

Draft **ETSI EN 319 521** V1.0.0 (2018-05)



**Electronic Signatures and Infrastructures (ESI);
Policy and security requirements for
Electronic Registered Delivery Service Providers**

*iTeh STANDARDS PREVIEW
(standards.iteh.ai)
Full standard: https://standards.iteh.ai/catalog/standards/sis/7102541b3-ef65-4790-b069-a79809328b51/etsi-en-319521-v1-2018-02*

Reference

DEN/ESI-0019521

Keywords

e-delivery services, policy requirements,
registered e-delivery services, security, trust
services

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

Important notice

The present document can be downloaded from:
<http://www.etsi.org/standards-search>

The present document may be made available in electronic versions and/or in print. The content of any electronic and/or print versions of the present document shall not be modified without the prior written authorization of ETSI. In case of any existing or perceived difference in contents between such versions and/or in print, the only prevailing document is the print of the Portable Document Format (PDF) version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status. Information on the current status of this and other ETSI documents is available at
<https://portal.etsi.org/TB/ETSIDeliverableStatus.aspx>

If you find errors in the present document, please send your comment to one of the following services:
<https://portal.etsi.org/People/CommiteeSupportStaff.aspx>

Copyright Notification

No part may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm except as authorized by written permission of ETSI.

The content of the PDF version shall not be modified without the written authorization of ETSI.

The copyright and the foregoing restriction extend to reproduction in all media.

© ETSI 2018.
All rights reserved.

DECT™, **PLUGTESTS™**, **UMTS™** and the ETSI logo are trademarks of ETSI registered for the benefit of its Members.
3GPP™ and **LTE™** are trademarks of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

oneM2M logo is protected for the benefit of its Members.

GSM® and the GSM logo are trademarks registered and owned by the GSM Association.

Contents

Intellectual Property Rights	5
Foreword	5
Modal verbs terminology	5
Introduction	5
1 Scope	7
2 References	7
2.1 Normative references	7
2.2 Informative references	7
3 Definitions, abbreviations and notation	8
3.1 Definitions	8
3.2 Abbreviations	9
3.3 Notation	9
4 General provision on policies and practices	9
4.1 ERDSP Practice statement	9
4.1.1 Common provisions	9
4.1.2 Practice statement for EU QERDSP	10
4.2 Terms and conditions	10
4.3 Information security policy	10
5 General provision on ERDS	11
5.1 User content integrity and confidentiality	11
5.1.1 Common provisions	11
5.1.2 Provisions for EU QERDSP	11
5.2 Users Identification and Authentication	11
5.2.1 Provisions for EU QERDSP initial identity verification	11
5.2.1.1 General	11
5.2.1.2 Recipient identification and handover of user content	12
5.2.2 Provisions for EU QERDS authentication	12
5.3 Time reference	13
5.3.1 Common provisions	13
5.3.2 Provisions for EU QERDS	13
5.4 Events and evidence	13
5.4.1 Common provisions	13
5.4.2 Provisions for EU QERDS	13
5.5 Interoperability	14
6 Risk Assessment	14
7 ERDSP management and operation	14
7.1 Internal organization	14
7.1.1 Organization reliability	14
7.1.2 Segregation of duties	14
7.2 Human resources	14
7.2.1 Common provisions	14
7.2.2 Provisions for EU QERDS	14
7.3 Asset management	15
7.3.1 General requirements	15
7.3.2 Media handling	15
7.4 Access control	15
7.5 Cryptographic controls	15
7.6 Physical and environmental security	15
7.7 Operation security	16
7.8 Network security	16
7.9 Incident management	16
7.10 Collection of evidence for ERDSP internal services	16

7.11	Business continuity management	17
7.12	ERDSP termination and ERDS termination plans	17
7.13	Compliance	17
History	18

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Full standard:
<https://standards.iteh.ai/catalog/standards/sist/70513ab3-ef65-4790-b069-a79809328b51/etsi-en-319-521-v1.1.1-2019-02>

Intellectual Property Rights

Essential patents

IPRs essential or potentially essential to normative deliverables may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: "*Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards*", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (<https://ipr.etsi.org/>).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Trademarks

The present document may include trademarks and/or tradenames which are asserted and/or registered by their owners. ETSI claims no ownership of these except for any which are indicated as being the property of ETSI, and conveys no right to use or reproduce any trademark and/or tradename. Mention of those trademarks in the present document does not constitute an endorsement by ETSI of products, services or organizations associated with those trademarks.

