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TECHNICAL SPECIFICATION

**Electronic Signatures and Infrastructures (ESI);
Testing Conformance and Interoperability of
Registered Electronic Mail Services;
Part 1: Testing conformance**

Reference

RTS/ESI-0019534-1v121

Keywords

conformance, registered electronic mail, testing

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Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Electronic Signatures and Infrastructures (ESI).

The present document is part 1 of a multi-part deliverable covering Registered Electronic Mail Services, as identified below:

Part 1: **"Testing conformance"**;

Part 2: "Test suites for interoperability testing of providers using same format and transport protocols";

Part 3: "Test suites for interoperability testing of providers using different format and transport protocols".

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.

1   Scope

The present document defines the set of checks to be performed for testing conformance in the provision of Registered Electronic Mail Services against the specific technical requirements defined in ETSI EN 319 532-3 [1] and against technical requirements for the provision of the service defined in ETSI EN 319 532-1 [2].

More specifically, the present document defines test assertions for testing conformance regarding:

1) The construction of MIME and SMIME headers (clause 5) and bodies (clause 6) in ETSI EN 319 532-3 [1].

2) The construction of REM messages (clause 7).

3) The generation of digital signatures in REM messages and ERDS evidence (clause 8).

4) Some aspects of the Common Service Interface (clause 9).

5) The structure and contents of ERDS evidence (clause 10).

6) Relevant aspects of the provision of the service, namely: the generation of ERDS evidence following certain events, and the security measures in the relevant interfaces defined in ETSI EN 319 532-3 [1], clause 11.

The present document does not define the checks to be performed for testing conformance in the provision of Registered Electronic Mail Services against technical requirements defined in none of the technical specifications on which ETSI EN 319 532-3 [1] is built.

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

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

[3]   IETF RFC 8551: "Secure/Multipurpose Internet Mail Extensions (S/MIME) Version 3.2 Message Specification".

[4]   IETF RFC 5322 (October 2008): "Internet Message Format".

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

[6]   OASIS Standard: "Test Assertions Model Version 1.0".

[7]   ETSI TS 119 524-1: "Electronic Signatures and Infrastructures (ESI); Testing Conformance and Interoperability of Electronic Registered Delivery Services; Part 1: Testing conformance".

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

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

[10]   ETSI TS 119 612: "Electronic Signatures and Infrastructures (ESI); Trusted Lists".

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

[12]   ETSI TS 119 124-4: "Electronic Signatures and Infrastructures (ESI); CAdES digital signatures - Testing Conformance and Interoperability; Part 4: Testing Conformance of CAdES baseline signatures".

[13]   ETSI TS 119 134-4: "Electronic Signatures and Infrastructures (ESI); XAdES digital signatures - Testing Conformance and Interoperability; Part 4: Testing Conformance of XAdES baseline signatures".

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

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

[16]   ETSI EN 319 132-1: "Electronic Signatures and Infrastructures (ESI); XAdES digital signatures; Part 1: Building blocks and XAdES baseline signatures".

[17]   eIDAS Technical Specifications: "SAML Attribute Profile - Version 1.2", 31 August 2019.

2.2   Informative references

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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]   ETSI TS 119 312: "Electronic Signatures and Infrastructures (ESI); Cryptographic Suites".

[i.2]   IETF RFC 2046: "Multipurpose Internet Mail Extensions (MIME) Part Two: Media Types".

[i.3]   IETF RFC 6931 (April 2013): "Additional XML Security Uniform Resource Identifiers (URIs)".

[i.4]   ETSI EN 319 142-1: "Electronic Signatures and Infrastructures (ESI);PAdES digital signatures; Part 1: Building blocks and PAdES baseline signatures".

[i.5]   ETSI EN 319 122-1: "Electronic Signatures and Infrastructures (ESI); CAdES digital signatures; Part 1: Building blocks and CAdES baseline signatures".

[i.6]   ETSI EN 319 522-4-3: "Electronic Signatures and Infrastructures (ESI); Electronic Registered Delivery Services; Part 4: Bindings; Sub-part 3: Capability/requirements bindings".

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

[i.8]   IETF RFC 5246: "The Transport Layer Security (TLS) Protocol Version 1.2".

[i.9]   IETF RFC 3501: "Internet Message Access Protocol - Version 4rev1".

3   Definition of terms, symbols and abbreviations

3.1   Terms

For the purposes of the present document, the terms given in ETSI EN 319 532-1 [2] apply.

3.2   Symbols

Void.

3.3   Abbreviations

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

ARI	Acceptance/Rejection Interface
CA	Certification Authority
CSI	Common Service Infrastructure
DER	Distinguished Encoding Rules
DNS	Domain Name System
eIDAS	electronic Identification, Authentication and Trust Services
ERD	Electronic Registered Delivery
ERDS	Electronic Registered Delivery Service
ERDSId	Electronic Registered Delivery Identifier
ERDSP	Electronic Registered Delivery Service Provider
ERD-UA	Electronic Registered Delivery - User Agent
ERI	Evidence Retrieval Interface
EU	European Union
HTML	HyperText Markup Language
ID	Identifier
IMAP	Internet Mail Access Protocol
MEPI	Message and Evidence Push Interface
MERI	Message and Evidence Retrieval Interface
MIME	Multipurpose Internet Mail Extensions
MRI	Message Retrieval Interface
MSI	Message Submission Interface
MX	Mail eXchanger
POP	Post Office Protocol
REM	Registered Electronic Mail
REMID	Registered Electronic Mail Identifier
REMS	Registered Electronic Mail Service
REMSP	Registered Electronic Mail Service Provider
RI	Relay Interface
R-REMS	Recipient's REMS
SAML	Security Assertion Markup Language
S&N	Store and Notify
S/MIME	Secure/Multipurpose Internet Mail Extensions
SMIME	Secure Multipurpose Internet Mail Extensions
SMTP	Simple Mail Transfer Protocol
S-REMS	Sender's REMS
TA	Test Assertion
TL	Trusted List
TLS	Transport Layer Security
TSP	Trust Service Provider
UID	Unique IDentifier
URI	Uniform Resource Identifier
URL	Universal Resource Locator
UTF	Unicode Transformation Format
XML	eXtensible Mark-up Language

4   Overview

The present clause describes the main aspects of the technical approach used for specifying the whole set of tests to be performed for testing conformance against ETSI EN 319 532-3 [1] with the scope defined in clause 1 of the present document.

