

Australian Standard™

**Electronic funds transfer—  
Requirements for interfaces**

**Part 2: Message structure, format and  
content**

This Australian Standard was prepared by Committee IT-005, Financial Transaction Systems. It was approved on behalf of the Council of Standards Australia on 16 June 2000 and published on 11 September 2000.

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Australian Association of Permanent Building Societies  
Australian Bankers Association  
Australian Electrical and Electronic Manufacturers Association  
Australian Institute of Petroleum  
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Consumers Federation of Australia  
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**Electronic funds transfer—  
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**Part 2: Message structure, format and  
content**

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## PREFACE

This Standard was prepared by the Standards Australia Committee IT-005, Financial Transaction Systems, to supersede AS 2805.2—1997, *Electronic funds transfer—Requirements for interfaces, Part 2: Message structure, format and content*. During the preparation of this Standard cognizance was taken of ISO 8583:1993, *Financial transaction card originated messages—Interchange message specifications*.

*This Standard incorporates Amendment No.1 (April 2002) and Amendment No.2 (January 2004). The changes arising from the Amendments are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure, or part thereof affected.*

### AS

2805	Electronic funds transfer—Requirements for interfaces
2805.1	Part 1: Communications
2805.2	Part 2: Message structure, format and content (this Standard)
2805.3	Part 3: PIN management and security
2805.4	Part 4: Message authentication
2805.5.1	Part 5.1: Ciphers—Data encipherment algorithm 1 (DEA 1)
2805.5.2	Part 5.2: Ciphers—Modes of operation for an n-bit block cipher algorithm
2805.5.3	Part 5.3: Ciphers—Data encipherment algorithm 2 (DEA 2)
2805.5.4	Part 5.4: Ciphers—Data encipherment algorithm 3 (DEA 3) and related techniques
2805.6.1	Part 6.1: Key management—Principles
2805.6.2	Part 6.2: Key management—Transaction keys
2805.6.3	Part 6.3: Key management—Session keys—Node to node
2805.6.4	Part 6.4: Key management—Session keys—Terminal to acquirer
2805.6.5.1	Part 6.5.1: Key management—TCU initialization—Principles
2805.6.5.2	Part 6.5.2: Key management—TCU initialization—Symmetric
2805.6.5.3	Part 6.5.3: Key management—TCU initialization—Asymmetric
2805.9	Part 9: Privacy of communications
2805.10	Part 10: File transfer integrity validation
2805.11	Part 11: Card parameter table
2805.12.1	Part 12.1: Message content—Structure and format
2805.12.2	Part 12.2: Message content—Codes
2805.12.3	Part 12.3: Message content—Maintenance of codes
2805.13.1	Part 13.1: Secure hash functions—General
2805.13.2	Part 13.2: Secure hash functions—MD5
2805.13.3	Part 13.3: Secure hash functions—SHA-1
2805.14.1	Part 14.1: Secure cryptographic devices (retail)—Concepts, requirements and evaluation methods

The following Handbooks relate to AS 2805 series of Standards:

HB 127	Electronic funds transfer—Implementing message content Standards—Conversion Handbook (changing from AS 2805.2 to AS 2805.12 series)
HB 128	Electronic funds transfer—Implementing message content Standards—Terminal Handbook
HB 129	Electronic funds transfer—Implementing message content Standards—Interchange Handbook

Part of the AS 2805 series that is in the course of preparation is as follows:

Message authentication using DEA 3.

In the AS 2805 series of Standards, the definitions of words and phrases used are specific to the Part in which they appear.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

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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. As long as messages conform to the interface format, as prescribed in this Standard, in order for interchange to take place, all other features of applications can be altered as required.

This Standard uses a concept whereby each data element is assigned a position indicator in a control field which is known as a 'bitmap'. 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, that are compatible with this Standard, is always feasible.

## STANDARDS AUSTRALIA

**Australian Standard****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, 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.

This Standard allows for the automated reconciliation of messages previously exchanged but makes no provision for the final exchange of funds (between two or more institutions) known as ‘settlement’.

Appendices A, B, C, D and I set out data elements, type and flow of messages and data representation.

NOTE: Appendices E, F, G and H give guidance on implementation, card acceptor registry and minimal message sets.

**1.2 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard:

## AS

- |        |  |
|--------|--|
| 1776   | Information processing — 7-bit coded character set for information interchange |
| 2632   | Codes for the representation of names of countries and their subdivisions      |
| 2632.1 | Part 1: Country Codes  |
| 2805   | Electronic funds transfer—Requirements for interfaces                          |
| 2805.4 | Part 4: Message authentication   |
| 3523   | Identification cards—Identification of issuers                                 |
| 3523.1 | Part 1: Numbering system   |
| 3523.2 | Part 2: Application and registration procedures                                |
| 3523.3 | Part 3: Australian national numbering system and registration procedures       |
| 3524   | Identification cards—Financial transaction cards                               |
| 3525   | Bank cards—Magnetic stripe data content for Track 3                            |

## AS/NZS

- |      |  |
|------|--|
| 4217 | Codes for the representation of currencies and funds |
|------|--|

## SAA/SNZ

- |      |   |
|------|---|
| HB99 | Addressing the comparison of dates for the year 2000 and beyond |
|------|---|

## ISO

- |       |   |
|-------|---|
| 8583  | Financial transaction card originated messages—Interchange message specifications                                 |
| 10202 | Financial transaction cards—Security architecture of financial transaction systems using integrated circuit cards |