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**ELECTRONIC FUNDS TRANSFER—
REQUIREMENTS FOR INTERFACES**

**Part 2—MESSAGE STRUCTURE,
FORMAT AND CONTENT**



STANDARDS ASSOCIATION OF AUSTRALIA
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Australian Bankers Association
Australian Computer Equipment Manufacturers Association
Australian Electrical and Electronics Manufacturers Association
Australian Federation of Credit Unions Ltd
Australian Information Industry Association
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AUSTRALIAN STANDARD

**ELECTRONIC FUNDS TRANSFER—
REQUIREMENTS FOR INTERFACES**

**Part 2
MESSAGE STRUCTURE,
FORMAT AND CONTENT**

AS 2868.2—1986

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PREFACE

This standard was prepared by the Association's Committee on Electronic Funds Transfer to supersede AS 2805.2—1985. It is Part 2 in a series of standards on electronic funds transfer (EFT), requirements for interfaces; the other standards in the series are as follows:

- Part 1—Communications Interface and Data Representation
- Part 3—PIN Management and Security
- Part 4—Message Authentication
- Part 5—Data Encryption Algorithm
- Part 6—Terminal Key Management and Security*
- Part 7—POS 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.

The main changes from the previous edition are listed below:

- (a) The following new message types have been added:
 - 0312, 0332, 0412, 0432, 0502, 0503, 0512, 0522, 0523, 0532
- (b) The following condition codes have been amended: 14, 21, 22 and 23.
- (c) The following new field has been added:
 - Additional Amounts (Field 54).
- (d) The descriptions of Fields 26 and 64 have been amended.
- (e) New requirements have been specified for the following:
 - Point of service PIN capture code (Clause 4.4.8)
 - Message authentication code (MAC) field (Clause 4.4.15)
 - Additional amounts (Clause 4.4.20)
- (f) Amendments have been made to the following codes:
 - Network management information codes—addition of new Codes 141 and 240.
 - Point of service condition codes—amendment to Code 02 and addition of Code 27.
 - Processing codes—addition of new Codes 09 and 31
 - Response codes—the addition of new Codes 33 to 40 and 44; the designation of some codes as approved, decline or pick-up; an amendment to Code 98; and the deletion of Code 99.
 - Settlement codes—the deletion of Code 6.

In this Part 2, appendix A has been included for the guidance of users; it does not form part of the requirements of this standard.

This Part 2 is a general statement of requirements and provides reference material (e.g. directory of data elements and message flow information) for other Parts of this standard (e.g. Parts 7 and 8).

Parts 7 and 8 provide the specific requirements for the specific areas which they address.

This standard is based on a draft international standard, i.e. ISO DIS 8583, Bank Card Originated Messages, Interchange Message Specifications, Content for Financial Transactions. The following are the major variations between this standard and DIS 8583:

Reference herein *Variation*

- Clause 1.1 Reference has been made to AS 2805, Parts 7 and 8; at present there is no proposal for international work corresponding to Parts 7 and 8.
- Clause 3.1 DIS 8583 permits the use of multiple bit maps although it defines specific usage for only two. This standard limits the number of bit maps which may be used to two.

* In course of preparation.

<i>Reference herein</i>	<i>Variation</i>
Clause 3.9	Condition Codes 01, 06, 08, 13 and 17 are used in DIS 8583 but are not used in this standard for the reasons stated in the text. Condition Codes 05 and 07 are included in DIS 8583 but have a different definition in this standard. Condition Codes 14, and 20 to 25 are not used in DIS 8583 but are included in this standard.
Table 3.1	Fields 57, 58 and 59 are not in DIS 8583.
Table 3.2	Fields 117, 118 and 119 are not in DIS 8583.
Clause 4.4.2	There are no requirements for Card Status Update Codes in DIS 8583.
Clause 4.4.3	Item (b) specifies requirements for negative balances; DIS 8583 does not include such requirements.
Clause 4.4.5	In this standard, the handling of transactions, where the currency of settlement and currency of the transaction are the same, or where they differ, is more specific than in DIS 8583—see items (a) and (b).
Clause 4.4.7	Network Management Information Code 141 is not in DIS 8583.
Clause 4.4.11	Processing Codes commencing with 80, 81, 82 and 83 are not in DIS 8583.
Clause 4.4.12	Response Codes 97 and 98 are not in DIS 8583.
Clause 4.4.14	There are no requirements for Service Restriction Codes in DIS 8583.
Appendix B	In this standard, partial reversals are not permitted in reversal messages.
Appendix D	Whilst DIS 8583 permits partial reversals, their use and hence the use of REPLACEMENT AMOUNT (Field 195), is not permitted in this standard.