No tests are included testing conformance on requirements not specified in ETSI EN 319 532-3 [1].

The tests are defined using recent developments in testing fields. The selected technology is the test assertions as specified in OASIS Standard, Test Assertions Model Version 1.0 [6].

Each test assertion defined in the present document will include:

1) Unique **identifier** for further referencing. The identifiers of the assertions defined within the present document will start with one code identifying the set of requirements the assertion corresponds to.

2) Reference to the **Normative source** for the test.

3) The **Target** of the assertion. In the normative part, this field identifies services whose technical implementation conforms to the requirements specified in ETSI EN 319 532-3 [1].

4) **Predicate** fully and unambiguously defining the assertion to be tested by tools claiming conformance to the present document.

5) **Prescription level**. Three levels are defined: mandatory, recommended and optional.

6) **Tag**. If assigned to test assertions it allows their categorization and grouping.

5   Test assertions for SMIME section header fields specified by ETSI EN 319 532-3

5.1   Introduction

This clause defines the whole set of assertions required for testing compliance of the requirements defined by ETSI EN 319 532-3 [1] for the header fields present in the following REM messages' MIME section headers:

1) The REMS Relay metadata MIME section header. This defines test assertions for [1], clause 6.2.1.

2) The signed data MIME section header. This defines test assertions for [1], clause 6.2.2.

3) The REMS introduction MIME section header. This defines test assertions for [1], clauses 6.2.3.2 and 6.2.3.3.

4) The original message MIME section header. This defines test assertions for [1], clause 6.2.4.2.

5) The REMS extension MIME section header. This defines test assertions for [1], clause 6.2.5.

6) The ERDS evidence MIME section header. This defines test assertions for [1], clause 6.2.6.

7) The REMS signature MIME section header. This defines test assertions for [1], clause 6.2.7.

