



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

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 58 can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web
 59 server) which are, or may be, or may become, essential to the present document.

60 Foreword

61 This draft European Standard (EN) has been produced by ETSI Technical Committee Electronic Signatures and
 62 Infrastructures (ESI), and is now submitted for public review before approval by TC ESI and submission for the
 63 combined Public Enquiry and Vote phase of the ETSI standards EN Approval Procedure.

64

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):	12 months after doa

65

66 Modal verbs terminology

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

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

71 Introduction

72 Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic
 73 identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC
 74 (Regulation (EU) No 910/2014 hereinafter) [i.1] provides a legal framework to facilitate cross-border recognition
 75 between existing national legal systems related to electronic registered delivery services. That framework aims to open
 76 new market opportunities for European Union trust service providers to offer new pan-European electronic registered
 77 delivery services.

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

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

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

89

1 Scope

90

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

93 The present document is applicable to:

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

99 The present document does not specify interconnection requirements.

100

2 References

101

2.1 Normative references

102

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

106 Referenced documents which are not found to be publicly available in the expected location might be found at
107 <http://docbox.etsi.org/Reference>.

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

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

111 [1] ETSI EN 319 401: "Electronic Signatures and Infrastructures (ESI); General Policy Requirements
112 for Trust Service Providers".

2.2 Informative references

113

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

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

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

121 [i.1] Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on
122 electronic identification and trust services for electronic transactions in the internal market and
123 repealing Directive 1999/93/EC.

124 [i.2] ETSI EN 319 411-1: "Electronic Signatures and Infrastructures (ESI); Policy and security
125 requirements for Trust Service Providers issuing certificates; Part 1: General Requirements".

126 [i.3.] ETSI EN 319 411-2: "Electronic Signatures and Infrastructures (ESI); Policy and security
127 requirements for Trust Service Providers issuing certificates; Part 2: Requirements for trust service
128 providers issuing EU qualified certificates".

129 [i.4] ETSI EN 319 421: "Electronic Signatures and Infrastructures (ESI); Policy and Security
130 Requirements for Trust Service Providers issuing Electronic Time-Stamps".

131 3 Definitions and abbreviations

132 3.1 Definitions

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

135 **electronic registered delivery service (ERDS):** electronic service that makes possible to transmit data between the
136 sender and recipients by electronic means and provides evidence relating to the handling of the transmitted data,
137 including proof of sending and receiving the data, and that protects transmitted data against the risk of loss, theft,
138 damage or any unauthorised alterations

139 **electronic registered delivery service provider:** Trust Service Provider which provides electronic registered delivery
140 services
141
142

143 **electronic registered delivery service practice statement:** statement of the practices that an electronic registered
144 delivery service provider employs in providing an electronic delivery service

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

146 **ERDS evidence:** data generated within the electronic registered delivery service, which aims to prove that a certain
147 event has occurred at a certain time
148

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

150 **qualified electronic registered delivery service:** As specified in Regulation (EU) No 910/2014 [i.1]

151 **qualified electronic registered delivery service provider:** Trust Service Provider which provides qualified electronic
152 registered delivery services

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

154 **sender:** natural or legal person that submits the user content

155 NOTE: In the present document, recipients and senders are assumed to be natural or legal persons.
156

157 3.2 Abbreviations

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

159	ERDS	Electronic Registered Delivery Service
160	ERDSP	Electronic Registered Delivery Service Provider
161	QERDS	Qualified Electronic Registered Delivery Service
162	QERDSP	Qualified Electronic Registered Delivery Service Provider

163

164 3.3 Notation

165 The requirements identified in the present document include:

- 166 a) requirements applicable to any ERDSP and ERDS provided. Such requirements are indicated by clauses
167 without any additional marking;
- 168 b) requirements applicable under certain conditions. Such requirements are indicated by clauses marked by
169 "[CONDITIONAL]";

- 170 c) requirements that include several choices which ought to be selected according to the applicable situation.
171 Such requirements are indicated by clauses marked by "[CHOICE]";
- 172 d) <the 3 letters REQ> - <4-5 letters type of service, whether qualified (QERDS) or non-qualified (ERDS)> < the
173 clause number> - <2 digit number - incremental>.optional<1 lowercase letter) to distinct elements from a list>
- 174 All ERDS and ERDSP requirements shall apply to QERDS and QERDSP.
175

176 4 General provision on policies and practices

177 4.1 ERDS Practice statement

178 **REQ-ERDS-4.1-01** All requirements from EN 319 401[1] clause 6.1 shall apply.