The above changes are identified in the text by the entry 'AUS only' next to the item.

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FOREWORD

Services of the financial industry include the exchange of electronic messages relating to financial transactions. Agreements on application specifications are generally at a private level. This standard is designed as an interface specification enabling messages to be exchanged between systems adopting a variety of application specifications. The application specification can remain at a private level. Designers of such applications have complete freedom within the overall constraints of this standard that messages must be convertible to the interface format in order that interchange may take place. However, attention is drawn to the requirements of AS 2805, Parts 7 and 8.

This standard uses a concept whereby each data element is assigned a position indicator in a control field which is known as a 'bit map'. The presence of a data element in a specific message is indicated by a one (1) in the assigned position; the absence of a data element is indicated by a zero (0) in the assigned position.

Message formats used in individual systems are subject to the commercial relationships between the parties contracting to each system. The data formats specified in this standard are designed to ensure that compatibility between systems, themselves compatible with this standard, is always feasible.

STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

for

ELECTRONIC FUNDS TRANSFER—REQUIREMENTS FOR INTERFACES

PART 2—MESSAGE STRUCTURE, FORMAT AND CONTENT

SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This standard specifies the message structure, format and content, data elements and values for data elements required for an interface by which card-originated electronic messages relating to financial transactions may be interchanged.

However, the specific requirements for point-of-service message content (e.g. terminal to acquirer) and financial institutions message content (e.g. acquirer to card issuer) are given in AS 2805, Parts 7 and 8, respectively.

This standard allows for the automated reconciliation of messages previously exchanged. However, it makes no provision for the final exchange of funds (between two or more institutions) which is known as 'settlement'.

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

- AS 2623 Credit Cards
Part 1—Specifications, Numbering System and Registration Procedure
Part 2—Magnetic Stripe Encoding on Tracks 1, 2 and 3
Part 3—Magnetic Stripe Data Content for Track 3
- AS 2632 Codes for the Representation of Names of Countries
- AS 2805 Electronic Funds Transfer—Requirements for Interfaces
Part 4—Message Authentication
Part 7—POS Message Content
Part 8—Financial Institution Message Content
- ISO 4217 Codes for the Representation of Currencies and Funds
- DIS 8583 Bank Card Originated Messages, Interchange Message Specifications—Content for Financial Transactions

1.3 DEFINITIONS. For the purpose of this standard, the following definitions apply:

1.3.1 Acquirer—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.

1.3.2 Advice—message which notifies a party of an action that has been taken, requiring no approval.

1.3.3 Authorization—guarantee of funds given by the card issuer to the acquirer or card acceptor.

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

1.3.5 Cardholder—customer associated with the Primary Account Number (PAN) requesting the transaction from the card acceptor.

1.3.6 Cardholder accounts transfer—the movement of funds by a cardholder from one of his accounts to another one of his accounts, both of which accounts are held by the same financial institution.

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

1.3.8 Credit transaction—claim for funds by the cardholder for the credit of his account as specified in the message.

NOTE: At the same time a credit transaction provides details of funds acknowledged as payable by the acquirer (and/or the card acceptor) to the card issuer.

1.3.9 Debit transaction—approval by the cardholder of the debit to his account as specified in the message.

NOTE: At the same time a debit transaction provides a claim of funds made by the acquirer (and/or the card acceptor) against the card issuer.

1.3.10 Interactive message—a message that is to be transmitted and responded to while the transaction is taking place.

1.3.11 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.

1.3.12 Message—a set of data elements used to exchange information between institutions.

NOTE: No communications (header/trailer, protocol, or character code) or security implications are assumed or identified.

1.3.13 Non-interactive message—a message transmitted after the transaction has taken place at the POS.

NOTE: On-line or off-line (e.g. magnetic tape) telecommunication methods may be used for message transmission.

1.3.14 Point of Service (POS)—location where a transaction is originated.

NOTE: This definition includes any device capable of initiating card-originated transactions e.g. Retail Terminal, Automatic Telling Machine (ATM), Airline Ticket Dispenser.