5.2   Test assertions for fields in REMS relay metadata MIME Header

REMS/HEADER/REMSRELAY/FIELD/TA_01	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_01
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 Content-Type Presence Mandatory
Target	Conformance to REMS relay metadata MIME section header
Predicate	The 'Content-Type' field of the REMS relay metadata MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_02	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_02
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 Content-Type The value for this header field shall be "multipart/signed": • 'protocol' parameter value shall be "application/pkcs7-signature" • 'micalg' parameter value should be conformant to ETSI TS 119 312 [i.1] • 'boundary' parameter value should be conformant to IETF RFC 2046 [i.2], section 5.1.1
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of 'Content-Type' field of the REMS relay metadata MIME section header is "multipart/signed"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata
REMS/HEADER/REMSRELAY/FIELD/TA_03	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_03
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 Content-Type The value for this header field shall be "multipart/signed": • 'protocol' parameter value shall be "application/pkcs7-signature" • 'micalg' parameter value should be conformant to ETSI TS 119 312 [i.1] • 'boundary' parameter value should be conformant to IETF RFC 2046 [i.2], section 5.1.1
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of parameter 'protocol' of 'Content-Type' field is "application/pkcs7-signature"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_04	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_04
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 Content-Type The value for this header field shall be "multipart/signed": • 'protocol' parameter value shall be "application/pkcs7-signature" • 'micalg' parameter value should be conformant to ETSI TS 119 312 [i.1] • 'boundary' parameter value should be conformant to IETF RFC 2046 [i.2], section 5.1.1
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of parameter 'micalg' of 'Content-Type' field is conformant to ETSI TS 119 312 [i.1]
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_05	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_05
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 Content-Type The value for this header field shall be "multipart/signed": • 'protocol' parameter value shall be "application/pkcs7-signature" • 'micalg' parameter value should be conformant to ETSI TS 119 312 [i.1] • 'boundary' parameter value should be conformant to IETF RFC 2046 [i.2], section 5.1.1
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of parameter 'boundary' of 'Content-Type' field is conformant to IETF RFC 2046 [i.2]
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_06	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_06
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 MIME-Version The value for this header field shall be "1.0"
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of 'MIME-Version' field of the REMS relay metadata MIME section header is "1.0"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_07	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_07
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 MIME-Version Presence Mandatory
Target	Conformance to REMS relay metadata MIME section header
Predicate	The 'MIME-Version' field of the REMS relay metadata MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_08	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_08
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 Message-ID The value for this header field should be an UID as defined in IETF RFC 5322 [4]
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of 'Message-ID' field of the REMS relay metadata MIME section header is an UID as defined in IETF RFC 5322 [4]
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_09	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_09
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 Message-ID Presence Mandatory
Target	Conformance to REMS relay metadata MIME section header
Predicate	The 'Message-ID' field of the REMS relay metadata MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_10	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_10
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 Date The value for this header field shall be compliant with clause 3.3 of IETF RFC 5322 [4]
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of 'Date' field of the REMS relay metadata MIME section header is compliant with clause 3.3 of IETF RFC 5322 [4]
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_11	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_11
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 Date Presence Mandatory
Target	Conformance to REMS relay metadata MIME section header
Predicate	The 'Date' field of the REMS relay metadata MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_12	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_12
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 From The value for this header field should be either a REMSP service address (e.g. "<service_rem_md_x@rem_md_x.com>" or a transformation of the original From field to show the role of the REMSP (e.g. "on behalf of user@rem_md_x.com <service_rem_md_x@rem_md_x.com>")
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of 'From' field of the REMS relay metadata MIME section header is either a REMSP service address or a transformation of the original 'From' field to show the role of the REMSP
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_13	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_13
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 From Presence Mandatory
Target	Conformance to REMS relay metadata MIME section header
Predicate	The 'From' field of the REMS relay metadata MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_14	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_14
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 To In case of a REM dispatch or REM payload the value for this header field shall match the value of the 'To' header field in the original message. In case of a REM message carrying evidence for the sender, the value for this header field may match the value of the 'From' header field in the original message
Target	Conformance to REMS relay metadata MIME section header
Prerequisite	The header is part of a REM Dispatch or REM payload
Predicate	The value of 'To' field of the REMS relay metadata MIME section header matches the value of the To header field in the original message
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_15	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_15
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 To In case of a REM dispatch the value for this header field shall match the value of the 'To' header field in the original message. In case of a REM message carrying evidence for the sender, the value for this header field may match the value of the 'From' header field in the original message
Target	Conformance to REMS relay metadata MIME section header
Prerequisite	The header is part of REM message carrying evidence for the sender
Predicate	The value of 'To' field of the REMS relay metadata MIME section header matches the value of the 'From' header field in the original message
Prescription level	Optional
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_16	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_16
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 To Presence Mandatory
Target	Conformance to REMS relay metadata MIME section header
Predicate	The 'To' field of the REMS relay metadata MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_17	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_17
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 Cc REMS should assign a value to this header field only for REM dispatch. In such case, the value shall match the value of the 'Cc' header field in the original message
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of 'Cc' field of the REMS relay metadata MIME section header matches the value of the 'Cc' header field in the original message
Prescription level	Optional
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_18	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_18
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 Cc Presence Optional
Target	Conformance to REMS relay metadata MIME section header
