

BSI Standards Publication

Applicability of CEN Standards to Qualified Electronic Seal Creation Device under the EU Regulation N°910/2014 (eIDAS)



National foreword

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Applicability of CEN Standards to Qualified Electronic Seal Creation Device under the EU Regulation N°910/2014 (eIDAS)

Application des normes du CEN aux dispositifs de création de cachets électroniques qualifiés au titre du règlement européen n°910/2014 (eIDAS)

Anwendbarkeit von CEN Normen für qualifizierte elektronische Siegelerstellungseinheiten unter der Verordnung (EU) Nr. 910/2014 (eIDAS)

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European foreword

This document (CEN/TR 419210:2019) 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.

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Introduction

EU Regulation No 910/2014 on electronic identification and trust services for electronic transactions in the internal market (also known as eIDAS)[1] builds on the concept and requirements defined in the repealed EU Directive 1999/93 on Electronic Signatures [2]. eIDAS defines an electronic seal which authenticates the origin of data but created under control, as opposed to "sole control" for electronic signatures, of a legal person (e.g.. organization), as opposed to natural person (i.e. individual). Technically, electronic seals have similar requirements as electronic signatures and both can be based on digital signatures. eIDAS recognizes a special level of qualified electronic seal which is created using a qualified seal creation device (QSealCD) and supported by a qualified certificate, in the similar way as a qualified electronic signature is created using qualified signature creation device (QSigCD) supported by a qualified certificate. The requirements for a qualified seal creation device are described as "mutatis mutandis" as for a qualified signature creation device. The requirements for a qualified signature creation device are considered to be met by the equivalent defined in Directive 1999/93 referred to as a secure signature creation device (SSCD).

CEN has issued standards EN 419 211 parts 1 to 6, which were initially aimed at SSCD but have been accepted as applicable to QSigCD and QSealCD (COMMISSION IMPLEMENTING DECISION (EU) 2016/650 of 25 April 2016). Further standards have since been issued EN 419 221 part 5 and EN 419 241 parts 1 and 2 which can also be applied as QSigCD and QSealCD. However, for some use cases of electronic seals some standards may be considered more appropriate than others.

This document considers the legal requirements and practical use cases against the features of the standards to assist in selecting the most appropriate standard.

1 Scope

This document considers the legal requirements and practical use cases against the features of the CEN standards which may be used to support electronic seals in accordance to EU Regulation N° 910/2014 with the aim to provide guidance on the most appropriate standard to use in particular types of usage.

Normative references 2

There are no normative references in this document.

3 Terms, definitions and abbreviations

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in EU Regulation N° 910/2014 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

The term "seal" is used to denote "electronic seal", and "signature" is used to denote "electronic signature".

3.1.1

digital signature

data appended to, or a cryptographic transformation of a data unit that allows a recipient of the data unit to prove the source and integrity of the data unit and protect against forgery (e.g. by the recipient)

Note 1 to entry: Digital signature is a technical concept which may be related to the legal concept of electronic signature or electronic seal as defined in EU Regulation N° 910/2014.

3.1.2

signer

entity being the creator of a digital signature

Note 1 to entry: Signer is a technical concept which may be related to the legal concepts of signatory or creator of a seal.

3.2 Abbreviations

| DTBS | Data To Be Signed |
|---------|--|
| DTBS/R | Data to be signed or its unique representation |
| eIDAS | EU Regulation N° 910/2014 [1] |
| SSCD | secure signature creation device |
| TSP | trust service provider |
| QSealCD | qualified seal creation device |
| QSigCD | qualified signature creation device |
| QSCD | Either QSealCD or QSigCD |
| QTSP | qualified trust service provider |