Foreword

This draft European Standard (EN) has been produced by ETSI Technical Committee Electronic Signatures and Infrastructures (ESI), and is now submitted for the combined Public Enquiry and Vote phase of the ETSI standards EN Approval Procedure.

Proposed national transposition dates	
Date of latest announcement of this EN (doa):	3 months after ETSI publication
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	6 months after doa
Date of withdrawal of any conflicting National Standard (dow):	6 months after doa

Modal verbs terminology

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).

"**must**" and "**must not**" are **NOT** allowed in ETSI deliverables except when used in direct citation.

Introduction

An "Electronic Registered Delivery Service (ERDS hereinafter)" provides secure and reliable delivery of electronic messages between parties, producing evidence of the delivery process for legal accountability. Evidence can be seen as a declaration by a trusted party that a specific event related to the delivery process (submission of a message, delivery of a message, refusal of a message, etc.) happened at a certain time. Evidence can be immediately delivered to the interested party (together with the message or separately) or can be kept in a repository for later access by interested parties. It is common practice to implement evidence as digitally signed data.

The above stated ERDS concept can be implemented in diverse ways, using different formats for identifiers and evidences, using different protocols for messaging, and even different message delivery models.

It is expected that the provision of these kind of services and the providers themselves will be suitably regulated within different regulatory or legal framework.

Particularly within the European Union 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 (Regulation (EU) No 910/2014 hereinafter) [i.1] provides a legal framework to facilitate cross-border recognition between existing national legal systems related to electronic registered delivery services. That framework aims to open new market opportunities for European Union trust service providers to offer new pan-European electronic registered delivery services.

Regulation (EU) No 910/2014 [i.1] defines the so-called Qualified Electronic Registered Delivery Services (QERDS hereinafter). QERDS is a special type of ERDS. Both the service and the provider providing it meet a number of additional requirements that the regular ERDS and its providers do not need to meet.

iTeh STANDARD PREVIEW
(standards.iteh.ai)
Full standard:
<https://standards.iteh.ai/catalog/standards/sist/70513ab3-ef65-4790-b069-a79809328b51/etsi-en-319-521-v1.1.1-2019-02>

1 Scope

The present document specifies generally applicable policy and security requirements for Electronic Registered Delivery Services Providers (ERDSP), including the services they provide.

The present document is applicable to:

- the policy and security requirements of the ERDSP and EU ERDSP qualified;
- the general and security requirements of EU Electronic Registered Delivery Services (ERDS) and EU ERDS qualified and non in terms of message integrity; protection against loss, theft, damage or any unauthorised alteration of the data transmitted; sender and recipient strong identification; time reference; and proof of data's sending and receiving.

The present document does not specify interconnection requirements.

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>.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

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

- [1] ETSI EN 319 401: "Electronic Signatures and Infrastructures (ESI); General Policy Requirements for Trust Service Providers".

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.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

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] ETSI EN 319 102-1: " Electronic Signatures and Infrastructures (ESI); Procedures for Creation and Validation of AdES Digital Signatures; Part 1: Creation and Validation".
- [i.3] ISO 29115: "Information technology -- Security techniques -- Entity authentication assurance framework".
- [i.4] NIST SP 800-63B: "Digital Identity Guidelines Authentication and Lifecycle Management".

- [i.5] Commission Implementing Regulation (EU) 2015/1502 of 8 September 2015 on setting out minimum technical specifications and procedures for assurance levels for electronic identification means pursuant to Article 8(3) of Regulation (EU) No 910/2014 of the European Parliament and of the Council on electronic identification and trust services for electronic transactions in the internal market (Text with EEA relevance).