Predicate	The 'Cc' field of the REMS relay metadata MIME section header is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_19	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_19
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 Subject The value for this header field should be transformed as follows starting from the Subject header field contained in the original sender's message, in order to indicate the role that the REM message has within the flow: REM <event identifier>: <original subject> (E.g.: "REM ContentConsignment: subject_of_original_message")
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of 'Subject' field of the REMS relay metadata MIME section header is the result of transforming the 'Subject' field in the original message as follows: REM <event identifier>: <original 'Subject' field>
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_20	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_20
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 Subject In the case of a REM dispatch this header field should be transformed as "REM Dispatch: <original subject>".
Target	Conformance to REMS relay metadata MIME section header
Prerequisite	If the 'Subject' field is within a REM Dispatch
Predicate	The value of 'Subject' field of the REMS relay metadata MIME section header is the result of transforming the 'Subject' field in the original message as follows: "REM Dispatch: <original subject>"
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_21	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_21
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 Subject Presence Mandatory
Target	Conformance to REMS relay metadata MIME section header
Predicate	The 'Subject' field of the REMS relay metadata MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_22	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_22
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 ReplyTo In the case of a REM dispatch or REM payload the value for this header field shall match the value of the 'From' header field in the original message. In the case of a REM message carrying evidence for the sender, this header field should not appear, and if it appears, its value should be the REM service address
Target	Conformance to REMS relay metadata MIME section header
Prerequisite	The header is part of a REM dispatch or REM payload
Predicate	The value of 'ReplyTo' field of the REMS relay metadata MIME section header matches the value of the 'From' header field in the original message
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_23	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_23
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 ReplyTo In the case of a REM dispatch or REM payload the value for this header field shall match the value of the 'From' header field in the original message. In the case of a REM message carrying evidence for the sender, this header field should not appear, and if it appears, its value should be the REM service address
Target	Conformance to REMS relay metadata MIME section header
Prerequisite	The header is part of a REM message carrying evidence for the sender and the ReplyTo field appears
Predicate	The value of 'ReplyTo' field of the REMS relay metadata MIME section header is the REM service address
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_24	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_24
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 ReplyTo Presence Conditional
Target	Conformance to REMS relay metadata MIME section header
Prerequisite	The header is part of a REM dispatch or REM payload
Predicate	The 'ReplyTo' field of the REMS relay metadata MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_25	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_25
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 ReplyTo Presence Conditional
Target	Conformance to REMS relay metadata MIME section header
Prerequisite	The header is part of a REM message carrying evidence for the sender
Predicate	The 'ReplyTo' field of the REMS relay metadata MIME section header is not present
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_26	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_26
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 Return-Path REMS may assign a value to this header field only for REM dispatch. In such case, the value should match the value of the 'Return-Path' header field in the original message. It should be absent or set to R-REMS receipt's mailbox in ContentConsignment receipt
Target	Conformance to REMS relay metadata MIME section header
Prerequisite	The header is part of a REM dispatch
Predicate	The 'Return-Path' field of the REMS relay metadata MIME section header is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_27	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_27
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 Return-Path REMS may assign a value to this header field only for REM dispatch. In such case, the value should match the value of the 'Return-Path' header field in the original message. It should be absent or set to R-REMS receipt's mailbox in ContentConsignment receipt
Target	Conformance to REMS relay metadata MIME section header
Prerequisite	The header is part of a REM dispatch
Predicate	The value of 'Return-Path' field of the REMS relay metadata MIME section header matches the value of the 'Return-Path' header field in the original message
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_28	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_28
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 Return-Path REMS may assign a value to this header field only for REM dispatch. In such case, the value should match the value of the 'Return-Path' header field in the original message. It should be absent or set to R-REMS receipt's mailbox in ContentConsignment receipt
Target	Conformance to REMS relay metadata MIME section header
Prerequisite	The header is part of a ContentConsigment receipt
Predicate	The value of 'Return-Path' field is either absent or set to R-REMS receipt's mailbox
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_29	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_29
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 Received REMS may assign a value to this header field only for REM dispatch. In such case, the value shall match the value of the 'Received' header field in the original message
Target	Conformance to REMS relay metadata MIME section header
Prerequisite	The header is part of a REM dispatch
Predicate	The value of 'Received' field of the REMS relay metadata MIME section header matches the value of the 'Received' header field in the original message
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_30	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_30
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 Received Presence Conditional
Target	Conformance to REMS relay metadata MIME section header
Prerequisite	The header is part of a REM dispatch
Predicate	The 'Received' field of the REMS relay metadata MIME section header is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_31	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_31
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 Received Presence Conditional
Target	Conformance to REMS relay metadata MIME section header
Prerequisite	The header is not part of a REM dispatch
Predicate	The 'Received' field of the REMS relay metadata MIME section header is not present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_32	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_32
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 In-Reply-To REMS may assign a value to this header field. The value should match the value of the 'In-Reply-To' header field in the original message
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of 'In-Reply-To' field of the REMS relay metadata MIME section header matches the value of the 'In-Reply-To' header field in the original message
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_33	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_33
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 In-Reply-To Presence Optional
Target	Conformance to REMS relay metadata MIME section header
Predicate	The 'In-Reply-To' field of the REMS relay metadata MIME section header is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_34	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_34
Normative source	ETSI EN 319 532-3 [1], clause 6.1 REM-MetadataVersion This value shall be formatted as defined in ETSI EN 319 522-2 [8], clause 6.2.1 - MD01 and it shall contain the version number of the present document according to the format EN31953203<version> (without the 'V')
