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**Information technology — Unique  
identifiers —**

**Part 2:  
Registration procedures**

*Technologies de l'information — Identificateurs uniques —  
Partie 2: Procédures d'enregistrement*

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## 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 15459-2 was prepared by Joint Technical Committee 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 15459-2:1999), which has been technically revised. It also incorporates Technical Corrigendum ISO/IEC 15459-2:1999/Cor.1:2004. Because the scope of ISO/IEC 15459 has been expanded beyond transport units, the term “license plate” in the first edition of ISO/IEC 15459 has been replaced by “unique identifier” in the second edition.

ISO/IEC 15459 consists of the following parts, under the general title *Information technology — Unique identifiers*:

- *Part 1: Unique identifiers for transport units*
- *Part 2: Registration procedures*
- *Part 3: Common rules for unique identifiers*
- *Part 4: Unique identifiers for supply chain management*

## 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 address, order number, contents of the item, weight, sender, batch or lot number, etc. There are considerable benefits if the identity of the item is common between all the relevant parties.

The procedures and obligations to construct a unique identifier for item management are defined in this part of ISO/IEC 15459.



# Information technology — Unique identifiers —

## Part 2: Registration procedures

### 1 Scope

This part of ISO/IEC 15459 specifies the procedural requirements to maintain a non-significant, unique identifier for item management applications, and outlines the obligations of the Registration Authority and Issuing Agencies.

This part of ISO/IEC 15459 excludes those items where ISO has designated Maintenance Agencies or Registration Authorities to provide identification schemes. It does not apply to

- freight containers, because their unique coding is specified in ISO 6346, *Freight containers — Coding, identification and marking*;
- vehicles, because their unique identification is specified in ISO 3779, *Road vehicles — Vehicle identification number (VIN) — Content and structure*;
- car radios, because their unique identification is specified in ISO 10486, *Passenger cars — Car radio identification number (CRIN)*.

The exclusion also applies to ISO 2108, *Information and documentation — International standard book number (ISBN)* and ISO 3297, *Information and documentation — International standard serial number (ISSN)*.

**NOTE** The scope of each of ISO 2108 and ISO 3297 identifies the title rather than the individual copy of a book or periodical. As such, the level of identification achieved is at a level higher than the unique identity required to be compliant with this part of ISO/IEC 15459.

### 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 3166-1, *Codes for the representation of names of countries and their subdivisions — Part 1: Country codes*

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

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

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

### 3 Terms, definitions, and abbreviated terms

For the purposes of this document, the terms and definitions given in ISO/IEC 19762 and the following apply.

#### 3.1 Terms and definitions

##### 3.1.1

###### **class**

defined application of unique identifiers for item, transport unit, returnable transport unit, etc. recognised as classes by all parts of ISO/IEC 15459

##### 3.1.1

###### **item**

single physical entity or a defined collection of entities having a distinct existence

##### 3.1.2

###### **item management**

controlled process for the manufacturing, storage, distribution and transport of items through all stages from creation to final consumption or disposal

NOTE The item management processes can involve a change of state or configuration, a change of location, or controlled or observed change over time.

#### 3.2 Abbreviated terms

IA Issuing Agency

IAC Issuing Agency Code

CIN Company Identification Number

RA Registration Authority

### 4 Issuing Agencies

#### 4.1 Responsibilities

Issuing Agencies shall:

- a) authorise any organisation wishing to allocate unique identifiers for use in item management applications (e.g., transport unit identification or traceability of items) for classes for which the Issuing Agency has been authorised. An individual organisation or company wishing to issue unique identifiers in accordance with this part of ISO/IEC 15459 shall do so through umbrella organisations such as their trade associations, or a public or state agency;
- b) define rules which ensure that no unique identifier issuer can issue a unique identifier which is the same as a unique identifier which may be issued by another issuer within a class;
- c) define rules which ensure that every unique identifier issued with their authority shall begin with one of their IACs;

NOTE The purpose of this is to ensure that, within a class, the same unique identifier can never be issued by another issuer, no matter which agency is used to ensure unambiguity in the total marketplace.

- d) define rules so that a unique identifier is only re-issued within a class after the previously issued unique identifier has ceased to be of significant to any user. The length of such period should be dependent upon the environment in which the unique identifier will be used.



## 4.2 Application

Issuing Agencies shall apply to the Registration Authority for registration and the assignment of an IAC using the form shown in annex B. Application forms are also available on request from the Registration Authority, the national standards bodies, the ISO/IEC JTC 1 Secretariat and the secretariat of ISO/IEC JTC 1/SC 31. The Registration Authority may request additional information where further clarification is needed. A separate form should be sent in for every IAC requested.

The Registration Authority for ISO/IEC 15459 is:

NEN - Nederlands Normalisatie-instituut - Registration Authority of ISO/IEC 15459  
 Postbus 5059  
 2600 GB Delft  
 THE NETHERLANDS  
 Fax: + 31 15 26 90 242  
 E-mail: RA-ISO15459@nen.nl

Applicants shall:

- a) comply fully with the procedures for application for IACs as contained in this part of ISO/IEC 15459;
- b) comply fully with the requirements contained in ISO/IEC 15459-3;
- c) forward to the Registration Authority a completed application form (see Annex B) and transfer the requisite fee;
- d) retain the completed application form containing the IAC assigned to the applicant by the Registration Authority;
- e) within a reasonable timeframe, preferably within 12 months of the date of assignment of the IAC, start for each class for which permission has been granted to authorise any organisation who wishes to allocate unique identifiers using the IAC;
- f) maintain a database of organisations (organisational units) directly authorized by the Issuing Agency to allocate unique identifiers.

### 4.2.1 Criteria for approval

Applications for an IAC shall meet all the criteria for approval below and shall not comply with any of the criteria for rejection in 4.2.2.

The criteria for approval are:

- a) The IAC shall be for immediate use, preferably within 12 months of the date of issue of the IAC;
- b) The unique identifier being issued using the IAC shall be for use in an open interchange environment;
- c) The applicant shall be a single corporate entity operating under specific legislative regulation.

### 4.2.2 Criteria for rejection

Any applications for an IAC shall be rejected by the Registration Authority when any of the following conditions exist:

- a) The applying organisation is not an umbrella organization such as a trade organisation or a public or state agency;
- b) the unique identifier issued using the IAC assigned to the applicant would not be used in an open interchange environment;

- c) the IAC will be used solely for purposes other than to facilitate uniqueness of the unique identifier in item management applications for the defined classes;
- d) no unique identifier will be issued for immediate use, e.g., within 12 months from the date of issue of an IAC;
- e) ineligibility of applicant;
- f) the absence of proper fee;
- g) incomplete or incomprehensible information in application.

#### **4.2.3 Appeal**

When an application has been rejected the applicant may appeal to the convenor of the ISO/IEC JTC 1/SC 31 appeals committee (see Annex A) or, if the appeals committee has rejected the request, to ISO/IEC JTC 1/SC 31. Appeal against rejection of an application shall be lodged with the appropriate body within 90 days of the date of receipt of the letter of rejection.

Where an application to become an Issuing Agency has been rejected by the Registration Authority, the following information shall be provided by the applicant to the appeals committee in support of the appeal:

- a) statement of which rejection clause (see 4.2.2) is disputed and why the applicant believes that the rejected application fulfils the criteria for approval (see 4.2.1);
- b) statement of special considerations whereby a specific requirement of the rejected application can be met, but such requirement is outside the current procedures and criteria for approval outlined in this part of ISO/IEC 15459.

## **5 Registration Authority**

### **5.1 Responsibilities**

The Registration Authority shall be responsible to ISO/IEC JTC 1/SC 31 and its responsibilities shall be:

- a) to receive and acknowledge applications from organisations wishing to become an Issuing Agency in accordance with this part of ISO/IEC 15459 (see 4.2);
- b) to process applications, within 30 days of receipt of the application form;
- c) to notify the applicant in writing, within 30 days of receipt of the application form, as to the disposition of their application;
- d) to register applications meeting the criteria for approval set out in 4.2.1 as Issuing Agencies and assign an IAC within 30 days of receipt of the application form;
- e) to notify unsuccessful applicant organisations with reference to the relevant rejection clauses within 30 days of receipt of the application form;
- f) to forward to the appeals committee, within 30 days of receipt of the application, requests for more than one IAC or any applications where special circumstances exist;
- g) where an application is referred to the appeals committee to notify the applicant, in writing, that a reply may not be received within the usual timeframe, and the reason for referring the application to the appeals committee;

- h) to notify the appeals committee, in writing, within 30 days of receipt of the application, if the application has been rejected;
- i) to maintain the database of Issuing Agency identification information (see 5.4);
- j) to produce a register of IACs (see 5.4);
- k) to submit a copy of the register of IACs, each January and July, to the secretariat of ISO/IEC JTC 1/SC 31;
- l) to retain as a permanent record copies of all applications submitted to it, along with the disposition of each application.

