NSAI
Standards

Standard Recommendation
S.R. CEN/TS 15480-2:2012

Identification card systems - European Citizen Card - Part 2: Logical data structures and security services

S.R. CEN/TS 15480-2:2012

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces:

This document is based on:	*Published:*
CEN/TS 15480-2:2012	2 July, 2012
EN 61228:1994	29 September, 1994

This document was published
under the authority of the NSAI
and comes into effect on:
2 July, 2012

ICS number:
35.240.15

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie

W **NSAI.ie**

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

TECHNICAL SPECIFICATION

SPÉCIFICATION TECHNIQUE

TECHNISCHE SPEZIFIKATION

CEN/TS 15480-2

June 2012

ICS 35.240.15

English Version

Identification card systems - European Citizen Card - Part 2: Logical data structures and security services

Systèmes de cartes d'identification - Carte Européenne du Citoyen - Partie 2: structures de données logiques et services de sécurité

Identifikationskartensysteme - Europäische Bürgerkarte - Teil 2: Logische Datenstrukturen und Sicherheitsfunktionen

This Technical Specification (CEN/TS) was approved by CEN on 9 January 2012 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

CEN members are the national standards bodies of 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, Turkey and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword

This document (CEN/TS 15480-2:2012) has been prepared by Technical Committee CEN/TC 224 “Personal identification, electronic signature and cards and their related systems and operations”, the secretariat of which is held by AFNOR.

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.

This document supersedes CEN/TS 15480-2:2007.

CEN/TS 15480 *Identification card systems — European Citizen Card* consists of the following four parts:

Part 1, Physical, electrical and transport protocol characteristics

Part 2, Logical data structures and card services

Part 3, European Citizen Card Interoperability using an application interface

Part 4, Recommendations for European Citizen Card issuance, operation and use

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to announce this Technical Specification: 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, Turkey and the United Kingdom.

1 Scope

This Technical Specification specifies the logical characteristics and security features at the card/system interface for the European Citizen Card.

The European Citizen Card is a smart card with Identification, Authentication and electronic Signature (IAS) services. Therefore:

- the supported services are specified;
- the supported data structures as well as the access to these structures are specified;
- the command set is defined.

This Technical Specification aims to ensure the interoperability at card/system interface in the usage phase.

In order to reach the interoperability objective, IAS services are compliant with EN 14890 Part 1 and Part 2. As the EN documents offer options, this specification fully defines a complete profile.

This Technical Specification also considers ICAO Doc 9303.

This Technical Specification does not mandate the use of a particular technology, and is intended to allow both native and Java card technologies.

This specification encompasses mandatory and optional features. Optional features make up a toolbox of modular options from which issuers can pick up the necessary protocols to fulfil the requirements for use. Mandatory features shall be implemented for a smart card to be compliant with this Technical Specification. Mandatory features required for compliancy to ECC specification are given in Annex C, the optional features are given in Annex D. Two IAS-enabled smart cards issued by two different issuers, and compliant with this Technical Specification but implementing different application profiles out of this Technical Specification, can interoperate with a terminal provided that such a terminal supports both application profiles. Therefore, interoperability requires a specific agreement between issuers/governments in order to determine which cross-border services are to be shared, and consequently, which protocols are to be supported by the terminals in each country.

All the APDU commands described in this Technical Specification are in accordance with ISO/IEC 7816 Part 4 or Part 8. They are fully described here in order to provide the settings adopted by this specification and to prevent any ambiguity in case of several possible interpretations of the standards.

For physical, electrical and transport protocol characteristics, refer to CEN/TS 15480-1.

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.

EN 14890-1:2008:2008, *Application Interface for smart cards used as Secure Signature Creation Devices — Part 1: Basic requirements*

ISO/IEC 7816-3, *Information technology — Identification cards — Integrated circuit(s) cards with contacts — Part 3: Electronic signals and transmission protocols*

ISO/IEC 7816-4:2005, *Identification cards — Integrated circuit(s) cards — Part 4: Organisation, security and commands for interchange*