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of 'REM-MetadataVersion' field of the REMS relay metadata MIME section header is formatted as defined in ETSI EN 319 522-2 [8], clause 6.2.1 - MD01 and it contains the version number of the applicable version of ETSI EN 319 532-3 [1] according to the format EN31953203<version> (without the 'V')
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_35	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_35
Normative source	ETSI EN 319 522-2 [8], clause 6.1 and Table 5 REM-MetadataVersion: Cardinality 1
Target	Conformance to REMS relay metadata MIME section header
Predicate	The 'REM-MetadataVersion' field of the REMS relay metadata MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_36	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_36
Normative source	ETSI EN 319 532-3 [1], clause 6.1 REM-RelayDate The format of this value shall be as defined in ETSI EN 319 522-2 [8], clause 6.2.2 - MD02 and ETSI EN 319 522-3 [9], clause 4.3.7, and mapped according to clause 3.3 of IETF RFC 5322 [4]
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of 'REM- RelayDate' field of the REMS relay metadata MIME section header is as defined in ETSI EN 319 522-2 [8], clause 6.2.2 - MD02 and ETSI EN 319 522-3 [9], clause 4.3.7, and mapped according to clause 3.3 of IETF RFC 5322 [4]
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_37	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_37
Normative source	ETSI EN 319 522-2 [8], clause 6.1 and Table 5 REM-RelayDate: cardinality 0-1
Target	Conformance to REMS relay metadata MIME section header
Predicate	The 'REM-RelayDate' field of the REMS relay metadata MIME section header is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_38	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_38
Normative source	ETSI EN 319 532-3 [1], clause 6.1 REM-ExpirationDate The format of this value shall be as defined in ETSI EN 319 522-2 [8], clause 6.2.3 - MD03 and ETSI EN 319 522-3 [9], clause 4.3.8. Mapped according to clause 3.3 of IETF RFC 5322 [4]
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of 'REM-RelayDate' field of the REMS relay metadata MIME section header is as defined in ETSI EN 319 522-2 [8], clause 6.2.3 - MD03 and ETSI EN 319 522-3 [9], clause 4.3.8. mapped according to clause 3.3 of IETF RFC 5322 [4]
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_39	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_39
Normative source	ETSI EN 319 522-2 [8], clause 6.1 and Table 5 REM-ExpirationDate: cardinality 0-1
Target	Conformance to REMS relay metadata MIME section header
Predicate	The 'REM-ExpirationDate' field of the REMS relay metadata MIME section header is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_40	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_40
Normative source	ETSI EN 319 532-3 [1], clause 6.1 REM-RecipientAssuranceLevel REM-RecipientAssuranceLevel: header field. This value representing the semantic defined in ETSI EN 319 522-2 [8], clause 6.2.4 - MD04 shall be formatted according to the appropriate choices amongst that defined in ETSI EN 319 522-3 [9], clause 4.3.14, and mapped as a URI in REM according to extension mechanisms defined in clause 6.2.1 or clause 6.2.5 for structured information.
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of 'REM-RecipientAssuranceLevel' field of the REMS relay metadata MIME section header is formatted according to the appropriate choices amongst that defined in ETSI EN 319 522-3 [9], clause 4.3.14, and mapped as a URI in REM according to extension mechanisms defined in clause 6.2.1 or clause 6.2.5 for structured information
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_41	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_41
Normative source	ETSI EN 319 522-2 [8], clause 6.1 and Table 5 REM-RecipientAssuranceLevel: cardinality 0-1
Target	Conformance to REMS relay metadata MIME section header
Predicate	The 'REM-RecipientAssuranceLevel' field of the REMS relay metadata MIME section header is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_42	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_42
Normative source	ETSI EN 319 522-2 [8], clause 6.1 and Table 5 REM-ApplicablePolicy: cardinality 0-n If there is more than one applicable policy, then the header field shall appear as many times as needed, and each occurrence shall contain one of the applicable policies
Target	Conformance to REMS relay metadata MIME section header
Predicate	The 'REM-ApplicablePolicy' field of the REMS relay metadata MIME section header is present
Prescription level	Conditional
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_43	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_43
Normative source	ETSI EN 319 532-3 [1], clause 6.1 REM-ApplicablePolicy This value shall be formatted as defined in ETSI EN 319 522-2 [8], clause 6.2.5 - MD05 and ETSI EN 319 522-3 [9], clause 4.3.15
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of 'REM-ApplicablePolicy' field of the REMS relay metadata MIME section header is formatted as defined in ETSI EN 319 522-2 [8], clause 6.2.5 - MD05 and ETSI EN 319 522-3 [9], clause 4.3.15
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_44	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_44
Normative source	ETSI EN 319 522-2 [8], clause 6.1 and Table 5 REM-ApplicablePolicy: cardinality 0-n If there is more than one applicable policy, then the header field shall appear as many times as needed, and each occurrence shall contain one of the applicable policies
Target	Conformance to REMS relay metadata MIME section header
Predicate	The 'REM-ApplicablePolicy' field of the REMS relay metadata MIME section header is present as many times as many applicable policies there are
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_45	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_45
Normative source	ETSI EN 319 532-3 [1], clause 6.1 REM-ModeOfConsignment This value shall be as defined in ETSI EN 319 522-2 [8], clause 6.2.6 - MD06. It shall contain one of the URIs defined in ETSI EN 319 522-3 [9], clause 4.3.16
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of 'REM-ModeOfConsignment' field of the REMS relay metadata MIME section header is as defined in ETSI EN 319 522-2 [8], clause 6.2.6 - MD06 and it contains one of the URIs defined in ETSI EN 319 522-3 [9], clause 4.3.16
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_46	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_46
Normative source	ETSI EN 319 522-2 [8], clause 6.1 and Table 5 REM-ModeOfConsignment: cardinality 0-1
Target	Conformance to REMS relay metadata MIME section header
Predicate	The 'REM-ModeOfConsignment' field of the REMS relay metadata MIME section header is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_47	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_47
Normative source	ETSI EN 319 532-3 [1], clause 6.1 REM-ScheduledDelivery The format of this value shall be as defined in ETSI EN 319 522-2 [8], clause 6.2.7 - MD07 and ETSI EN 319 522-3 [9], clause 4.3.9, and mapped according to clause 3.3 of IETF RFC 5322 [4]
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of 'REM-ScheduledDelivery' field of the REMS relay metadata MIME section header is formatted as defined in ETSI EN 319 522-2 [8], clause 6.2.7 - MD07 and ETSI EN 319 522-3 [9], clause 4.3.9, and mapped according to clause 3.3 of IETF RFC 5322 [4]
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_48	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_48
Normative source	ETSI EN 319 522-2 [8], clause 6.1 and Table 5 REM-ScheduledDelivery: cardinality 0-1
Target	Conformance to REMS relay metadata MIME section header
Predicate	The 'REM-ScheduledDelivery' field of the REMS relay metadata MIME section header is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_49	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_49
Normative source	ETSI EN 319 532-3 [1], clause 6.1 REM-MessageType This value shall be as defined in ETSI EN 319 522-2 [8], clause 6.2.13 - MD13. It shall contain one of the URIs defined in ETSI EN 319 522-3 [9], clause 4.3.5, except in case of REMS notification, when the value shall be: http://uri.etsi.org/19522/v1#/ERDMessageType/notification
Target	Conformance to REMS relay metadata MIME section header
Prerequisite	The 'REM-MessageType' field is not part of a REMS notification message
Predicate	The value of 'REM-MessageType' field of the REMS relay metadata MIME section header is as defined in ETSI EN 319 522-2 [8], clause 6.2.13 - MD13, and it contains one the URIs defined in ETSI EN 319 522-3 [9], clause 4.3.5
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_50	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_50
Normative source	ETSI EN 319 532-3 [1], clause 6.1 REM-MessageType This value shall be as defined in ETSI EN 319 522-2 [8], clause 6.2.13 - MD13. It shall contain one of the URIs defined in ETSI EN 319 522-3 [9], clause 4.3.5, except in case of REMS notification, when the value shall be: http://uri.etsi.org/19522/v1#/ERDMessageType/notification
Target	Conformance to REMS relay metadata MIME section header
Prerequisite	The 'REM-MessageType' field is part of a REMS notification message
Predicate	The value of 'REM-MessageType' field of the REMS relay metadata MIME section header is http://uri.etsi.org/19522/v1#/ERDMessageType/notification
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_51	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_51
Normative source	ETSI EN 319 522-2 [8], clause 6.1 and Table 5 REM-MessageType: cardinality 1
Target	Conformance to REMS relay metadata MIME section header
Predicate	The 'REM-MessageType' field of the REMS relay metadata MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_52	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_52
Normative source	ETSI EN 319 532-3 [1], clause 6.1 REM-DigestAlgorithm This value shall be as defined in ETSI EN 319 522-2 [8], clause 6.2.14 - MD14 and ETSI EN 319 522-3 [9], clause 4.3.13 In REM it should be mapped as a URI compliant with section 4.2 of IETF RFC 6931 [i.3]
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of 'REM-DigestAlgorithm' field of the REMS relay metadata MIME section header is as defined in ETSI EN 319 522-2 [8], clause 6.2.14 - MD14 and ETSI EN 319 522-3 [9], clause 4.3.13
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_53	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_53
Normative source	ETSI EN 319 532-3 [1], clause 6.1 REM-DigestAlgorithm This value shall be as defined in ETSI EN 319 522-2 [8], clause 6.2.14 - MD14 and ETSI EN 319 522-3 [9], clause 4.3.13 In REM it should be mapped as a URI compliant with section 4.2 of IETF RFC 6931 [i.3]
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of 'REM-DigestAlgorithm' field of the REMS relay metadata MIME section header is mapped as a URI compliant with section 4.2 of IETF RFC 6931 [i.3]
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_54	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_54
Normative source	ETSI EN 319 522-2 [8], clause 6.1 and Table 5 REM-DigestAlgorithm: cardinality 1
Target	Conformance to REMS relay metadata MIME section header
Predicate	The 'REM-DigestAlgorithm' field of the REMS relay metadata MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_55	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_55
Normative source	ETSI EN 319 532-3 [1], clause 6.1 REM-DigestValue This value shall be as defined in ETSI EN 319 522-2 [8], clause 6.2.14 - MD14 and ETSI EN 319 522-3 [9], clause 4.3.13 In REM it should contain the base64 encoded digest value of original message as computed using the digest algorithm indicated in the aforementioned header field
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of 'REM-DigestAlgorithm' field of the REMS relay metadata MIME section header is as defined in ETSI EN 319 522-2 [8], clause 6.2.14 - MD14 and ETSI EN 319 522-3 [9], clause 4.3.13
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_56	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_56
Normative source	ETSI EN 319 532-3 [1], clause 6.1 REM-DigestValue This value shall be as defined in ETSI EN 319 522-2 [8], clause 6.2.14 - MD14 and ETSI EN 319 522-3 [9], clause 4.3.13 In REM it should contain the base64 encoded digest value of original message as computed using the digest algorithm indicated in the aforementioned header field
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of 'REM-DigestAlgorithm' field of the REMS relay metadata MIME section header contains the base64 encoded digest value of original message as computed using the digest algorithm indicated in the aforementioned header field
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_57	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_57
Normative source	ETSI EN 319 522-2 [8], clause 6.1 and Table 5 REM-DigestValue: cardinality 1
Target	Conformance to REMS relay metadata MIME section header
Predicate	The 'REM-DigestValue' field of the REMS relay metadata MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_58	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_58
Normative source	ETSI EN 319 532-3 [1], clause 6.1 REM-UAMessageIdentifier shall be as defined in ETSI EN 319 522-2 [8], clause 6.2.11 - MD11 (mapped with Application layer protocol identifier, clause 6.2.14 - MD14) and ETSI EN 319 522-3 [9], clause 4.3.4 (where is defined as AppLayerIdentifier ETSI EN 319 522-3 [9], clause 4.3.13). In REM it should contain the Message-ID value of the original message submitted by the ERD-UA.
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of 'REM-UAMessageIdentifier' field of the REMS relay metadata MIME section header is as defined in ETSI EN 319 522-2 [8], clause 6.2.11 and ETSI EN 319 522-3 [9], clause 4.3.4
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_59	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_59
Normative source	ETSI EN 319 532-3 [1], clause 6.1 REM-UAMessageIdentifier shall be as defined in ETSI EN 319 522-2 [8], clause 6.2.11 - MD11 (mapped with Application layer protocol identifier, clause 6.2.14 - MD14) and ETSI EN 319 522-3 [9], clause 4.3.4 (where is defined as AppLayerIdentifier ETSI EN 319 522-3 [9], clause 4.3.13). In REM it should contain the Message-ID value of the original message submitted by the ERD-UA.
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of 'REM-UAMessageIdentifier' field of the REMS relay metadata MIME section header contains the Message-ID value of the original message submitted by the ERD-UA
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_60	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_60
Normative source	ETSI EN 319 522-2 [8], clause 6.1 and Table 5 REM-UAMessageIdentifier: cardinality 0-1
Target	Conformance to REMS relay metadata MIME section header
Predicate	The 'REM-UAMessageIdentifier' field of the REMS relay metadata MIME section header is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_61	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_61
Normative source	ETSI EN 319 532-3 [1], clause 6.1 REM-EventIdentifier This value shall be as defined in ETSI EN 319 522-2 [8], clause 8.2.3 - G03. It shall contain a URI defined in Table 3 of ETSI EN 319 522-3 [9], clause 5.2.2.5
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of 'REM-EventIdentifier' field of the REMS relay metadata MIME section header is as defined in ETSI EN 319 522-2 [8], clause 8.2.3 - G03
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_62	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_62
Normative source	ETSI EN 319 532-3 [1], clause 6.1 REM-EventIdentifier This value shall be as defined in ETSI EN 319 522-2 [8], clause 8.2.3 - G03. It shall contain a URI defined in Table 2 of ETSI EN 319 522-3 [9], clause 5.2.2.5
Target	Conformance to REMS relay metadata MIME section header
Predicate	The value of 'REM-EventIdentifier' field of the REMS relay metadata MIME section header contains one of the URIs defined in Table 3 of ETSI EN 319 522-3 [9], clause 5.2.2.5
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_63	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_63
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 REM-EventIdentifier The present header section of a REM message shall contain the following header fields according to the requirements of presence and format defined in Table 2 of ETSI EN 319 532-3 [1] • REM-EventIdentifier
Target	Conformance to REMS relay metadata MIME section header
Predicate	The 'REM-EventIdentifier' field of the REMS relay metadata MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_64						
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_64					
Normative source	ETSI EN 319 532-4 [11],clause 5.4.1					
	Nº	Service/Protocol element	ETSI EN 319 532-3 [1] reference	Requirement	Implementation guidance	Notes
	4	REM-ReasonIdentifier	Clause 6.2.1	R	d)	
Target	Conformance to REMS relay metadata MIME section header in REM Baseline					
Predicate	The value of 'REM-Evidence-ID' field of the REMS relay metadata MIME section header is present					
Prescription level	Mandatory					
Tag	Conformance, REM Baseline, REMS, REMSP, REMS relay metadata					

REMS/HEADER/REMSRELAY/FIELD/TA_65	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_65
Normative source	REM-ReasonIdentifier: ETSI EN 319 532-3 [1], clause 6.1, Table 2 This value shall be as defined in ETSI EN 319 522-2 [8], clause 8.2.3 - G04. It shall contain the reason identifier component and in REM it should be mapped as a URI. It may be mapped according to extension mechanisms defined in ETSI EN 319 532-3 [1], clause 6.2.1 or clause 6.2.5 for structured information.
Target	Conformance to REMS relay metadata MIME section header in REM Baseline
Predicate	The value of 'REM-Evidence-ID' field of the REMS relay metadata MIME section header is mapped according to extension mechanisms defined in ETSI EN 319 532-3 [1], clause 6.2.1 or clause 6.2.5 for structured information.
Prescription level	Optional
Tag	Conformance, REM Baseline, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_66	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_66
Normative source	REM-ReasonIdentifier: ETSI EN 319 532-3 [1], clause 6.1, Table 2 This value shall be as defined in ETSI EN 319 522-2 [8] , clause 8.2.3 - G04. It shall contain the reason identifier component and in REM it should be mapped as a URI. It may be mapped according to extension mechanisms defined in clause 6.2.1 or clause 6.2.5 for structured information.
Target	Conformance to REMS relay metadata MIME section header in REM Baseline
Predicate	The value of 'REM-Evidence-ID' field of the REMS relay metadata MIME section header is as defined in ETSI EN 319 522-2 [8], clause 8.2.3 - G04.
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_67	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_67
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 Furthermore, the header section of each REM message may contain other basic extension header fields The syntax of these basic extension header fields shall be as follows: `REM-<component>: <value>`
Target	Conformance to REMS relay metadata MIME section header
Predicate	Additional basic headers not specified in ETSI EN 319 532-3 [1] are present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_68	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_68
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 Furthermore, the header section of each REM message may contain other basic extension header fields The syntax of these basic extension header fields shall be as follows: `REM-<component>: <value>`
Target	Conformance to REMS relay metadata MIME section header
Prerequisite	Additional basic headers not specified in ETSI EN 319 532-3 [1] are present
Predicate	The name of any additional basic header not specified in ETSI EN 319 532-3 [1] starts with "REM-"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_69	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_69
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 The same naming mechanism should be used also for other implementation-specific or custom header fields
Target	Conformance to REMS relay metadata MIME section header
Predicate	Additional implementation-specific or custom header fields not specified in ETSI EN 319 532-3 [1] are present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_70	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_70
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 The same naming mechanism should be used also for other implementation-specific or custom header fields
Target	Conformance to REMS relay metadata MIME section header
Prerequisite	Additional implementation-specific or custom header fields not specified in ETSI EN 319 532-3 [1] are present
Predicate	The name of any implementation-specific or custom header field not specified in ETSI EN 319 532-3 [1] starts with "REM-"
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_71	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_71
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 In case the character set of the <value> to assign to any aforementioned header fields is not compliant with the supported email standards, a base64 encoding should be used for a consistent representation in a unique header field body
Target	Conformance to REMS relay metadata MIME section header
Prerequisite	The character set of the <value> to assign to an additional basic header, or to an implementation-specific, or to a custom header field not specified in ETSI EN 319 532-3 [1], is not compliant with the supported email standards
Predicate	The <value> uses a base64 encoding for a consistent representation in a unique header field body
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_72	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_72
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 In case of structured information, not easily convertible to a simple header body, the REMS structured extension defined in clause 6.2.5 may be used to host the full structure in a specific file as attachment.
Target	Conformance to REMS relay metadata MIME section header
Prerequisite	The structured information is not easily convertible to a simple header body
Predicate	Use the REMS structured extension defined in clause 6.2.5 to host the full structure in a specific file as attachment
Prescription level	Optional
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_73	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_73
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 In REMS operating in Store&Notify style of operation, the present header section of the REMS notification shall contain also the following header field, according to the requirements defined in ETSI EN 319 532-2 [14], clause 6.2.1: • REM-AcceptanceRejectionInterfaceLocation: <URI>
Target	Conformance to REMS relay metadata MIME section header
Prerequisite	REMS is operating in Store&Notify style and the message is a REMS Notification
Predicate	This header field is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_74	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_74
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 In REMS operating in Store&Notify style of operation, the present header section of the REMS notification shall contain also the following header field, according to the requirements defined in ETSI EN 319 532-2 [14], clause 6.2.1: • REM-AcceptanceRejectionInterfaceLocation: <URI>
Target	Conformance to REMS relay metadata MIME section header
Prerequisite	REMS is operating in Store&Notify style and the message is NOT a REMS Notification
Predicate	This header field is not present
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, REMS relay metadata

