ICS 33.040.01, 35.240.15, 35.240.30

SLOVENSKÁ TECHNICKÁ NORMA

Máj 2019

STN	**Elektronické podpisy a infraštruktúry (ESI) Registrované služby elektronickej pošty (REM) Časť 4: Profily interoperability**	**STN EN 319 532-4 V1.1.1** 87 9532

Electronic Signatures and Infrastructures (ESI); Registered Electronic Mail (REM) Services; Part 4: Interoperability profiles

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 04/19

Obsahuje: EN 319 532-4 V1.1.1:2018

128219

ETSI EN 319 532-4 V1.1.1 (2018-09)

Electronic Signatures and Infrastructures (ESI); Registered Electronic Mail (REM) Services; Part 4: Interoperability profiles

Reference
DEN/ESI-0019532-4

Keywords
e-delivery services, registered e-delivery services, registered electronic mail

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Foreword

This European Standard (EN) has been produced by ETSI Technical Committee Electronic Signatures and Infrastructures (ESI).

The present document is part 4 of a multi-part deliverable. Full details of the entire series can be found in part 1 [4].

National transposition dates	
Date of adoption of this EN:	23 August 2018
Date of latest announcement of this EN (doa):	30 November 2018
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 May 2019
Date of withdrawal of any conflicting National Standard (dow):	31 May 2019

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In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the ETSI Drafting Rules (Verbal forms for the expression of provisions).

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Introduction

Registered Electronic Mail (REM) is a particular instance of An Electronic Registered Delivery Service (ERDS). Standard email, used as backbone, makes interoperability smooth and increases usability. At the same time, the application of additional security mechanisms ensures integrity, confidentiality and non-repudiation (of submission, consignment, handover, etc.), and protects against risk of loss, theft, damage and any illegitimate modification.
The present document aims to cover the common and worldwide-recognized requirements to address electronic registered delivery in a secure and reliable way. Particular attention is paid to the Regulation (EU) No 910/2014 [i.1]. However, the legal effects are outside the scope of the present document.

1 Scope

The present document specifies the interoperability profiles of the Registered Electronic Mail (REM) messages according to the formats defined in ETSI EN 319 532-3 [6] and the concepts and semantic defined in ETSI EN 319 532-1 [4] and ETSI EN 319 532-2 [5]. It deals with issues relating authentication, authenticity and integrity of the information, with the purpose to address the achievement of interoperability across REM service providers, implemented according the aforementioned specifications.

The present document covers all the options to profile REM services for both styles of operation: S&N and S&F.

The mandatory requirements defined in the aforementioned referenced REM services specifications are not normally repeated here but, when necessary, the present document contains some references to them.

More specifically, the present document:

a) Defines generalities on profiling.

b) Defines constraints for SMTP profile.

2 References

2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at https://docbox.etsi.org/Reference/.

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The following referenced documents are necessary for the application of the present document.

[1] ETSI EN 319 522-1: "Electronic Signatures and Infrastructures (ESI); Electronic Registered Delivery Services; Part 1: Framework and Architecture".

[2] ETSI EN 319 522-2: "Electronic Signatures and Infrastructures (ESI); Electronic Registered Delivery Services; Part 2: Semantic Contents".

[3] ETSI EN 319 522-3: "Electronic Signatures and Infrastructures (ESI); Electronic Registered Delivery Services; Part 3: Formats".

[4] ETSI EN 319 532-1: "Electronic Signatures and Infrastructures (ESI); Registered Electronic Mail (REM) Services; Part 1: Framework and Architecture".

[5] ETSI EN 319 532-2: "Electronic Signatures and Infrastructures (ESI); Registered Electronic Mail (REM) Services; Part 2: Semantic Contents".

[6] ETSI EN 319 532-3: "Electronic Signatures and Infrastructures (ESI); Registered Electronic Mail (REM) Services; Part 3: Formats".

[7] IETF RFC 5321: "Simple Mail Transfer Protocol".

[8] IETF RFC 5322: "Internet Message Format".

[9] IETF RFC 2045: "Multipurpose Internet Mail Extensions (MIME) Part One: Format of Internet Message Bodies".

[10] IETF RFC 3207 (2002): "SMTP Service Extension for Secure SMTP over Transport Layer Security".

2.2 Informative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

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The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

[i.1] 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.

[i.2] ISO/IEC TR 10000:1998: "Information technology - Framework and taxonomy of International Standardized Profiles".

[i.3] IETF RFC 6698: "The DNS-Based Authentication of Named Entities (DANE), Transport Layer Security (TLS) Protocol: TLSA".

[i.4] IETF RFC 7208: "Sender Policy Framework (SPF) for Authorizing Use of Domains in Email, Version 1".

[i.5] IETF RFC 6376: "DomainKeys Identified Mail (DKIM) Signatures".

[i.6] NIST Special Publication 800-177: "Trustworthy Email".

[i.7] NIST Special Publication 800-45: "Guidelines on Electronic Mail Security, Version 2".

[i.8] IPJ - The Internet Protocol Journal - November 2016, Volume 19, Number 3: "Comprehensive Internet E-Mail Security: Review of email vulnerabilities and security threats".

[i.9] IETF RFC 4035: "Protocol Modifications for the DNS Security Extensions".

[i.10] IETF RFC 7489: "Domain-based Message Authentication, Reporting, and Conformance (DMARC)".

[i.11] IETF RFC 5751: "Secure/Multipurpose Internet Mail Extensions (S/MIME) Version 3.2 Message Specification".

[i.12] ETSI EN 319 521: "Electronic Signatures and Infrastructures (ESI); Policy and security requirements for Electronic Registered Delivery Service Providers".

[i.13] IETF RFC 7817: "Updated Transport Layer Security (TLS) Server Identity Check Procedure for Email-Related Protocols".