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AMENDMENT 1
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Intelligent transport systems — Automatic vehicle and equipment identification — Electronic Registration Identification (ERI) for vehicles —

Part 5: Secure communications using symmetrical techniques

AMENDMENT 1

Systèmes de transport intelligents — Identification automatique des véhicules et des équipements — Identification d'enregistrement électronique (ERI) pour les véhicules —

Partie 5: Communications sécurisées utilisant des techniques symétriques

AMENDEMENT 1

Reference number
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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 ISO documents 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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This document was prepared by Technical Committee ISO/TC 204, *Intelligent transport systems*.

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Intelligent transport systems — Automatic vehicle and equipment identification — Electronic Registration Identification (ERI) for vehicles —

Part 5:
Secure communications using symmetrical techniques

AMENDMENT 1

Page 19, 6.2.3.2

Replace definition of SecretKeyEriTransactions by

```
SecretKeyEriTransactions TRANSACTION ::= { mutualAuthentication1 |
mutualAuthentication2 | getSecretKeyEriData | setSecretKeyEriData |
commissionSecretKeyErt | decommissionSecretKeyErt | updateAccessControlList |
getCipertextAccessControlListEntry | endOfSession, ...}
```

Page 27, 6.3.1

In third paragraph, replace

(CANONICAL-PER) ALIGNED

by

(CANONICAL-PER) UNALIGNED

Page 27, 6.4.1

In first paragraph, replace

(CANONICAL-PER) ALIGNED

by

(CANONICAL-PER) UNALIGNED

Page 31, Annex A

Replace the annex by the following one.

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Annex A
(normative)

ASN.1 module

A.1 Overview

The following ASN.1 modules are specified in this normative annex:

— The normative module **EriSecretKeyTransactionsModule** {iso(1) standard(0) iso24535 (24534) secretKeyTransactions (5) version1 (1)} in

— The informative module **AviEriDSRCData** {iso(1) standard(0) iso24534 (24534) transactions (2) example1(1) version1 (1)}

In case the ASN.1 specifications given in this Annex are not compliant with illustrations or specifications provided elsewhere in this International standard, the specifications given in this Annex shall prevail.

The ASN.1 modules contained in this Annex will be published on http://standards.iso.org/iso/24534/-5.

A.2 Module EriSecretKeyTransactionsModule

```
EriSecretKeyTransactionsModule {iso(1) standard(0) iso24535 (24534)
secretKeyTransactions (5) version1 (1)}
DEFINITIONS AUTOMATIC TAGS ::= BEGIN

SecretKeyEriPdu ::= CHOICE {
   requestPdu                SecretKeyEriReqPdu,
   reponsePdu                SecretKeyEriRspPdu
   }

SecretKeyEriReqPdu ::= SEQUENCE {
   transactCode  TRANSACTION.&transactionCode ({SecretKeyEriTransactions}),
   argument      TRANSACTION.&ArgumentType {SecretKeyEriTransactions} {@.transactCode})
OPTIONAL
   }

SecretKeyEriRspPdu ::= SEQUENCE {
   transactCode  TRANSACTION.&transactionCode ({SecretKeyEriTransactions}),
   result        TRANSACTION.&ResultType ({SecretKeyEriTransactions} {@.transactCode})
   }

-- TRANSACTIONS

TRANSACTION ::= CLASS {
   &ArgumentType           ,
   &ResultType             ,
   &transactionCode        INTEGER UNIQUE
   }
WITH SYNTAX {
   ARGUMENT                &ArgumentType
   RESULT                  &ResultType
   CODE                    &transactionCode
   }

SecretKeyEriTransactions TRANSACTION ::= { mutualAuthentication1 |
mutualAuthentication2 | getSecretKeyEriData | setSecretKeyEriData |
commissionSecretKeyErt | decommissionSecretKeyErt | updateAccessControlList |
getCipertextAccessControlListEntry | endOfSession, ...}

-- Mutual authentication phase transactions
```

