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**Information technology — Automatic
identification and data capture
techniques — Unique identification —**

**Part 3:
Common rules**

*Technologies de l'information — Identification automatique et
techniques de capture de données — Identification unique —*

Partie 3: Règles communes

Reference number
ISO/IEC 15459-3:2014(E)



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Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Abbreviated terms	2
5 Distinguishing between identities	2
6 Identities	3
6.1 General	3
6.2 Common rule for the length of an identity	3
6.3 Common rule for the character set of an identity	4
6.4 Compliance with ISO/IEC 15459	4
Annex A (informative) Invariant Character Set of ISO/IEC 646	5
Annex B (informative) Unique identities overview	6
Annex C (informative) Identity constructs	7
Annex D (informative) Identities on different levels	10
Bibliography	12

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

Technical Corrigendum 1 was prepared by ISO/IEC JTC 1, *Information technology*, Subcommittee SC 31, *Automatic identification and data capture techniques*.

This second edition cancels and replaces the first edition (ISO/IEC 15459-3:2014), which has been technically revised.

This corrected version of ISO/IEC 15459-3:2014 incorporates the following corrections plus other editorial modifications. Clause [6.2](#) (Clause [6.3](#) in this edition) has been modified as follows:

6.3 Common rule for the character set of an identity

“The common rule for an identity is that it shall use alphabetic, numeric and special characters from the invariant character set ISO/IEC 646 (see Annex A).

Any data processing system shall be capable of processing identities using the full repertoire of characters permitted by ISO/IEC 646.”

A list of all parts in the ISO/IEC 15459 series can be found on the ISO website.

Introduction

Unique identification can occur at many different levels, at item level, on the transport unit, on the returnable transport item, at grouping levels, and elsewhere. Such entities are often handled by several parties, both public and private, throughout their lifecycle. Each of these parties must be able to identify and trace such distinct entities so that reference can be made to associated information such as quality inspection data, the chemical substance contained, the batch or lot number of parts, components or raw materials, etc.

The associated information is typically held in some kind of database. The information can be accessed using EDI exchange or another appropriate access protocol, e.g. a directory access protocol.

There are considerable benefits if the identity of the entity is represented as a bar code 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 minimizing 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 entity.

All AIDC technologies have the potential to encode an identity. It is expected that application standards, using various automatic identification technologies, will be developed based upon the identity as a prime key. These application standards, which can include additional rules for which level of identification should be used, are often made available from the publisher.

The common rules for how to construct an identity to achieve unique identification of an entity are defined in this part of ISO/IEC 15459.

Information technology — Automatic identification and data capture techniques — Unique identification —

Part 3: Common rules

1 Scope

This part of ISO/IEC 15459 specifies the common rules applicable for unique identification that are required to ensure full compatibility across different identities.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 15459-2, *Information technology — Automatic identification and data capture techniques — Unique identification — Part 2: Registration procedures*

ISO/IEC 19762-1, *Information technology — Automatic identification and data capture (AIDC) techniques — Harmonized vocabulary — Part 1: General terms relating to AIDC*