

Irish Standard Recommendation S.R. CEN/TS 419261:2015

Security requirements for trustworthy systems managing certificates and timestamps

© CEN 2015 No copying without NSAI permission except as permitted by copyright law.

S.R. CEN/TS 419261:2015

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/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on: Published:

CEN/TS 419261:2015 2015-03-25

This document was published ICS number:

under the authority of the NSAI

and comes into effect on: 03.120.20 35.040

2015-04-11 35.240.30

NOTE: If blank see CEN/CENELEC cover page

NSAI T +353 1 807 3800 Sales:

 1 Swift Square,
 F +353 1 807 3838
 T +353 1 857 6730

 Northwood, Santry
 E standards@nsai.ie
 F +353 1 857 6729

 Dublin 9
 W NSAI.ie
 W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

This is a free page sample. Access the full version online. S.R. CEN/TS 419261:2015

TECHNICAL SPECIFICATION

CEN/TS 419261

SPÉCIFICATION TECHNIQUE

TECHNISCHE SPEZIFIKATION

March 2015

ICS 03.120.20; 35.040; 35.240.30

English Version

Security requirements for trustworthy systems managing certificates and time-stamps

Exigences de sécurité pour systèmes de confiance gérant des certificats et des horodatages

Sicherheitsanforderungen für vertrauenswürdige Systeme zur Verwaltung von Zertifikaten für elektronische Signaturen und Zeitstempel

This Technical Specification (CEN/TS) was approved by CEN on 18 November 2014 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, Former Yugoslav Republic of Macedonia, 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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

CEN/TS 419261:2015 (E)

Cont	Contents Pag				
Forew	ord	4			
Introdu	uction	7			
1	Scope	8			
1.1	General				
1.2	European Regulation-specific	8			
2	Normative references	9			
3	Terms, definitions, symbols and abbreviations	9			
3.1	Terms and definitions				
3.2	Symbols and abbreviations	14			
4	Description of a Trust Service Provider System				
4.1	General				
4.2	TSP Core Services for certificate management				
4.3	TSP Supplementary Services for certificate management				
4.4	TSP Core Services for electronic time-stamp management				
4.5	Overall Architecture	17			
5	Security Requirements	18			
5.1	Relationship between Security Requirements and Recommendations				
5.2	General Security Requirements	19			
5.2.1	Management	19			
5.2.2	Systems and Operations	20			
5.2.3	Identification and Authentication	22			
5.2.4	System Access Control	23			
5.2.5	Key Management				
5.2.6	Accounting and Auditing				
5.2.7	Archiving				
5.2.8	Backup and Recovery				
5.2.9	Network Security Requirements for the Operational Environment				
5.2.10	Physical Security Requirements for the Operational Environment				
5.3	Core Services Security Requirements for TWS managing certificates				
5.3.1	General				
5.3.2	Registration Service				
5.3.3	Certificate Generation Service				
5.3.4	Dissemination Service Certificate Revocation Management Service				
5.3.5 5.3.6	Certificate Revocation Management Service				
ნ.ა. ა 5.4	Supplementary Services Security Requirements				
5.4 5.4.1	Subject Device Provision Service				
5.4. i 5.5	Core Services Security Requirements for TWS managing electronic time-stamps				
5.5.1	Time-Stamping Service				
Annex	A (informative) Physical security requirements for the operational environment	47			
A.1	General				
A.2	P1 Intrusion Resistant Security Perimeter				
A.3	P2 Access Control System				
A.4	P3 Intrusion Alarm System				
A.5	P4 Fire Protection and Prevention				
A.6	P5 Power Supply	50			
Δ7	P6 Air Conditioning and Ventilation	50			

This is a free page sample. Access the full version online. S.R. CEN/TS 419261:2015

CEN/TS 419261:2015 (E)

Annex	(B (informative) Network Security Requirements for the Operational Environment	52
B.1	General	52
B.2	NET1 Protected TWS Architecture	52
B.3	NET2 Logging	53
B.4	NET3 Monitoring and Alerting	
Biblio	graphy	5

CEN/TS 419261:2015 (E)

Foreword

This document (CEN/TS 419261:2015) 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.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

Successful implementation of European Directive 1999/93/EC on a Community framework for electronic signatures [Dir.1999/93/EC] and of REGULATION (EU) No 910/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC [Reg.910/2014/EU] requires standards for services, processes, systems and products related to electronic signatures as well as guidance for conformity assessment of such services, processes, systems and products.

NOTE According to Article 50 of Reg.910/2014/EU Directive 1999/93/EC is repealed with effect from 1 July 2016 and references to the repealed Directive shall be construed as references to the Regulation.

In 1999 the European Information and Communications Technologies Standards Board, with the support of the European Commission, undertook an initiative bringing together industry and public authorities, experts and other market players, to create the European Electronic Signature Standardization Initiative (EESSI).

Within this framework the Comité Européen de Normalization / Information Society Standardization System (CEN/ISSS) and the European Telecommunications Standards Institute / Electronic Signatures and Infrastructures (ETSI/ESI) were entrusted with the execution of a work programme to develop generally recognized standards to support the implementation of [Dir.1999/93/EC] and development of a European electronic signature infrastructure.

The CEN/ISSS Workshop on electronic signatures (WS/E-SIGN) resulted in a set of deliverables, CEN Workshop Agreements (CWA), which contributed towards those generally recognized standards.

In 2011 the European Commission (EC) with the support of the European Free Trade Association has signed a specific grant agreement with the European Committee for Standardization (CEN) regarding the update of the existing European e-Signature CEN Workshop Agreements (CWAs) in the framework of Phase 1 of the mandate M/460. The present document is such a CEN Workshop Agreement that was first created as a CWA and then updated into a Technical Specification (TS).

The purpose of this TS is to describe the security requirements for trustworthy systems managing certificates for electronic signatures and to define overall system security requirements, whereas EN 419221 specifies security requirements for cryptographic devices. The requirements were partly inspired by Common Criteria [CC] Part 2, but the TS is not compliant to [CC], as e.g. EN 419221. In consequence, this TS cannot be used to perform Common Criteria certifications of products.

The TS is intended for use by designers and developers of systems managing certificates and time-stamps, as well as customers of such systems.

Executive Summary

This Technical Specification specifies security requirements on products and technology components, used by Trust Service Providers (TSPs) for issuing and managing certificates as well as electronic time-stamps in the sense of the REGULATION (EU) No 910/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC [Reg.910/2014/EU].



The is a new provider i arenade and chare publication at the limit below	This is a free preview.	Purchase the	entire publication	at the link below:
--------------------------------------------------------------------------	-------------------------	--------------	--------------------	--------------------

Product Page

- Dooking for additional Standards? Visit Intertek Inform Infostore
- Dearn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation