Automatic vehicle and equipment identification Electronic Registration Identification (ERI) for vehicles Part 3: Vehicle data

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## English Version

## Automatic vehicle and equipment identification - Electronic Registration Identification (ERI) for vehicles - Part 3: Vehicle data (ISO 24534-3:2010)

> Identification automatique des véhicules et des équipements - Identification d'enregistrement électronique (ERI) pour les véhicules - Partie 3: Données du véhicule (ISO 24534-3:2010)

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## Foreword

This document (EN ISO 24534-3:2010) has been prepared by Technical Committee CEN/TC 278 "Road transport and traffic telematics", the secretariat of which is held by NEN, in collaboration with Technical Committee ISO/TC 204 "Intelligent transport systems".

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2011, and conflicting national standards shall be withdrawn at the latest by January 2011.

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

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According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## Endorsement notice

The text of ISO $24534-3: 2010$ has been approved by CEN as a EN ISO 24534-3:2010 without any modification
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## Introduction

A quickly emerging need has been identified with administrations to improve the unique identification of vehicles for a variety of services. Situations are already occurring where manufacturers intend to fit lifetime tags to vehicles. Various governments are considering the needs and benefits of electronic registration identification (ERI) as a legal proof of vehicle identity with potential mandatory uses. There is commercial and economic justification in respect of both tags and infrastructure that a standard enables an interoperable solution.

ERI is a means of uniquely identifying road vehicles. The application of ERI will offer significant benefits over existing techniques for vehicle identification. It will be a suitable tool for the future management and administration of traffic and transport, including applications in free-flow, multi-lane traffic conditions with the capability to support mobile transactions. ERI addresses the need of authorities and other road users for a trusted electronic identification, including roaming vehicles.

This part of ISO 24534 specifies the vehicle-related data that can be exchanged between an onboard electronic registration tag (ERT) and an ERI reader/writer inside or outside the vehicle. The vehicle-related data consists of the vehicle identifier and might also include additional vehicle data as typically included in a vehicle registration certificate.

This part of ISO 24534 does not provide any accurate definitions for additional vehicle data items; this is left to the local registration authorities and/or local legislation. This part of ISO 24534 only provides the means for an unambiguous exchange of vehicle parameters registered by local registration authorities.

This part of ISO 24534 makes use of the basic automatic vehicle identification (AVI) definitions in ISO 14816.

## Automatic vehicle and equipment identification - Electronic registration identification (ERI) for vehicles -

## Part 3:

## Vehicle data

## 1 Scope

This part of ISO 24534 provides requirements for electronic registration identification (ERI) that are based on an identifier assigned to a vehicle (e.g. for recognition by national authorities) suitable to be used for:

- electronic identification of local and foreign vehicles by national authorities;
- vehicle manufacturing, in-life maintenance and end-of-life identification (vehicle life cycle management);
- adaptation of vehicle data (e.g. for international resales);
- safety-related purposes;
- crime reduction;
- commercial services.

It adheres to privacy and data protection regulations.
This part of ISO 24534 defines the vehicle identification data. This data is called the ERI data and includes

- the vehicle identifier, and
- possible additional vehicle-related information (as typically included in a vehicle registration certificate).

All additional vehicle data elements are defined as optional. It is left to local legislation and/or the discretion of a registration authority to use or not to use a particular data element. If used, the value is assumed to be the one registered by the registration authority in accordance with local legislation. This part of ISO 24534 only provides the syntax for all these data elements.

NOTE The secure application layer interfaces for the exchange of ERI data with an ERI reader or writer are specified in ISO 24534-4 and ISO 24534-5.

## 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 612:1978, Road vehicles - Dimensions of motor vehicles and towed vehicles - Terms and definitions
ISO 1176:1990, Road vehicles - Masses - Vocabulary and codes
ISO 3779, Road vehicles - Vehicle identification number (VIN) — Content and structure
ISO 3780, Road vehicles - World manufacturer identifier (WMI) code
ISO 3833, Road vehicles - Types - Terms and definitions
ISO/IEC 8824 (all parts), Information technology - Abstract Syntax Notation One (ASN.1)
ISO/IEC 8825-2, Information technology - ASN. 1 encoding rules: Specification of Packed Encoding Rules (PER)

## 3 Terms and definitions

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

## 3.1 <br> additional vehicle data <br> ERI data in addition to the vehicle identifier

## 3.2 <br> distinguishing identifier <br> information which unambiguously distinguishes an entity

[ISO/IEC 9798-1:1997, definition 3.3.9]

## 3.3 electronic registration identification <br> ERI

action or act of identifying a vehicle with electronic means for purposes as mentioned in the scope of this part of ISO 24534

## 3.4

## ERI data

vehicle identifying data which can be obtained from an ERT
NOTE ERI data consists of the vehicle identifier and possible additional vehicle data.

## 3.5 electronic registration tag <br> ERT

onboard ERI device that contains the ERI data including relevant security provisions and one or more interfaces to access that data

NOTE 1 In case of high security, the ERT is a SAM (secure application module).
NOTE 2 The ERT may be a separate device or may be integrated into an onboard device that also provides other capabilities (e.g. DSRC communications).

