL PMD	------	TBD	25.13.01.20*	RE9314-20*	----
836D I/O	FFOL PHY	------	TBD	25.13.01.21*	RE9314-21*	----
837D I/O	FFOL SMUX	------	TBD	25.13.01.22	RE9314-22	----
839D I/O	FFOL IMAC	------	TBD	25.13.01.23	RE9314-23	----
838D I/O	FFOL AMAC	------	TBD	25.13.01.24	RE9314-24	----
840D I/O	FFOL SMT	------	TBD	25.13.01.25*	RE9314-25	----
975D I/O	FDDI SMT-ATS	------	12/96	25.13.01.25	RE9314-25	----
978D I/O	FDDI MAC-ATS	X3.245-199X	6/96	25.13.01.26	WD9314-26	----
N/A I/O	Eurobus A	N/A	12/86	25.13.07.03	IS6951	----
052M I/O	Flex Disk	IS9315-1994	6/89	25.13.10.01	IS9315	----
053M I/O	SMD-E	X3.91-1987	Withdraw	25.13.10.03	FT9324	----
375M I/O	SCSI	X3.131-1986	7/89	25.13.10.04	IS9316	111
		Also listed as		25.13.11.01		
378M I/O	SCTD	X3.146-1987	N/A	25.13.10.05	Discontinued	
370M I/O	IPI PL	X3.129-1986	Withdraw	25.13.10.06	DIS9318-1	----
467M I/O	IPI-2 DISK	IS9318-2-1990	12/90	25.13.10.07	IS9318-2	----
496M I/O	IPI-3 DISK	IS9318-3-1990	12/90	25.13.10.08	IS9318-3	----
505M I/O	IPI-3 TAPE	IS9318-4-1990	12/90	25.13.10.09	IS9318-4	----
504M I/O	IPI-3 COM	X3.166-1990	N/A	25.13.10.10	Discontinued	
591M I/O	IPI-2 TAPE	X3.166-1990	12/95	25.13.10.12	DIS9318-5	----
587M I/O	ESDI	X3.170-199X	???	25.13.10.12	DIS10222	----
375M I/O	SCSI-2	X3.131-1994	7/95	25.13.10.13	DIS9316-1	----
790M I/O	IPI ENH PL	X3.201-1992	2/96	25.13.10.14	CD9318-6	----
667M I/O	HIPPI-PH	X3.183-1991	7/95	25.13.10.15	DIS11518-1	----
702M I/O	HIPPI FP	X3.210-1992	2/96	25.13.12.02	CD11518-2	----
825M I/O	HIPPI LE	X3.218-1993	2/96	25.13.12.03	CD11518-3	----
782D I/O	HIPPI IPI	------	TBD	25.13.12.04	RE11518-4	----
???D I/O	HIPPI MI	------	N/A	25.13.12.05	Withdrawn	
818D I/O	HIPPI SC	X3.222-1993	2/96	25.13.12.06	CD11518-6	----
755M I/O	FC PH	X3.230-1994	6/96	25.13.13.01	CD14165-1	----

~ NWI proposal to be considered at the June SC 25 Meeting

* The SC 25 Secretary had confused the FFOL and FDDI ATS projects and used the reserved FFOL numbers for the ATS projects for the equivalent layers.

---------- X3 Project ----------		----- IEC/ISO JTC1 ----------	
		Est.	Proj.

#	Type	Title	ASC #	Complete	#	Doc. #	ECMA#
Additional Reserved SC 25 numbers:							
789D	I/O	IPI-2 E Disk	X3.236-199X	TBD	25.13.10.16**	RE9318-8	----
791M	I/O	ATA	X3.221-1994	V	25.13.10.17	Rejected	----
				NWI Failed # of contributors			
792D	I/O	SCSI-2 CAM	X3.232-199X	TBD	25.13.11.02	RE9316-2	----
			Rejected	NWI Failed # of contributors			
995D	I/O	SCSI-3 SPC	------	TBD	25.13.11.03	RE9316-3	----
856D	I/O	SCSI-3 SIP	------	TBD	25.13.11.04	RE9316-4	----
855D	I/O	SCSI-3 SPI	X3.253-199X	TBD	25.13.11.05~	RE9316-5	----
991D	I/O	SCSI-3 GPP	Tech Rep	Delete?	25.13.11.06	RE9316-6	----
992D	I/O	SCSI-3 SBP	X3.268-199X	TBD	25.13.11.07~	RE9316-7	----
994D	I/O	SCSI-3 SAM	X3.270-199X	TBD	25.13.11.08~	RE9316-8	----
990D	I/O	SCSI-3 CAM	------	TBD	25.13.11.09	RE9316-9	----
996D	I/O	SCSI-3 SBC	------	TBD	25.13.11.10	RE9316-10	----
997D	I/O	SCSI-3 SSC	------	TBD	25.13.11.11	RE9316-11	----
998D	I/O	SCSI-3 SGC	------	TBD	25.13.11.12	RE9316-12	----
999D	I/O	SCSI-3 SMC	------	TBD	25.13.11.13	RE9316-13	----
979D	I/O	HIPPI FC	------	TBD	25.13.12.07	RE11518-7	----
	~	NWI proposal to be considered at the June SC 25 Meeting					
	**	NWI proposal needed.					
1025D	I/O	HIPPI ATM	------	TBD	25.13.12.08	RE11518-8	----
993D	I/O	SCSI-3 FCP	X3.269-199X	TBD	25.13.13.02~		----
					25.13.13.03	Deleted	
954M	I/O	FC-FP	X3.254-1994	TBD	25.13.13.04**	Reserved	
958D	I/O	FC-FG		TBD	25.13.13.05	Reserved	
960D	I/O	FC-AL	X3.272-199X	TBD	25.13.13.06**	Reserved	
	I/O	SCSI-3 SBC			25.13.13.07	Deleted	
	I/O	FC-FP			25.13.13.08	Deleted	
955D	I/O	FC-LE		TBD	25.13.13.09	Reserved	
956D	I/O	FC-IG		TBD	25.13.13.10	Reserved	
957D	I/O	FC-SB	X3.271-199X	TBD	25.13.13.11**	Reserved	
959D	I/O	FC-SW		TBD	25.13.13.12	Reserved	

