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1980 MAY 14

U.S. DEPARTMENT OF COMMERCE / National Bureau of Standards



ADVANCED DATA COMMUNICATION CONTROL PROCEDURES (ADCCP)

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NO. 71
1980

CATEGORY: HARDWARE
SUBCATEGORY: DATA TRANSMISSION

U.S. DEPARTMENT OF COMMERCE, Philip M. Klutznick, Secretary
Luther H. Hodges, Jr., Deputy Secretary
Jordan J. Baruch, Assistant Secretary for Productivity, Technology and Innovation
National Bureau of Standards, Ernest Ambler, Director

Foreword

Federal Information Processing Standards Publications of the National Bureau of Standards are adopted and promulgated under the provisions of Public Law 89-306, and Part 6 of Title 15 Code of Federal Regulations. The standards are required for implementation by Federal agencies in the acquisition, development, and use of automated information systems and in the interchange of data between and among agencies and with the public. The use of such standards, which are adopted after extensive review by Federal agencies, industry, and the public, is intended to reduce Government costs and improve the effectiveness of Government services.

Comments concerning Federal Information Processing Standards are welcomed, and should be addressed to the Director, Institute for Computer Sciences and Technology, National Bureau of Standards, Washington, D.C. 20234.

Ernest Ambler, Director

Abstract

This FIPS PUB announces the adoption, with three exceptions, of the American National Standard X3.66-1979, Advanced Data Communication Control Procedures (ADCCP). This standard defines the data link control procedures to be used by automatic data processing (ADP) equipment and services employing bit-oriented synchronous data communications links. The procedures provide:

- transfer of information across a data link;
- minimal exposure to errors and to the loss or duplication of information;
- control functions relating to beginning, suspending, and terminating the flow of information across a link; and
- operation on any type of synchronous data transmission facility.

KEY WORDS: Advanced data communication control procedures; ANSI X3.66; bit-oriented; code independence; data; data link control procedures; data transparency; interoperability; teleprocessing; transmission.

Nat. Bur. Stand. (U.S.) Fed. Info. Process. Stand. Publ. (FIPS PUB) 71, 4 pages.

(1980)

CODEN:FIPPAT

For sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161.

Federal Information Processing Standards Publication 71

1980 MAY 14

ANNOUNCING THE STANDARD FOR



ADVANCED DATA COMMUNICATION CONTROL PROCEDURES (ADCCP)

Federal Information Processing Standards Publications (FIPS PUBs) are issued by the National Bureau of Standards, pursuant to section 111(f)(2) of the Federal Property and Administrative Services Act of 1949, as amended, Public Law 89-306 (79 Stat. 1127), Executive Order 11717 (38 FR 12315, dated May 11, 1973), and Part 6 of Title 15 Code of Federal Regulations (CFR).

1. **Name of Standard.** Advanced Data Communication Control Procedures (ADCCP) (FIPS PUB 71).
2. **Category of Standard.** Hardware, Data Transmission.
3. **Explanation.** This standard defines the data link control procedures to be used by automatic data processing (ADP) equipment and services employing bit-oriented synchronous data communications links. The procedures provide:
 - transfer of information across a data link;
 - minimal exposure to errors and to the loss or duplication of information;
 - control functions relating to beginning, suspending, and terminating the flow of information across a link; and
 - operation on any type of synchronous data transmission facility.

The Government's intent in employing this standard is to reduce the cost of acquiring and using computer network facilities and services:

- increasing the available alternative sources of supply for ADP equipment and services which employ synchronous data communications;
- increasing the reutilization of such equipment; and
- assuring required interoperability to providing a common data link control procedure for use between such equipment and services.

