

English Version

**Identification card systems - European Citizen Card - Part 1:
Physical, electrical and transport protocol characteristics**

Systèmes des cartes d'identification - Carte Européenne du
Citoyen - Partie 1: Caractéristiques physiques, électriques
et protocoles de transmission

Identifikationskartensysteme - Europäische Bürgerkarte -
Teil 1: Physikalische, elektrische und
transportprotokollbezogene Merkmale

This Technical Specification (CEN/TS) was approved by CEN on 17 July 2006 for provisional application.

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Foreword

This document (CEN/TS 15480-1:2007) 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.

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

Part 1: *Physical, electrical and transport protocol characteristics*

Part 2: *Logical data structures and card services*

Part 3: *ECC interoperability using an application interface*

Part 4: *Recommendations for ECC issuance, operation and use*

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this CEN Technical Specification: Austria, Belgium, Bulgaria, 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 United Kingdom.

Introduction

This Technical Specification describes the specifications for the European Citizen Card (ECC) including electronic identity cards, with smart card format, defining identity justification with emphasis on remote civil service procedures.

This proposal is intended to comply with the scope of the NWI ECC as defined by the terms of reference document approved by the CEN/TC 224 Resolution 667/2004.

This Technical Specification is one of a set of documents describing card specifications. It defines identity justification functions, with emphasis on remote public service procedures requiring the generation and/or verification by the ECC card of electronic signatures and electronic certificates.

1 Scope

This Technical Specification specifies Electronic Citizen Card (ECC) requirements. The ECC, is a smart card issued under the authority of a government institution, either national or local and carries credentials in order to provide all or part of the following services:

- 1) verify the identity;
- 2) act as an Inter-European Union travel document;
- 3) facilitate logical access to e-government or local administration services.

A public administration authority may entitle a private organisation to provide all or part of the ECC services.

This Technical Specification is intended to offer the card issuer with a great deal of flexibility for the ECC specification, in connection with the services that the ECC provides, the authentication mechanisms supported and the national specific public policy with an special concern to protect the citizen privacy according to the applicable European legislation.

The requirements described in this Technical Specification are used to:

- a) define a plastic body card with associated physical and logical securities;
- b) specify the electrical interface and data transport protocols for the ECC;
- c) support the basic set of Identification and, authentication elements visible at the card surface.

This Technical Specification also contains a possible methodology for ECC durability testing in informative Annex B.

This Technical Specification refers to the European legislation and regulations in effect.

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/IEC 7810, *Identification cards — Physical characteristics*

ISO/IEC 7816-1, *Identification cards — Integrated circuit(s) card(s) with contacts — Part 1: Physical characteristics*

ISO/IEC 7816-2, *Identification cards — Integrated circuit cards — Part 2: Cards with contacts — Dimensions and location of the contacts*

ISO/IEC 7816-3, *Identification cards -- Integrated circuit cards -- Part 3: Cards with contacts -- Electrical interface and transmission protocols*

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

ISO/IEC 7816-5, *Identification cards — Integrated circuit cards — Part 5: Registration of application identifiers*

ISO/IEC 7816-6, *Identification cards — Integrated circuit cards — Part 6: Interindustry data elements for interchange*

ISO/IEC 7816-7, *Identification cards — Integrated circuit(s) cards with contacts — Part 7: Interindustry commands for Structured Card Query Language (SCQL)*

ISO/IEC 7816-8, *Identification cards — Integrated circuit cards — Part 8: Commands for security operations*

ISO/IEC 7816-9, *Identification cards — Integrated circuit cards — Part 9: Commands for card management*

ISO/IEC 7816-10, *Identification cards — Integrated circuit(s) cards with contacts — Part 10: Electronic signals and answer to reset for synchronous cards*

ISO/IEC 7816-11, *Identification cards — Integrated circuit cards — Part 11: Personal verification through biometric methods*

ISO/IEC 7816-12, *Identification cards — Integrated circuit cards — Part 12: Cards with contact — USB electrical interface and operating procedures*

ISO/IEC 7816-15, *Identification cards — Integrated circuit cards — Part 15: Cryptographic information application*

ISO/IEC 10373-3, *Identification cards — Test methods — Part 3: Integrated circuit(s) cards with contacts and related interface devices*

ISO/IEC 10373-6, *Identification cards — Test methods — Part 6: Proximity cards*

ISO/IEC 14443-1, *Identification cards — Contactless integrated circuit(s) cards — Proximity cards — Part 1: Physical characteristics*

ISO/IEC 14443-2, *Identification cards — Contactless integrated circuit(s) cards — Proximity cards — Part 2: Radio frequency power and signal interface*

ISO/IEC 14443-3, *Identification cards — Contactless integrated circuit(s) cards — Proximity cards — Part 3: Initialization and anticollision*

ISO/IEC 14443-4, *Identification cards — Contactless integrated circuit(s) cards — Proximity cards — Part 4: Transmission protocol*

ICAO 9303, Part 1, *Machine Readable Passports*

ICAO 9303, Part 2, *Machine Readable Visas*

ICAO 9303, Part 3, *Machine Readable Official Documents of Identity*

3 Terms and definitions

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