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: Electronic Funds Transfer
: Smart cards & stds.

ELECTRONIC FUNDS TRANSFER—REQUIREMENTS FOR INTERFACES

Part 1—COMMUNICATIONS INTERFACE AND DATA REPRESENTATION

STANDARDS ASSOCIATION OF AUSTRALIA
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This Australian standard was prepared by Committee IS/5, Electronic Funds Transfer. It was approved on behalf of the Council of the Standards Association of Australia on 19 March 1985, and published on 17 May 1985.

The following interests are represented on Committee IS/5:

Australian Association of Permanent Building Societies

Australian Bankers Association

Australian Computer Equipment Manufacturers Association

Australian Electrical and Electronics Manufacturers Association

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Australian Information Industry Association

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This standard was issued in draft form for comment as DR 84118.

AUSTRALIAN STANDARD

ELECTRONIC FUNDS TRANSFER—REQUIREMENTS FOR INTERFACES

Part 1
COMMUNICATIONS INTERFACE AND DATA REPRESENTATION

AS 2805.1—1985

First published 1985

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PREFACE

This standard was prepared by the Association's Committee on Electronic Funds Transfer. It is one of a series of standards on electronic funds transfer (EFT), requirements for interfaces; the other standards in the series being as follows:

Part 2—Message Structure, Format and Content

Part 3—PIN Management and Security

Part 4—Message Authentication

Part 5—Data Encryption Algorithm

Part 6—Terminal Key Management and Security*

Part 7—Point of Service Message Content*

Part 8—Financial Institution Message Content*

It should be noted that in this series of standards, the definitions are specific to the Part in which they appear.

In this Part 1, Appendix A has been included for the guidance of users; it does not form part of the requirements of this standard.

During the preparation of this standard, the committee determined that EFT communications networks should be restricted to High Level Data Link Control Procedures (HDLC) only, since it was the only standardized protocol which, without modification, possessed all of the following advantages:

(a) Speed independence.

(b) Security.

(c) Efficiency.

(d) Universality.

(e) International acceptance.

(f) Transparency.

(g) Consistency.

(h) Multidrop capability.

(j) Ability to support unaltered message authentication codes across network boundaries.

It is expected that as a result of on-going study, further definition of higher level aspects may be added to this standard or other standards in the series.

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* In course of preparation.

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PART 1—COMMUNICATIONS INTERFACE AND DATA REPRESENTATION

1 SCOPE. This standard specifies common communication interfaces by which card-originated electronic messages relating to a financial transaction may be interchanged between independent identities.

2 REFERENCED DOCUMENTS. The following standards are referred to in this standard:

AS 1189	Data Processing—Vocabulary. Part 9—Data Communications.
AS 1776	Information Processing—7-bit Coded Character Set for Information Interchange.
AS 2572	Data Communication—High Level Data Link Control Procedures—Frame Structure.
AS 2751	Information Processing Systems—High Level Data Link Control Procedures—Consolidation of Classes of Procedure.
AS 2805	Electronic Funds Transfer—Requirements for Interfaces— Part 2—Message Structure, Format and Content. Part 7—POS Message Content*.
ISO 7776	Information Processing Systems—Data Communications—High-level Data Link Control Procedures—Description of the X.25 LAPB-compatible DTE Data Link Procedures *.
CCITT V.22bis	2400 bits per second Duplex Modem using the Frequency Division Technique Standardized for use on the General Switched Telephone Network and on Point-to-point 2-wire Leased Telephone-type Circuits*.
CCITT V.23	600/1200-baud Modem Standardized for use in the General Switched Telephone Network.
CCITT V.24	List of Definitions for Interchange Circuits between Data Terminal Equipment and Data Circuit-terminating Equipment.
CCITT V.25	Automatic Calling and/or Answering Equipment on the General Switched Telephone Network, including Disabling of Echo Suppressors on Manually Established Calls.
CCITT V.28	Electrical Characteristics for Unbalanced Double-current Interchange Circuits.
CCITT V.35	Data Transmission at 48 kilobits per second using 60-108 kHz Group Band Circuits.
CCITT V.54	Loop Test Devices for Modems.
CCITT X.21	Interface between Data Terminal Equipment (DTE) and Data-circuit Terminating Equipment (DCE) for Synchronous Operation on Public Data Networks.
CCITT X.25	Interface between Data Terminal Equipment (DTE) and Data Circuit Terminating Equipment (DCE) for Terminals Operating in the Packet Mode on Public Data Networks.
CCITT X.244	Procedure for the Exchange of Protocol Identification during Virtual Call Establishment on Packet Switched Public Data Networks.*

3 DEFINITIONS. For the purpose of this standard, the definitions of AS 1189, Part 9, and the following definitions, apply.

3.1 Acquirer—the institution or its agent, which acquires, from the card acceptor, the financial data relating to the transaction, and which initiates that data into an interchange system.

NOTE: Any entity which passes messages without regard to the financial data therein is not regarded as an acquirer.

3.2 Card acceptor—the party accepting the card and presenting transaction data to an acquirer.

3.3 Card issuer—the institution, or its agent, which issues the identification card to the cardholder.

3.4 Intermediate Network Facility (INF)—any message processing entity positioned between the—

(i) card acceptor and acquirer; or

(ii) acquirer and card issuer; or

(iii) card acceptor and card issuer;

and which has responsibility for the financial data.

3.5 Network Access Controller (NAC)—a device that performs protocol conversion between CCITT X.25 and the HDLC terminal protocol.

NOTE: It may also perform functions such as routing and line concentration.

3.6 Non-return to Zero (NRZ)—the method of encoding where a binary zero is represented by an 'ON' state ('space') and a binary one is represented as an 'OFF' state ('mark').

* In course of preparation.