NOTE The Registration Authority will advise successful applicants of the IAC assigned. The applicant may not demand a specific IAC.

## 5.2 Appointment

One of the members of ISO/IEC JTC 1/SC 31, or a body approved by ISO/IEC JTC 1/SC 31, shall be appointed to act as the Registration Authority.

## 5.3 Resignation

If the Registration Authority finds it necessary to resign, twelve months' notice shall be given to the ISO/IEC JTC 1/SC 31 Secretariat. The secretariat of ISO/IEC JTC 1/SC 31 shall initiate a search for a new Registration Authority. If a new Registration Authority cannot be found within twelve months, the ISO/IEC JTC 1/SC 31 secretariat shall assume the responsibilities of the Registration Authority on a temporary basis until a replacement is found.

## 5.4 The register of Issuing Agency Codes (IACs)

The Registration Authority shall maintain a database of information taken directly from the application form.

NOTE A copy of each application received shall be maintained on file by the Registration Authority.

Based on the information contained in this database, the Registration Authority shall publish a register of IACs. The register shall be published in alphabetical order (in English) of Issuing Agency names, and of IACs. The register of IACs is a publicly available document. It is available free of charge to the national members of ISO/IEC JTC 1/SC 31. It is available at a reasonable charge to all other parties.

The register of IACs shall contain the following information:

- a) name of Issuing Agency;
- b) address as indicated on the application form;
- c) IAC assigned to the Issuing Agency by the Registration Authority;
- d) identification of which classes are assigned by the Issuing Agency;
- e) identification of the numbering structure employed by the Issuing Agency for each class.

## 5.5 IAC allocation

IACs shall be allocated from the upper case character A to Z (A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z) and the numeric digits (0, 1, 2, 3, 4, 5, 6, 7, 8, 9).

- a) IACs A — J shall be reserved for organisations which are allocated a single character code. These organisations shall, in addition to the criteria for approval as set out in 4.2.1, meet the following criteria:
  - 1) be multi-national and be represented in all of the national members countries of JTC 1/SC 31;
  - 2) have official external liaison status with ISO/IEC JTC 1/SC 31;
  - 3) be a not for profit organisation;
  - 4) have a formal, long term relationship with at least five thousand issuers of unique identifiers.
- b) IACs with first character K shall be reserved for national public administration, and shall be completed with the relevant alpha-2 country code as established by ISO 3166-1. Public administrations using the IAC K shall apply to the Registration Authority. Such application shall be accompanied by an endorsement from the National ISO/IEC Member Body if such body exists in the country;
- c) IACs with first character L-U shall be reserved for organisations which are allocated a two character IAC. These organisations must, in addition to the criteria for approval as set out in 4.2.1, meet the following criteria:
  - 1) be represented in more than three of the national members countries of ISO/IEC JTC 1/SC 31;
  - 2) have a formal, long term relationship with at least one thousand issuers of unique identifiers.
- d) IACs with first characters V-Z shall be reserved for organisations which are allocated a three character IAC. These organisations shall, in addition to the criteria for approval as set out in 5.2.1, meet the following criteria:
  - 1) be represented in more than one of the national members countries of ISO/IEC JTC 1/SC 31;
  - 2) have a formal, long term relationship with at least one hundred issuers of unique identifiers.
- e) GS1 is allocated a block of IACs ranging from 0 to 9, and no other organisation shall be allocated a block.

## **Annex A**

### **(informative)**

## **Appeals committee**

### **A.1 Constitution**

In order to effectively manage the relationship between ISO/IEC JTC 1/SC 31 and the Registration Authority, ISO/IEC JTC 1/SC 31 had established an Appeals Committee.