179 **REQ- ERDS-4.1-02** The ERDSP shall have a management body with overall responsibility for the ERDSP with final
180 authority for approving the ERDSP practice statement.

181 **REQ- ERDS-4.1-03** The ERDS set of policies and practices shall be approved by the ERDSP management, published
182 and communicated to its employees and external parties as relevant.

183 **REQ- ERDS 4.1-04** The ERDSP shall have a ERDS practice statement publicly available on its website or any other
184 electronic means of the practices and procedures used to address the requirements on both the ERDSP and the ERDS
185 provided.

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

187 **REQ- ERDS-4.1-05** The ERDSP shall make available to subscribers and relying parties its ERDS practice statement.

188 **REQ- ERDS-4.1-06** The ERDSP shall define a review process for the practices including responsibilities for
189 maintaining the ERDS practice statement and a process to notify changes it intends to make in its ERDS practice
190 statement

191 **REQ- ERDS-4.1-07** The ERDS practice statement shall identify the obligations of all external organizations supporting
192 the provision of ERDS including the applicable policies and practices.

193 **REQ- ERDS-4.1-08** The ERDS practice statement shall specify the means used to report any modifications to user
194 content before relay and delivery.

195 In addition, for QERDSP and QERDS, the following specific requirements apply.:

196 **REQ-QERDS-4.1-01** The QERDS practice statement shall Include a clear statement indicating that the policy is for
197 qualified ERDS a per Regulation (EU) No 910/2014 [i.1];

198 **REQ-QERDS-4.1-02** The QERDS practice statement shall Include the complete list of TSPs and QTSPs involved in
199 the provision of the QERDS;

200 EXAMPLE: Time-stamping service, TSPs issuing certificates...

201 **REQ-QERDS-4.1-03** The QERDS practice statement shall Include a description on how the security of transmission
202 against any risk of loss, theft, damage or any unauthorised alterations, is ensured.

203 **REQ-QERDS-4.1-04** The QERDS practice statement shall Include any limitations on the use of the QERDS;

204 **REQ-QERDS-4.1-05** The QERDS practice statement shall Include the sender, recipient and other relying parties
205 obligations;

206 **REQ-QERDS-4.1-06** The QERDS practice statement shall Describe how sender and recipient are identified and
207 authenticated to the sevice;

208 **REQ-QERDS-4.1-07** The QERDS practice statement shall Include information on how to get evidence relating to the
209 handling of the transmitted data

210 **REQ-QERDS-4.1-08** The QERDS practice statement shall Include any possible limitations on the evidence validity
211 period;

212 **REQ-QERDS-4.1-09** The QERDS practice statement shall Include the retention period actually applied to the evidence
 213 as per clause 5.4.1. and, where applicable, the modalities of reversibility and portability; and

214 **REQ-QERDS-4.1-10** The QERDS practice statement shall State the provisions made for termination of service.

215

216 4.2 Terms and conditions

217 **REQ-ERDS-4.2-01** All requirements from EN 319 401[1] clause 6.2 shall apply.

218 **REQ-ERDS-4.2-02** The terms and conditions shall indicate what is deemed to constitute a delivery of the user content
 219 to the recipient.

220 **REQ-ERDS-4.2-03** The terms and conditions shall indicate if any expiry of data availability to the recipient is
 221 handled and, if applicable, how long the data are available.

222 **REQ-ERDS-4.2-04** Before entering into a contractual relationship with an ERDSP customer, the ERDSP shall inform
 223 the sender of the terms and conditions regarding the ERDS.

224 i) **REQ-ERDS-4.2-05** The ERDSP shall communicate the terms and conditions through a durable (i.e. with
 225 integrity over time) mean of communication, and in a human readable form.

226 ii) **REQ-ERDS-4.2-06** The terms and conditions may be transmitted electronically.

227 **REQ-ERDS-4.2-07** The ERDSP shall have evidence that the terms and conditions have been accepted by the sender.

228

229 4.3 Information security policy

230 **REQ-ERDS-4.3-01** All requirements from EN 319 401[1] clause 6.3 shall apply.

231

232 5 General provision on ERDS

233 5.1 User content integrity and confidentiality

234 **REQ-ERDS-5.1-01** The ERDS shall ensure that availability, integrity, and confidentiality of the user content is
 235 adequately guaranteed from the sending to the reception of the user content.

236 **REQ-ERDS-5.1-02** The confidentiality of sender/recipient identification shall be protected, especially when
 237 exchanged with the sender/recipient or between distributed ERDS system components.

238 In addition, the following QERDSP and QERDS-specific requirements and guidance apply.

239 • **REQ-QERDS-5.1-01** User content shall be protected by an advanced electronic seal or signature issued by a
 240 QTSP in such a manner as to preclude the possibility of the data being changed undetectably;

241 • **REQ-QERDS-5.1-02** The integrity of user content shall be protected, especially when exchanged with the
 242 sender/recipient or between distributed ERDS system components.

243 • **REQ-QERDS-5.1-03** [Conditional] If applicable, user content should be securely retained to meet statutory
 244 requirements

245 • **REQ-QERDS-5.1-04** [Conditional] If the ERDSP has generated a qualified electronic seal or signature on the
 246 user content, then the ERDSP shall be clearly identified in the certificate used for generating such seal or
 247 signature.

248 • **REQ-QERDS-5.1-05** [Conditional] If the qualified electronic seal or signature on the user content is
 249 generated by another QTSP, then the ERDSP shall verify the validity of the generated signature or seal, and
 250 check that the TSP generating the signature or seal is still qualified.

- 251 • **REQ-QERDS-5.1-06** [Conditional] If the user content needs to be modified by the ERDS, the changes shall
252 be clearly indicated to the sender, the recipient and any third party involved.

253 EXAMPLE: In case of format conversion.

254 5.2. Users Identification and Authentication

255 5.2.1. Initial identity verification

256 **REQ-QERDS-5.2.1-01** The QERDSP shall verify the identity of the sender and the recipient either directly or by
257 relying on a third party:

- 258 a) by the physical presence of the natural person or of an authorised representative of the legal person; or
259 b) remotely, using electronic identification means, for which a physical presence of the natural person or of an
260 authorised representative of the legal person was ensured and which meets the requirements set out in Article 8
261 of the Regulation (EU) N° 910/2014 [i.1] with regard to the assurance levels ‘substantial’ or ‘high’; or
262 c) by means of a certificate of a qualified electronic signature or of a qualified electronic seal issued in
263 compliance with point a) or b); or
264 d) by using other identification methods recognised at national level which provide equivalent assurance in terms
265 of reliability to physical presence. The equivalent assurance shall be confirmed by a conformity assessment
266 body.

267 **REQ-QERDS-5.2.1-02** [Conditional] If after initial identity verification, the QERDSP has not bound an authentication
268 means to the sender or the recipient, identity verification shall be carried out each time a user’s content is sent or
269 received.

270 271 5.2.1.1. Recipient identification and consignment of user content

272 **REQ-QERDS-5.2.1.1-01** The QERDSP shall consign or hand over the user content to the recipient only after a
273 successful authentication of the recipient.

274 **REQ-QERDS-5.2.1.1-02** [Conditional] If the authentication of the recipient is based on an advanced electronic
275 signature, the signature validation shall precede the consignment or handing over of the user content.

276 **REQ-QERDS-5.2.1.1-03** [Conditional] If the authentication of the recipient is based on an QEDRS internal
277 authentication process, the QEDRSP should conduct the whole process in a secured and controlled environment. All
278 evidence of authentication and consignment or handing over process shall be gathered and protected.

279 5.2.2 Authentication

280 **REQ-QERDS-5.2.2-01** The sender, the recipient of both, shall use the mean of authentication accepted by the
281 QERDSP as per its Practice Statement in the authentication process before submitting the user or before it is consigns or
282 hands over to the recipient.

283 NOTE: The QERDSP can issue a mean of authentication either for the sender, the recipient of both to be used
284 in the authentication process.

285 **REQ-QERDS-5.2.2-02** [Conditional] When the QEDRSP issues a mean of authentication, it shall be one of the
286 following:

287 **REQ-QERDS-5.2.2-02** [Conditional] Authentication means to QEDRSPs shall be of one of the following:

- 288 a) Multi-factor user authentication; or

289 EXAMPLE: at a level compatible with ISO 29115 LoA3, NIST AAL2, IA 1502/2015 Substantial,
290 remote q-signature auth. level

- 291 b) Mutual authentication based on certificates; or

- 292 c) An authentication mean with a equivalent security level to the above.