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```
mutualAuthentication1 TRANSACTION ::= {
   ARGUMENT                  OCTET STRING
   RESULT                    OCTET STRING
   CODE                      1
   }

mutualAuthentication2 TRANSACTION ::= {
   ARGUMENT                  OCTET STRING
   RESULT                    OCTET STRING
   CODE                      2
   }

-- Data exchange phase transactions

getSecretKeyEriData TRANSACTION ::= {
   ARGUMENT                  OCTET STRING
   RESULT                    OCTET STRING
   CODE                      3
   }

setSecretKeyEriData TRANSACTION ::= {
   ARGUMENT                  OCTET STRING
   RESULT                    OCTET STRING
   CODE                      4
   }

commissionSecretKeyErt TRANSACTION ::= {
   ARGUMENT                  OCTET STRING
   RESULT                    OCTET STRING
   CODE                      5
   }

decommissionSecretKeyErt TRANSACTION ::= {
   ARGUMENT                  NULL
   RESULT                    NULL
   CODE                      6
   }

updateAccessControlList TRANSACTION::={
   ARGUMENT                  OCTET STRING
   RESULT                    OCTET STRING
   CODE                      7
   }

getCipertextAccessControlListEntry TRANSACTION::={
   ARGUMENT                  OCTET STRING
   RESULT                    OCTET STRING
   CODE                      8
   }
-- Session release phase transactions

endOfSession TRANSACTION ::= {
   ARGUMENT                  OCTET STRING
   RESULT                    NULL
   CODE                      9
   }

END
```

A.3 Module AviEriDSRCData

```
-- Informative example

AviEriDSRCData {iso(1) standard(0) iso24534 (24534) transactions (2) example1(1)
version1 (1)}
DEFINITIONS AUTOMATIC TAGS::= BEGIN

IMPORTS

-- From ISO 15628
```

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```
Action-Request, Action-Response, ActionType, ApplicationList, AttributeIdList,
AttributeList, Attributes, BeaconID, BroadcastPool, BST, Directory, Dsrc-EID,
DSRCApplicationEntityID, Event-Report-Request, Event-Report-Response, EventType, File,
FileType, Get-Request, Get-Response, Initialisation-Request, Initialisation-Response,
ObeConfiguration, Profile, Record, ReturnStatus, Set-Request, Set-Response, Time, T-APDUs,
VST FROM DSRCData {iso(1) standard(0) dsrc(15628) dsrcData(0) version1 (1)}

-- From ISO 24534-4
SecretKeyEriReqPdu, SecretKeyEriRspPdu FROM EriSecretKeyTransactionsModule

-- From ISO 24534-4
EriRequestPdu, EriResponsePdu FROM ElectronicRegistrationIdentificationTransactionsModule
;


ApplicationContextMark::=CHOICE{ -- Container
   integer                     [0] INTEGER,
   bitstring                   [1] BIT STRING,
   octetstring                 [2] OCTET STRING (SIZE (0..127, ...)),
   universalString             [3] UniversalString,
   beaconId                    [4] BeaconID,
   t-apdu                      [5] T-APDUs,
   dsrcApplicationEntityId     [6] DSRCApplicationEntityID,
   dsrc-Ase-Id                 [7] Dsrc-EID,
   attrIdList                  [8] AttributeIdList,
   attrList                    [9] AttributeList,
   broadcastPool               [10] BroadcastPool,
   directory                   [11] Directory,
   file                        [12] File,
   fileType                    [13] FileType,
   record                      [14] Record,
   time                        [15] Time,
   vector [16] SEQUENCE (SIZE(0..255)) OF INTEGER (0..127,...),
   secrtetKeyEriReqPdu [19] EriSecretKeyTransactionsModule.SecretKeyEriReqPdu,
                            -- only to be used in an Action-Request
   secrtetKeyEriRspPdu [20] EriSecretKeyTransactionsModule.SecretKeyEriRspPdu,
                            -- only to be used in an Action-Response
   eriRequestPdu               [70]
ElectronicRegistrationIdentificationTransactionsModule.EriRequestPdu,
                         -- only to be used in an Action-Request
   eriResponsePdu              [71]
ElectronicRegistrationIdentificationTransactionsModule.EriResponsePdu
                         -- only to be used in an Action-Response
   }

END
```

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