3 Definitions, abbreviations and notation

3.1 Definitions

For the purposes of the present document, the terms and definitions given in ETSI EN 319 401 [1] and the following apply:

consignment: act of making the user content available to the recipient, within the boundaries of the electronic registered delivery service

Electronic Registered Delivery Service (ERDS): electronic service that makes possible to transmit data between the sender and recipients by electronic means and provides evidence relating to the handling of the transmitted data, including proof of sending and receiving the data, and that protects transmitted data against the risk of loss, theft, damage or any unauthorized alterations

NOTE: An electronic registered delivery service is provided by one ERDSP. ERDSPs can cooperate in transferring data from a sender to a recipient when they are subscribed to different ERDSPs.

Electronic Registered Delivery Service (ERDS) evidence: data generated within the electronic registered delivery service, which aims to prove that a certain event has occurred at a certain time

Electronic Registered Delivery Service (ERDS) practice statement: statement of the practices that an electronic registered delivery service provider employs in providing its services

NOTE: See clause 4 for further information on practice statement.

Electronic Registered Delivery Service Provider (ERDSP): trust service provider which provides electronic registered delivery services

NOTE: It can be a Trust Service Provider as defined in Regulation (EU) No 910/2014 [i.1].

ERD user agent/application: system consisting of software and/or hardware components by which senders and recipients participate in the exchange of data with electronic registered delivery service providers

handover: act of having the user content successfully cross the border of the recipient's electronic registered delivery service towards the recipient's ERD user agent/application

Qualified Electronic Registered Delivery Service (QERDS): As specified in Regulation (EU) No 910/2014 [i.1].

Qualified Electronic Registered Delivery Service Provider (QERDSP): trust service provider which provides qualified electronic registered delivery services

recipient: natural or legal person to which the user content is addressed

sender: natural or legal person that submits the user content

NOTE: In the present document, recipients and senders are assumed to be natural or legal persons.

user content: original data produced by the sender which has to be delivered to the recipient

3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

ERDS	Electronic Registered Delivery Service
ERDSP	Electronic Registered Delivery Service Provider
PKI	Public Key Infrastructure
QERDS	Qualified Electronic Registered Delivery Service
QERDSP	Qualified Electronic Registered Delivery Service Provider
QTSP	Qualified Trust Service Provider
REQ	REquirement
TLS	Transport Layer Security
TSP	Trust Service Provider

3.3 Notation

The requirements identified in the present document include:

- requirements applicable to any ERDSP and ERDS provided. Such requirements are indicated by clauses without any additional marking;
- requirements applicable under certain conditions. Such requirements are indicated by clauses marked by "[CONDITIONAL]";
- requirements that include several choices which ought to be selected according to the applicable situation. Such requirements are indicated by clauses marked by "[CHOICE]";
- <the 3 letters REQ> - <4-6 letters type of service, whether EU qualified (QERDS / QERDSP) or non EU (ERDS / ERDSP)> < the clause number> <2 digit number, incremental>.optional<1 lowercase letter) to distinct elements from a list>.

All ERDS and ERDSP requirements apply to QERDS and QERDSP.

4 General provision on policies and practices

4.1 ERDSP Practice statement

4.1.1 Common provisions

- REQ-ERDS-4.1.1-01** All requirements from ETSI EN 319 401 [1], clause 6.1 shall apply.
- REQ-ERDS-4.1.1-02** The ERDS set of policies and practices shall be approved by the ERDSP management, published and communicated to its employees and external parties as relevant.
- REQ-ERDS-4.1.1-03** The ERDSP shall have an ERDS practice statement publicly available on its website or any other electronic means, containing the practices and procedures used to address the requirements on both the ERDSP and the ERDS provided.

NOTE: The ERDSP is not obliged to disclose any aspects containing sensitive information.

- REQ-ERDS-4.1.1-04** The ERDSP shall define a review process for the practices including responsibilities for maintaining the ERDS practice statement and a process to notify changes it intends to make in its ERDS practice statement.
- REQ-ERDS-4.1.1-05** The ERDS practice statement shall identify the obligations of all external organizations supporting the provision of ERDS including the applicable policies and practices.
- REQ-ERDS-4.1.1-06** The ERDS practice statement shall specify the means used to report any modifications to user content before consignment/ handover.