

AS 2805.6.9:2022



STANDARDS  
Australia



# Electronic funds transfers — Requirements for interfaces

Part 6.9: Key management — AES Session keys — Node to node



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This Australian Standard ® was prepared by IT-005, Financial Transaction Systems. It was approved on behalf of the Council of Standards Australia on 3 March 2022.

This Standard was published on 18 March 2022.

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- Australian Payments Network
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This Standard was issued in draft form for comment as DR AS 2805.6.9:2021.

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ISBN 978 1 76113 684 9

# Electronic funds transfers — Requirements for interfaces

## Part 6.9: Key management — AES Session keys — Node-to-node

First published as AS 2805.6.9:2022.

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## Preface

This Standard was prepared by the Standards Australia Committee IT-005, *Financial transaction systems*.

The objective of this document is to provide an interoperable method to transact within a node-to-node environment using the Advanced Encryption Standard (AES). It specifies management procedures applied in the authentication, encryption and decryption of electronic messages relating to financial transactions utilizing session keys.

This document —

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

The requirements of this document refer to AS ISO 20038 *Banking and related financial services — Key wrap using AES*.

This document is intended to be read in conjunction with AS ISO 20033:2009, *Banking and related financial services — Key wrap using AES*.

This document is part of the AS 2805.6 series, summarized as follows.

AS 2805.6.1.1, *Electronic funds transfer—Requirements for interfaces, Part 6.1.1: Key management—Principles (ISO 11568-1:2005, MOD)*

AS 2805.6.1.4, *Electronic funds transfer— Requirements for interfaces, Part 6.1.4: Key management—Asymmetric cryptosystems—Key management and life cycle*

AS 2805.6.2, *Electronic funds transfer—Requirements for interfaces, Part 6.2: Key management—Transaction keys*

AS 2805.6.3, *Electronic funds transfer—Requirements for interfaces, Part 6.3: Key management—Session keys—Node to node*

AS 2805.6.5.1, *Electronic funds transfer—Requirements for interfaces, Part 6.5.1: Key management—TCU initialization—Principles*

AS 2805.6.5.2, *Electronic funds transfer—Requirements for interfaces, Part 6.5.2: Key management—TCU initialization—Symmetric*

AS 2805.6.5.3, *Electronic funds transfer — Requirements for interfaces, Part 6.5.3: Key management — TCU initialization — Asymmetric*

AS 2805.6.7, *Electronic funds transfer—Requirements for interfaces, Part 6.7: Key management—Transaction key —Derived unique key per transaction (DUKPT)*

The terms “normative” and “informative” are used in Standards to define the application of the appendix or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

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# Australian Standard®

## Electronic funds transfers — Requirements for interfaces

### Part 6.9: Key management — AES Session keys — Node-to-node

#### Section 1 Scope and general

##### 1.1 Scope

This document provides an interoperable method to transact within a node-to-node environment using the AES. It specifies management procedures applied in the authentication, encryption and decryption of electronic messages relating to financial transactions utilizing session keys.

This document —

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

NOTE Principles concerning key management and physical security are dealt with in AS 2805.6.1.2 and AS ISO 20038

##### 1.2 Application

This document is intended for use in institutions where a node-to-node dialogue is required using AES keys.

##### 1.3 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes the requirements of this document.

NOTE Documents referenced for normative purposes are listed in the Bibliography.

AS ISO 20038, *Banking and related financial services — Key wrap using AES*

##### 1.4 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

IEC Electropedia: available at <http://www.electropedia.org/>

ISO online browsing platform: available at <https://www.iso.org/obp>

###### 4.1

###### authentication

verification that a message was sent by the purported originator to the intended recipient and that the message was not changed in transit

[SOURCE: ISO/IEC 20944-1:2013, 3.11.1.9]