4. **Approving Authority.** Secretary of Commerce.
5. **Maintenance Agency.** Department of Commerce, National Bureau of Standards (Institute for Computer Sciences and Technology).
6. **Cross Index.** American National Standard X3.66-1979, Advanced Data Communication Control Procedures (ADCCP). Federal Telecommunications Standard 1003 (FED-STD 1003), published by the General Services Administration, is technically consistent with this standard.
7. **Applicability.** This Federal Information Processing Standard describes data link control procedures which shall be used in the design and procurement of all ADP systems, ADP terminal equipment, and ADP services that are to be employed in computer networking or teleprocessing environments using bit-oriented synchronous data communications. Such systems, equipment, and services shall implement one or more of the classes of procedure described in this Federal Information Processing Standard.

Prior to acceptance of equipment or service which is required to conform to this standard, the conformance of such equipment or service shall be verified by demonstration or other means acceptable to the Government.

8. Specifications. This Federal Information Processing Standard adopts American National Standard X3.66-1979, Advanced Data Communication Control Procedures (ADCCP), with the following exceptions:

(1) When the address field consists of a single octet, the least significant bit (bit number 1) shall always be set to one, making the address format consistent with the extended format prescribed by section 4.3.2 of X3.66; i.e., the basic address format prescribed by section 4.3.1 of X3.66 shall not be used.

(2) The four non-reserved commands (section 7.4.5 of X3.66) and four non-reserved responses (section 7.5.5 of X3.66) shall not be specified or used.

(3) The meaning of option 11 (deleting RSET) is changed so that RSET is deleted unless the option is selected.

9. Implementation Schedule. The provisions of this standard are effective June 13, 1980. Any applicable equipment or service ordered on or after the effective date, or procurement actions for which solicitation documents have not been issued by that date, must conform to the provisions of this standard unless a waiver has been granted in accordance with the procedure described in paragraph 10 below.

Regulations concerning the specific use of this standard in Federal procurement will be issued by the General Services Administration and become part of the Federal Property Management Regulations.

This standard shall be reviewed by the National Bureau of Standards within five years after its effective date. This review shall take into account technological trends and other factors to determine if the standard should be affirmed, revised, or withdrawn.

10. Waivers. Heads of agencies desiring a waiver from the requirements stated in this standard, so as to acquire applicable equipment or service not conforming to this standard, shall submit a request for waiver to the Secretary of Commerce for review and approval. Approval will be granted if, in the judgment of the Secretary, based on all available information including that provided in the waiver request, a major adverse economic or operational impact would occur through conformance with this standard.

A request for waiver shall include a justification for the waiver, including a description and discussion of the adverse economic or operational impact that would result from conforming to this standard as compared to the alternative for which the waiver is requested.

The request for waiver shall be submitted to the Secretary of Commerce, Washington, D.C. 20230, and labeled as a Request for Waiver to a Federal Information Processing Standard. Waiver requests will normally be processed within 45 days of receipt by the Secretary. No action shall be taken to issue solicitation documents or to order equipment or service for which this standard is applicable and which does not conform to this standard prior to receipt of a waiver approval response from the Secretary.

11. Where to Obtain Copies. Copies of this publication are available for sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161. (Sale of the included specifications document is by arrangement with the American National Standards Institute.) When ordering, refer to Federal Information Processing Standards Publication 71 (FIPS-PUB-71), and title. Payment may be made by check, money order, or deposit account.

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(REV. 10-88)

U.S. DEPARTMENT OF COMMERCE
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

CHANGE NUMBER 2 - 71
Change Number 1 - 78

DATE OF CHANGE
1994 July 29

FIPS PUBLICATION NUMBER
71 & 78

FIPS PUBLICATION CHANGE NOTICE

PUBLICATION TITLE

FIPS PUB 71, Advanced Data Communication Control Procedures (ADCCP)

FIPS PUB 78, Guideline for Implementing Advanced Data Communication Control Procedures (ADCCP)