293 **REQ-QERDS-5.2.2-03** [Conditional] If the user does not have a mean of authentication, identity verification shall be
 294 carried out at each time a user's content is sent.

295 **REQ-QERDS-5.2.2-04** [Conditional] If applicable, the mean of authentication shall be under the exclusive control of
 296 the user.

297

298 5.3 Time reference

299 **REQ-EDRS-5.3-01**The Time reference shall be in line with the one defined within the Terms and Conditions.

300 In addition, the following QERDSP and QERDS-specific requirements and guidance apply.

- 301 • **REQ-QEDRS-5.3-01** The date and time of sending, receiving and any change of user content shall be
 302 indicated by a qualified electronic time-stamp.
- 303 • **REQ-QEDRS-5.3-02** Proof of sending and proof of receiving shall be linked to user content and time-
 304 stamped by a qualified electronic time-stamp.
- 305 • **REQ-QEDRS-5.3-03** [Conditional] In case a QERDSP relies on a third-party qualified time-stamp service
 306 provider, the validity of the qualified electronic time-stamp shall be verified once the qualified time-stamp
 307 service provider generates it.
- 308 • **REQ-QEDRS-5.3-04** [Conditional] In case a QERDSP relies on a third-party qualified time-stamp service
 309 provider, the QERDSP shall check regularly that the time-stamp service provider is still qualified.

310

311 5.4 Events and evidence

312 **REQ-EDRS-5.4-01** The ERDS shall provide evidence of user content sending and receiving to the users.

313 **REQ-EDRS-5.4-02** [Conditional] if applicable, the ERDS shall provide evidence of user content *consignment of*
 314 *handing over* to the users.

315 **REQ-EDRS-5.4-03**The ERDS shall generate an evidence of submission of the user content by the sender.

316 **REQ-EDRS-5.4-04** The ERDS shall generate an evidence of consignment or handing over of the user content to the
 317 recipient

318 **REQ-EDRS-5.4-05** The ERDSP shall keep at least:

- 319 a) Users identification data;
- 320 b) Users authentication level;
- 321 c) Proof that the sender identity has been initially verified;
- 322 d) Logs of ERDS operation, identification validation of sender and recipient, and communication;
- 323 e) Proof of the recipient's identity verification before the handover of the user content;
- 324 f) Proof that the user content has been made available only after the recipient identity verification;
- 325 g) Proof that the user content has been received by the recipient, if applicable;
- 326 h) Means to prove that the user content has not being modified during transmission;
- 327 i) A reference to or a digest of the complete user's content submitted; and
- 328 j) Time-stamp tokens corresponding to the date and time of sending, consigning and handing over and modifying
 329 the user content, as appropriate.

330 **REQ-EDRS-5.4-06** The ERDSP shall ensure the confidentiality, integrity and availability of the logs defined in the
 331 present clause.

332

333 In addition, the following QERDSP and QERDS-specific requirements and guidance apply.

- 334 • **REQ-QEDRS-5.4-01** All events related to sender initial identity verification and further authentication shall
335 be logged.
- 336 • **REQ-QEDRS-5.4-02** All events related to recipient initial identity verification and/or further authentication
337 shall be logged.
- 338 • **REQ-QEDRS-5.4-03** [Conditional] If provided, the initial and renewed identity verification information shall
339 be recorded.

340 EXEMPLE: This may include the type of document(s) presented by the applicant to support identification (e.g.
341 applicant's identity card or passport); any record referring to a unique identification data, numbers,
342 or a combination thereof; or copies of applications and identification documents, including the
343 signed sender agreement.

344 5.4.1 Retention period

345 **REQ-EDRS-5.4.1-01** The ERDS provider shall archive for the national legal period applicable after the date of sending
346 all relevant evidence.

347

348 6 Risk Assessment

349 **REQ-ERDS-6-01** All requirements from EN 319 401[1] clause 5 shall apply.

350 7 ERDSP management and operation

351 7.1 Internal organization

352 7.1.1 Organization reliability

353 **REQ-ERDS-7.1.1-01** All requirements from EN 319 401[1] clause 7.1.1 shall apply.

354 7.1.2 Segregation of duties

355 **REQ-ERDS-7.1.2-01** All requirements from EN 319 401[1] clause 7.1.2 shall apply.