~ NWI proposal to be considered at the June SC 25 Meeting

** NWI proposal needed.

IV. Activities

a) 1994 Meetings

SC 25/WG 4 July in Hoersholm, Denmark.
SC 25/WG 4 TAG - See X3T10, X3T11 & X3T12 reports for 15 meetings.

b) 1995 Planned Meetings

SC 25/WG 4 June in Montreal, Canada.
SC 25/WG 4 TAG - See X3T10, X3T11 & X3T12 reports for 15 meetings.

c) Officers

SC 25:

Chairman	Professor Popovic University of Bremen
Secretary	Walter van Pattay Siemens

WG 4:

Convener	Professor Popovic University of Bremen
Secretary	Dr. Nicholas Kovacs DIN

d) Membership

SC 25/WG 4

Australia	(P)		Japan	(P)	
Austria	(O)		Korea Republic	(P)	
Belgium	(P)		Mongolia	(O)	
Brazil	(P)		Morocco	(P)	
Canada		P)	Netherlands		(P)
China	(P)		Norway	(P)	
Czech Republic	(P)		Romania	(P)	
Denmark	(P)		Russian Federation	(P)	
Egypt	(P)		Slovenia	(P)	
Finland		(P)	Sweden		(P)
France	(P)		Switzerland	(P)	
Germany	(P)		Ukraine	(P)	
Ireland	(P)		United Kingdom	(P)	
Italy	(P)		USA	(S)	

SC 25/WG 4 TAG see X3T10, X3T11 & X3T12 reports and subtract non-US domiciled organizations (however you construe that term).

e) Liaison Activities

IEC SC 65C/WG 6; IEEE 802; IEC TC 86; JTC 1/SC 6; JTC 1/SC 1; JTC 1/SC 26; JTC 1/SC 25/WG 3.

f) Administrative Matters

None.

g) Procedural Matters of Note:

The interpretation of "U.S. domiciled" organization should be revisited.

The procedures practiced by ANSI and X3 are different than that practiced by SC 25. Several new project proposals being processed as NPs are already listed by project number in SC25. This is not a major item but is a point of confusion and make work.

Regarding formal votes for U.S. positions relative to SC 25/WG 4 there is a need for a compound TAG of X3T10, X3T11, and X3T12.

A procedural problem is that many member bodies indicate on the NWI ballots that they will not contribute to the development of the standard. Thus we have had the experience of widely claimed standards projects being technically declared as having failed the NWI solely on the basis of failing to have five member bodies indicating they will contribute to the development of the standard.

h) Recommendations:

The X3T10 IR recommends that the procedures be amended to judge a NWI proposal based upon the member bodies acknowledging a need for the standard and leave it up to the assigned SC to judge whether or not resources are available. The circumstances of each project is different so there is no magical number of member bodies needed for the work.

The X3T10 IR recommends that "U.S. domiciled" be interpreted as U.S. managed and controlled. This would avoid the specter of U.S. domiciled organizations awaiting X3TX voting instructions from abroad.

The X3T10 IR recommends that he be allowed to form a compound TAG made up of interested parties from X3T10, X3T11, and X3T12 including the Chairs and IR’s from each of these organizations. This compound TAG would only meet on an as needed basis with the bulk of the work delegated to X3T10, X3T11, and X3T12. It is further recommended that meetings and votes be allowed to occur via Internet when appropriate. Since the project work of the compound TAG is delegated to X3T10, X3T11, and X3T12 the compound TAG should not be assessed an additional participation fee. The principal duty of the compound TAG would be to manage the SC 25/WG 4 delegation and to address SC 25/WG 4 activity for which there is no clear corresponding U.S. project assignment.

V. Anticipated Projects

The SC 25/WG 4 TAG expects to continue the process of making a decision to propose dpANS of X3T10, X3T11, and X3T12 as international standards near the time of forwarding to X3 for further processing. This allows international examination concurrent with the U.S. public review. Anticipated projects include FDDI TP-PMD, IPI-2 Enhanced Disk, SCSI-2 CAM, SCSI-3 SPI, SCSI-3 SBP, SCSI-3 SAM, SCSI-3 FCP, FC-FP,
FC-AL, FC-SB in the near term.

In the longer term most of the other X3T10, X3T11, and X3T12 projects in development are anticipated.

New proposals were withheld during 1994 due to the problem that countries not leading the development of I/O interfaces were not indicating that they would contribute to the standards development. only a few member bodies regularly participate in the meetings. While this does not cause any operational problem since the standards are widely accepted and widely applied. However it does contribute to a procedural problem in that many member bodies indicate on the NWI ballots that they will not contribute to the development of the standard. Thus we have had the experience of widely claimed standards projects being technically declared as having failed the NWI solely on the basis of failing to have five member bodies indicating they will contribute to the development of the standard. It appears that this procedural problem has been resolved and we are resuming the submission of NWI proposals. In addition we are monitoring when the JTC 1 letter ballots on NWI's are being issued to alert the countries which acknowledge the need for the standards but whose member bodies may not be aware of the need of all the industries in their country.

VI. Future Trends in Standardization

See the X3T10, X3T11, and X3T12 reports.