The Appeals Committee shall be made up of:

**A.1.1** representative of the Registration Authority who shall be a non-voting member of the Appeals Committee and shall attend all meetings;

**A.1.2** the Convenor of the Appeals Committee who shall be a non-voting member of the Appeals Committee, appointed by the P-members of ISO/IEC JTC 1/SC 31;

**A.1.3** the Secretary of the Appeals Committee who shall be a non-voting member of the Appeals Committee, appointed by the P-members of ISO/IEC JTC 1/SC 31.

In addition each P-member of ISO/IEC JTC 1/SC 31 is entitled to nominate one delegate and one alternate to the Appeals Committee. The alternate may attend all meetings, but is entitled to vote only in the absence of the principal delegate.

### **A.2 Responsibilities**

The responsibilities of the Appeals Committee shall be:

**A.2.1** to enforce the criteria for approval and rejection of an Issuing Agency by the Registration Authority (see 4.2.1 and 4.2.2);

**A.2.2** to process within 60 days of receipt any queries arising from the Registration Authority.

### **A.3 Voting procedures**

Any appeal will be circulated to the Appeals Committee as a postal ballot (if the convenor believes there is a case for a ballot). If the postal ballot fails, at the discretion of the convenor, a meeting of the Appeals Committee will be called. Quorum of the meeting will be those present, a majority of votes cast is required to overturn a decision of the Registration Authority.

If the Appeals Committee cannot resolve the issue after a ballot at a meeting, the matter shall be referred to ISO/IEC JTC 1/SC 31.

## Annex B (informative)

### Application form for Issuing Agency Code (IAC)

This application is submitted in accordance with ISO/IEC 15459.

#### A. TO BE COMPLETED BY APPLICANT (Issuing Agency)

Name of organisation (maximum 40 characters). Abbreviate where necessary.		
Address (maximum 60 characters), starting street, city. Abbreviate where necessary.		
Principal contact in organisation		Position
E-mail	Telephone number	Fax number
Legal status of organisation	Anticipated date of first use of IAC	
	Expected number of issuers of unique identifiers	
	Expected number of unique identifiers issued annually	
	List the countries in which you are represented (attach separate sheet)	
	Confirmation of not for profit status (if requesting a single character IAC)	
Address for correspondence/billing		
(On separate sheet(s)) For each class for which usage is requested, provide details of provisions made by the application to safeguard conformance with this part of ISO/IEC 15459 (required to ensure compliance with the IA responsibilities (subclause 4.1)) For example: functional description of application, structure, rules to prevent re-issuing of unique identifiers by another issuer and re-issue period.		
(On separate sheet) Details of fees and conditions imposed upon users of the IAC (required to ensure compliance with the IA responsibilities (subclause 4.1))		
VAT NUMBER OF THE APPLICANT <i>if applicable</i>		
We hereby apply for the assignment of an IAC, and state that the use of the IAC will be in accordance with this part of ISO/IEC 15459		
Signature/date		

Please return application to:

The Registration Authority

NEN - Nederlands Normalisatie-instituut - Registration Authority for ISO/IEC 15459  
Postbus 5059  
2600 GB Delft  
THE NETHERLANDS  
Fax: + 31 15 26 90 242  
E-mail: RA-IS015459@nen.nl

**B. TO BE COMPLETED BY THE REGISTRATION AUTHORITY**

Form received on	IAC	IAC issued on
Classes permitted		
Signature/date		

## Bibliography

- [1] ISO/IEC Directives, Part 2: *Rules for the structure and drafting of International Standards*, 2004
- [2] ISO 2108, *Information and documentation — International standard book number (ISBN)*
- [3] ISO 3297, *Information and documentation — International standard serial number (ISSN)*
- [4] ISO 3779, *Road vehicles — Vehicle identification number (VIN) — Content and structure*
- [5] ISO 6346, *Freight containers — Coding, identification and marking*
- [6] 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*
- [7] ISO 10486, *Passenger cars — Car radio identification number (CRIN)*
- [8] ISO/IEC 15418, *Information technology — EAN/UCC Application Identifiers and Fact Data Identifiers and Maintenance* <sup>1)</sup>
- [9] ISO 15394, *Packaging — Bar code and two-dimensional symbols for shipping, transport and receiving labels*

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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”.