356 7.2 Human resources

357 **REQ-ERDS-7.2-01** All requirements from EN 319 401[1] clause 7.2 shall apply.

358 In addition, the following QERDSP-specific requirements and guidance apply.

359 **REQ- QERDSP-7.2-01** The ERDSP shall appoint an identity verification officer.

360 **REQ- QERDSP-7.2-02** The identity verification officer shall be in charge of ensuring that the actual processes
361 conducted for verifying the identity of the sender and recipient are compliant with the initial identity verification
362 process specified.

363 7.3 Asset management

364 7.3.1 General requirements

365 **REQ-ERDS-7.3.1-01** All requirements from EN 319 401[1] clause 7.3.1 shall apply.

366 7.3.2 Media handling

367 **REQ-ERDS-7.3.2-01** All requirements from EN 319 401[1] clause 7.3.2 shall apply.

368 7.4 Access control

369 **REQ-ERDS-7.4-01** All requirements from EN 319 401[1] clause 7.4 shall apply.

370 7.5 Cryptographic controls

371 **REQ-ERDS-7.5-01** All requirements from EN 319 401[1] clause 7.5 shall apply.

372 [CONDITIONAL] In case the ERDSP generates the signature or seal certificates, the following ERDSP-specific
373 requirements and guidance apply:

374 **REQ- ERDSP-7.5-02** The ERDSP' signature or seal certificate private keys shall be held physically isolated from
375 normal operations in such a way that only designated trusted personnel have access to the keys for use in signing user
376 content and/or evidence.

377 **REQ- ERDSP-7.5-03** The ERDS sealing/signing private key shall be held and used within a secure cryptographic
378 device.

379 **REQ- ERDSP-7.5-04** The ERDS sealing/signing private key shall be protected in a way that ensures the same level of
380 protection as provided by the secure cryptographic device.

381 **REQ- ERDSP-7.5-05** The ERDS sealing/signing private key shall be backed up, stored and recovered only by
382 personnel in trusted roles using, at least, dual control in a physically secured environment. The number of personnel
383 authorized to carry out this function shall be kept to a minimum and be consistent with the ERDS practices.

384 **REQ- ERDSP-7.5-06** The copies of the ERDS sealing/signing private key shall be subject to the same or greater level
385 of security controls as keys currently in use.

386 **REQ- ERDSP-7.5-07** [Conditional] If the ERDS sealing/signing private key and any copies are stored in a dedicated
387 secure cryptographic device, access controls shall be in place to ensure that the keys are not accessible outside this
388 device.

389 **REQ- ERDSP-7.5-08** The secure cryptographic device shall not be tampered with during shipment and storage.

390 **REQ- ERDSP-7.5-09** The secure cryptographic device shall be functioning correctly.

391 **REQ- ERDSP-7.5-10** The ERDS sealing/signing private key stored on the ERDSP secure cryptographic device shall be
392 destroyed upon device retirement.

393 NOTE: This destruction does not necessarily affect all copies of the private key. Only the physical of the key stored
394 in the secure cryptographic device under consideration will be destroyed.

395

396 7.6 Physical and environmental security

397 **REQ-ERDS-7.6-01** All requirements from EN 319 401[1] clause 7.6 shall apply.

398 **REQ- ERDSP-7.6-02** The ERDSP's physical and environmental security policy for systems concerned with the
399 provision of the ERDS shall address the physical access control, natural disaster protection, fire safety factors, failure of
400 supporting utilities (e.g. power, telecommunications), structure collapse, plumbing leaks, protection against theft,
401 breaking and entering, and disaster recovery.

402 **REQ- ERDSP-7.6-03** The ERDSP shall implement controls to protect against equipment, information, media and
403 software related to the provision of the ERDS being taken off-site without authorization.

404 **REQ- ERDSP-7.6-04** Physical and environmental security controls shall be implemented to protect the facility housing
405 system resources, the system resources themselves, and the facilities used to support their operation.

406 **REQ- ERDSP-7.6-05** Any parts of the premises shared with other organizations shall be outside ERDS system and
407 communication perimeter.

408 **REQ- ERDSP-7.6-06** Every logical access shall be logged.

409 **REQ- ERDSP-7.6-07** Every entry to the physically secure area shall be subject to oversight and securely logged.

410 **REQ- ERDSP-7.6-08** Non-authorized person shall be accompanied by an authorized person whilst in the secure area.