THIS OFFICE HAS A RECORD OF YOUR INTEREST IN RECEIVING CHANGES TO THE ABOVE FIPS PUBLICATION. THE CHANGE(S) INDICATED BELOW HAVE BEEN PROVIDED BY THE MAINTENANCE AGENCY FOR THIS PUBLICATION AND WILL BE INCLUDED IN THE NEXT PUBLISHED REVISION TO THIS FIPS PUBLICATION. QUESTIONS OR REQUESTS FOR ADDITIONAL INFORMATION SHOULD BE ADDRESSED TO THE MAINTENANCE AGENCY:

Department of Commerce
National Institute of Standards and Technology
Computer Systems Laboratory
Gaithersburg, MD 20899

CHANGE ITEM(S)

Attached is a reprint from the June 22, 1994, FEDERAL REGISTER (59 FR 32186) which announces that the Secretary of Commerce has approved the withdrawal of two Federal Information Processing Standards (FIPS): FIPS PUB 71, Advanced Data Communication Control Procedures (ADCCP) and FIPS PUB 78, Guideline for Implementing Advanced Data Communication Control Procedures (ADCCP).

FIPS 71 and 78 are withdrawn because they are no longer needed by the Federal government. Commercial products supported by this technology are no longer needed.

This withdrawal of the standards is effective June 22, 1994.

Please remove each FIPS listed above and insert this change notice.

Attachment

Copies of FIPS are available from:

National Technical Information Service (NTIS)
ATTN: Sales Office, Sills Building
5285 Port Royal Road
Springfield, VA 22161

Phone - (703) 487-4650

Office Hours - 7:45am to 5:00pm



National Institute of Standards and Technology

(Docket No. 931057-4117)

RN 0593-AA58

Approval of Withdrawal of Federal Information Processing Standard (FIPS) 71, Advanced Data Communication Control Procedures (ADCCP) and FIPS 78, Guideline for Implementing ADCCP

AGENCY: National Institute of Standards and Technology (NIST), Commerce.

ACTION: Notice.

SUMMARY: The purpose of this notice is to announce that the Secretary of Commerce has approved the withdrawal of Federal Information Processing Standard (FIPS) 71, Advanced Data Communication Control Procedures (ADCCP) and FIPS 78, Guideline for Implementing Advanced Data Communication Control Procedures (ADCCP).

On November 16, 1993, notice was published in the *Federal Register* (58 FR 60425) proposing withdrawal of Federal Information Processing Standard (FIPS) 71, because the technical specifications that they adopt are obsolete and are no longer supported by industry. NIST also stated that if FIPS 71 were withdrawn, FIPS 78 would be withdrawn as well.

The written comments submitted by interested parties and other material available to the Department relevant to this standard was reviewed by NIST. On the basis of this review, NIST recommended that the Secretary approve the withdrawal of FIPS 71 and 78, and prepared a detailed justification document for the Secretary's review in support of that recommendation.

The detailed justification document which was presented to the Secretary is part of the public record and is available for inspection and copying in the Department's Central Reference and Records Inspection Facility, Room 6020, Herbert C. Hoover Building, 14th Street between Pennsylvania and Constitution Avenues, NW., Washington, DC 20230.

EFFECTIVE DATE: This withdrawal is effective on June 22, 1994.

FOR FURTHER INFORMATION CONTACT: Ms. Shirley Radack, National Institute of Standards and Technology, Gaithersburg, MD 20899, telephone (301) 975-2933.

Authority: Federal Information Processing Standards Publications (FIPS PUBS) are issued by the National Institute of Standards and Technology after approval by the Secretary of Commerce pursuant to Section 111(d) of the Federal Property and

Administrative Services Act of 1949 as amended by the Computer Security Act of 1987, Public Law 100-235.

Dated: June 17, 1994.

Samuel Kramer,

Associate Director.

[FR Doc. 94-15189 Filed 6-21-94; 3:45 am]

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National Institute of Standards and Technology
NOTICES

Information processing standards, Federal:
Advanced data communication control procedures;
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