AS ISO/IEC 15459.4—2006

Australian Standard®

# Information technology—Unique identifiers

## Part 4: Unique identifiers for supply chain management



This Australian Standard® was prepared by Committee IT-034, Automatic Identification and Data Capture Techniques. It was approved on behalf of the Council of Standards Australia on 15 November 2006.
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The following are represented on Committee IT-034:

- Australian Custom Service
- Australian Data Capture Association
- Australian Electrical and Electronic Manufacturers Association
- Australian Retailers Association
- Australian Veterinary Association
- Department of Communications, Information Technology and the Arts
- Department of Defence
- Department of Primary Industries, Vic
- RFID Association of Australia
- The University of Adelaide
- GS1

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This Standard was issued in draft form for comment as DR 06519.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard, through their representation on the Committee and through public comment period.

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# Part 4: Unique identifiers for supply chain management

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# PREFACE

This Standard was prepared by the Standards Australia Committee IT-034, Automatic Identification and Data Capture Techniques.

The objective of this Standard is to provide a unique, non-significant, string of characters for the unique identifier for supply chain management with a character string intended to be represented in a bar code label or other AIDC media attached to the item to meet supply chain management needs.

This Standard is identical with, and has been reproduced from ISO/IEC 15459-4:2006, *Information technology—Unique identifiers*—Part 4: *Unique identifiers for supply chain management*.

As this Standard is reproduced from an international standard, the following applies:

(a) Its number appears on the cover and title page while the international standard number appears only on the cover.

(b) In the source text 'this part of ISO/IEC 15459' should read 'this Australian Standard'.

(c) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

| *Reference to International Standard* | | *Australian Standard* | |
|---|---|---|---|
| ISO/IEC | | AS ISO/IEC | |
| 15418 | Information technology—EAN/UCC Application Identifiers and Fact Data Identifiers and Maintenance | 15418 | Information technology—EAN/UCC Application Identifiers and Fact Data Identifiers and Maintenance |
| 15459 | Information technology—Unique identifiers | 15459 | Information technology—Unique identifiers |
| 15459-2 | Part 2: Registration procedures | 15459.2 | Part 2: Registration procedures |
| 15459-3 | Part 3: Common rules for unique identifiers | 15459.3 | Part 3: Common rules for unique identifiers |
| 19762 | Information technology—Automatic identification and data capture (AIDC) techniques—Harmonized vocabulary | 19762 | Information technology—Automatic identification and data capture (AIDC) techniques—Harmonized vocabulary |

Only international references that have been adopted as Australian or Australian/New Zealand Standards have been listed.

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

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# INTRODUCTION

Unique identification can occur at many different levels in the supply chain, at the transport unit, at the item level, and elsewhere. Such distinct entities are often handled by several parties: the sender, the receiver, one or more carriers, customs authorities, etc. Each of these parties must be able to identify and trace the item so that reference can be made to associated information such as configuration, maintenance history, address, order number, contents of the item, weight, sender, batch or lot number, etc.

The information is often held on computer systems, and may be exchanged between parties involved via EDI (Electronic Data Interchange) and XML (eXtensible Markup Language) messages.

There are considerable benefits if the identity of the item is represented in bar code format, or other AIDC (Automatic Identification and Data Capture) media and attached to or made a constituent part of that which is being uniquely identified so that

— it can be read electronically, thus minimising errors;

— one identity can be used by all parties;

— each party can use the identity to look up its computer files to find the data associated with the item;

— the identifier is unique within the class and cannot appear on any other item of the class during the lifetime of the item.

The unique identifier for supply chain management defined in this part of ISO/IEC 15459 and represented in a bar code label, two-dimensional symbol, radio-frequency identification tag, or other AIDC media attached to the item meets these needs.

All AIDC technologies have the potential to encode a unique identifier. It is expected that application standards for items, using various automatic identification technologies, will be developed based upon the unique identifier as a prime key. These application standards may be made available from the Issuing Agency.

NOTES

AUSTRALIAN STANDARD

# Information technology — Unique identifiers —

# Part 4:
# Unique identifiers for supply chain management

## 1 Scope

This part of ISO/IEC 15459 specifies a unique, non-significant, string of characters for the unique identifier for supply chain management. The character string is intended to be represented in a bar code label or other AIDC media attached to the item to meet supply chain management needs. To address management needs different classes of items are recognized in the various parts of ISO/IEC 15459, which allows different requirements to be met by the unique identifiers associated with each class. The rules are defined for the unique identifiers for supply chain management to identify the unique occurrence of an item, understood to mean the layers zero and one as will be defined in two future International Standards (ISO 17367 and ISO 17366, respectively).

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 646, *Information technology — ISO 7-bit coded character set for information interchange*

ISO/IEC 15418, *Information technology — EAN/UCC Application Identifiers and Fact Data Identifiers and Maintenance* 1)

ISO/IEC 15459-2, *Information technology — Unique identifiers — Part 2: Registration procedures*

ISO/IEC 15459-3, *Information technology — Unique identifiers — Part 3: Common rules for unique identifiers*

ISO/IEC 9834-1, *Information technology — Open Systems Interconnection — Procedures for the operation of OSI Registration Authorities: General procedures and top arcs of the ASN.1 Object Identifier tree*

ISO/IEC 19762 (all parts), *Information technology — Automatic identification and data capture (AIDC) techniques — Harmonized vocabulary*

*GS1 General Specifications,* GS1

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 19762 (all parts) and ISO/IEC 15459-2 apply.

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1) GS1 was formed in 2005 from the joining together of EAN International and the Uniform Code Council (UCC). Since 2005, “EAN/UCC Application Identifiers” have been re-branded “GS1 Application Identifiers”.