

Australian Standard™

**Electronic funds transfer—  
Requirements for interfaces**

**Part 6.6: Key management—Session  
keys—Node to node with KEK  
replacement**

**STANDARDS**  
Australia



This Australian Standard was prepared by Committee IT-005, Financial Transaction Systems. It was approved on behalf of the Council of Standards Australia on 31 March 2006.  
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## PREFACE

This Standard was prepared by the Standards Australia Committee IT-005, Financial Transaction Systems.

This Standard is Part 6.6 of the following series:

### AS

- 2805 Electronic funds transfer—Requirements for interfaces
- 2805.1 Part 1: Communications
- 2805.2 Part 2: Message structure, format and content
- 2805.3.1 Part 3.1: PIN management and security—General
- 2805.3.2 Part 3.2: PIN management and security—Offline
- 2805.4.1 Part 4.1: Message authentication—Mechanisms using a block cipher
- 2805.4.2 Part 4.2: Message authentication—Mechanisms using a hash function
- 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
- 2805.6.6 Part 6.6: Key management—Session keys—Node to node with KEK replacement
- 2805.9 Part 9: Privacy of communications
- 2805.10.1 Part 10.1: File transfer integrity validation
- 2805.10.2 Part 10.2: Secure file transfer (retail)
- 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
- 2805.14.2 Part 14.2: Security, compliance checklists for devices used in magnetic stripe and card systems

The following Handbooks relate to the AS 2805 series of Standards:

### HB

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

In the AS 2805 series of Standards, definitions are specific to the Part in which they appear. Statements expressed in mandatory terms in notes to figures are deemed to be requirements of the Standard.

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. An 'informative' appendix is only for information and guidance.

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STANDARDS AUSTRALIA

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**Part 6.6: Key management—Session keys—Node to node with KEK replacement**

**1 SCOPE**

This Standard specifies management techniques for keys used in the authentication, encipherment and decipherment of electronic messages relating to financial transactions using session keys.

In particular, this Standard—

- (a) defines security interface procedures between nodes;
- (b) defines methods of interchange of the various encipherment keys used for securing transactions; and
- (c) ensures that messages can only be authenticated at their correct destination.

NOTE: Principles concerning key management and physical security are dealt with in AS 2805.6.1.

**2 APPLICATION**

This Standard may be adopted in all situations where a secure node-to-node dialogue is desired and where on-line KEK replacement is desired.

**3 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard:

AS	
2805	Electronic funds transfer—Requirements for interfaces
2805.2	Part 2: Message structure, format and contents
2805.3.1	Part 3.1: PIN management and security—General
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