411

412 7.7 Operation security

413 **REQ-ERDS-7.7-01** All requirements from EN 319 401[1] clause 7.7 shall apply.

414 7.8 Network security

415 **REQ-ERDS-7.8-01** All requirements from EN 319 401[1] clause 7.8 shall apply.

416 **REQ- ERDSP-7.8-02** The ERDSP shall monitor capacity demands.

417 **REQ- ERDSP-7.8-03** Projections of future capacity requirements shall ensure that adequate processing power and
418 storage are available.

419 **REQ- ERDSP-7.8-04** The ERDSP shall use state of the art protocols and algorithms for encryption on transport layer
420 level.

421 **REQ- ERDSP-7.8-05** The ERDSP shall use non-qualified website authentication certificates for Transport Layer
422 Security if data is sent outside internal networks.

423 7.9 Incident management

424 **REQ-ERDS-7.9-01** All requirements from EN 319 401[1] clause 7.9 shall apply.

425 7.10 Collection of evidence for ERDSP internal services

426 **REQ-ERDS-7.10-01** All requirements from EN 319 401[1] clause 7.10 shall apply.

427 **REQ- ERDSP-7.10-02** The EDRSP shall log events relating to the sending and consigning/handing over the user
428 content.

429 **REQ- ERDSP-7.10-03** All security events shall be logged, including changes relating to the security policy, system
430 start-up and shutdown, system crashes and hardware failures, firewall and router activities and PKI system access
431 attempts.

432

433 7.11 Business continuity management

434 **REQ-ERDS-7.11-01** All requirements from EN 319 401[1] clause 7.11 shall apply.

435 **REQ- ERDSP-7.11-02** The ERDSP's data systems necessary to resume ERDS operations shall be backed up and
436 stored in safe places suitable to allow the ERDSP to timely go back to operations in case of incident/disasters.

437 **REQ- ERDSP-7.11-03** The ERDSP shall back-up copies regularly of essential information and software.

438 **REQ- ERDSP-7.11-04** Adequate recovery facilities shall be provided to ensure that all essential information and
439 software can be recovered following a disaster or media failure.

440 **REQ- ERDSP-7.11-05** Recovery arrangements shall be regularly tested to ensure that they meet the requirements of
441 business continuity plans.

442 **REQ- ERDSP-7.11-06** [Conditional] If risk analysis identifies information requiring dual control for management then
443 dual control shall be applied to recovery.

444 EXAMPLE: keys are an example of information requiring dual control for management

445 **REQ- ERDSP-7.11-07** The ERDSP 's business continuity plan (or disaster recovery plan) shall address the
446 compromise, loss or suspected compromise of an ERDSP private key as a disaster and the planned processes shall be in
447 place.

448 **REQ- ERDSP-7.11-08** Following a disaster, the ERDSP shall, where practical, take steps to avoid repetition of a
449 disaster.

450 **REQ- ERDSP-7.11-09** [Conditional] In the case of compromise of the ERDSP, the ERDSP shall notify it at least to all
451 senders/receivers, and relying parties and other entities with which the ERDSP has agreements or other form of
452 established relations for the provision of the ERDS. The information to be provided shall indicate that evidence
453 information issued using the compromised key may no longer be valid from the known time of compromise;

454 **REQ- ERDSP-7.11-10** [Conditional] If any of the algorithms, or associated parameters, used by the ERDSP become
455 insufficient for its remaining intended usage then the ERDSP shall:

- 456 a) inform all sender/recipients and relying parties with whom the ERDSP has agreement or other form of
457 established relations for the provision of the ERDS; and
- 458 b) schedule a re-signing and re-time-stamping of all evidences.

459 7.12 ERDSP termination and ERDS termination plans

460 **REQ-ERDS-7.12-01** All requirements from EN 319 401[1] clause 7.12 shall apply.

461 **REQ- ERDSP-7.12-02** The ERDSP shall keep the collected evidence for the national statutory time.

462

463 7.13 Compliance

464 **REQ-ERDS-7.13-01** All requirements from EN 319 401[1] clause 7.13 shall apply.

465 **REQ- ERDSP-7.13-02** [Conditional] Where feasible, ERDS and end-user products used in the provision of the service
466 shall be made accessible for persons with disabilities.

467

468 History

Document history		
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V.0.0.01.B	April 2017	First draft
v.0.0.01.d	June 2017	First stable draft
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