REMS/HEADER/REMSRELAY/FIELD/TA_75	
TA Id	REMS/HEADER/REMSRELAY/FIELD/TA_75
Normative source	ETSI EN 319 532-3 [1], clause 6.2.1 In REMS operating in Store&Notify style of operation, the present header section of the REMS notification shall contain also the following header field, according to the requirements defined in ETSI EN 319 532-2 [14], clause 6.2.1: • REM-AcceptanceRejectionInterfaceLocation: <URI>
Target	Conformance to REMS relay metadata MIME section header
Prerequisite	REMS is operating in Store&Notify style
Predicate	This header field has an URI as value
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS relay metadata

5.3   Test assertions for fields in the signed data MIME section header

REMS/HEADER/SIGDATA/FIELD/TA_01	
TA Id	REMS/HEADER/SIGDATA/FIELD/TA_01
Normative source	ETSI EN 319 532-3 [1], clause 6.2.2 Content-Type The value for this header field shall be: "multipart/mixed" 'boundary' parameter value should be conformant to IETF RFC 2046 [i.2], section 5.1.1
Target	Conformance to SignedData MIME section header
Predicate	The value of 'Content-Type' field of the SignedData MIME section header is "multipart/mixed"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, SignedData MIME Header

REMS/HEADER/SIGDATA/FIELD/TA_02	
TA Id	REMS/HEADER/SIGDATA/FIELD/TA_02
Normative source	ETSI EN 319 532-3 [1], clause 6.2.2 Content-Type The value for this header field shall be: "multipart/mixed" 'boundary' parameter value should be conformant to IETF RFC 2046 [i.2], section 5.1.1
Target	Conformance to SignedData MIME section header
Predicate	The value of the parameter 'boundary' of 'Content-Type' field of the SignedData MIME section header is conformant to IETF RFC 2046 [i.2], section 5.1.1
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, SignedData MIME Header

REMS/HEADER/SIGDATA/FIELD/TA_03	
TA Id	REMS/HEADER/SIGDATA/FIELD/TA_03
Normative source	ETSI EN 319 532-3 [1], clause 6.2.2 Content-Type Presence Mandatory
Target	Conformance to SignedData MIME section header
Predicate	The 'Content-Type' field of the SignedData MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, SignedData MIME Header

5.4   Test assertions for fields in REMS introduction MIME section header

5.4.1   Test assertions for Introduction MIME section header

This clause defines test assertions for the headers in the Introduction MIME section. Clauses 5.4.2 and 5.4.3 define test assertions for headers in the two alternative MIME sub-sections, namely the free-text, and the HTML sub-sections.

REMS/HEADER/INTRO/FIELD/TA_01	
TA Id	REMS/HEADER/INTRO/FIELD/TA_01
Normative source	ETSI EN 319 532-3 [1], clause 6.2.3.1 REM-Section-Type The value of this field should be "rem_message/introduction"
Target	Conformance to Introduction MIME section header
Predicate	The value of 'REM-Section-Type' field of the Introduction MIME section header is "rem_message/introduction"
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, Introduction MIME Header

REMS/HEADER/INTRO/FIELD/TA_02	
TA Id	REMS/HEADER/INTRO/FIELD/TA_02
Normative source	ETSI EN 319 532-3 [1], clause 6.2.3.1 REM-Section-Type Presence Optional
Target	Conformance to Introduction MIME section header
Predicate	The 'REM-Section-Type' field of the Introduction MIME section header is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, Introduction MIME Header

REMS/HEADER/INTRO/FIELD/TA_03	
TA Id	REMS/HEADER/INTRO/FIELD/TA_03
Normative source	ETSI EN 319 532-3 [1], clause 6.2.3.1 Content-Type The value for this field shall be: "multipart/alternative" 'boundary' parameter value should be conformant to IETF RFC 2046 [i.2], section 5.1.1
Target	Conformance to Introduction MIME section header
Predicate	The value of 'Content-Type' field of the Introduction MIME section header is "multipart/alternative"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Introduction MIME Header

REMS/HEADER/INTRO/FIELD/TA_04	
TA Id	REMS/HEADER/INTRO/FIELD/TA_04
Normative source	ETSI EN 319 532-3 [1], clause 6.2.3.1 Content-Type The value for this field shall be: "multipart/alternative" 'boundary' parameter value should be conformant to IETF RFC 2046 [i.2], section 5.1.1
Target	Conformance to Introduction MIME section header
Predicate	The value of the parameter 'boundary' of 'Content-Type' field of the Introduction MIME section header is conformant to IETF RFC 2046 [i.2], section 5.1.1
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, Introduction MIME Header

REMS/HEADER/INTRO/FIELD/TA_05	
TA Id	REMS/HEADER/INTRO/FIELD/TA_05
Normative source	ETSI EN 319 532-3 [1], clause 6.2.3.1 Content-Type Presence Mandatory
Target	Conformance to Introduction MIME section header
Predicate	The 'Content-Type' field of the Introduction MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Introduction MIME Header

5.4.2 Test assertions for free text MIME subsection header

REMS/HEADER/INTRO/FREETEXT/FIELD/TA_01	
TA Id	REMS/HEADER/INTRO/FREETEXT/FIELD/TA_01
Normative source	ETSI EN 319 532-3 [1], clause 6.2.3.2 Content-Type The value for this field shall be: "text/plain" 'charset' parameter value should be "UTF-8"
Target	Conformance to Introduction MIME section header, Free Text sub-section MIME header
Predicate	The value of 'Content-Type' field of the free text MIME sub-section header within Introduction MIME section, is "text/plain"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Introduction MIME Header, Free text sub-section MIME Header

REMS/HEADER/INTRO/FREETEXT/FIELD/TA_02	
TA Id	REMS/HEADER/INTRO/FREETEXT/FIELD/TA_02
Normative source	ETSI EN 319 532-3 [1], clause 6.2.3.2 Content-Type The value for this field shall be: "text/plain". 'charset' parameter value should be "UTF-8"
Target	Conformance to Introduction MIME section header, Free Text sub-section MIME header
Predicate	The value of the parameter 'charset' of 'Content-Type' field of the free text MIME sub-section header within Introduction MIME section, is "UTF-8"
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, Introduction MIME Header, Free text sub-section MIME Header

REMS/HEADER/INTRO/FREETEXT/FIELD/TA_03	
TA Id	REMS/HEADER/INTRO/FREETEXT/FIELD/TA_03
Normative source	ETSI EN 319 532-3 [1], clause 6.2.3.2 Content-Type Presence Mandatory
Target	Conformance to Introduction MIME section header, Free Text sub-section MIME header
Predicate	The 'Content-Type' field of the free text MIME sub-section header within Introduction MIME section is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Introduction MIME Header, Free text sub-section MIME Header

REMS/HEADER/INTRO/FREETEXT/FIELD/TA_04	
TA Id	REMS/HEADER/INTRO/FREETEXT/FIELD/TA_04
Normative source	ETSI EN 319 532-3 [1], clause 6.2.3.2 Content-Disposition The value of this header field shall be "inline" in order to display the present body part automatically, upon display of the message in mail client
Target	Conformance to Introduction MIME section header, Free Text sub-section MIME header
Predicate	The value of 'Content-Disposition' field of the free text MIME sub-section header within Introduction MIME section, is "inline"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Introduction MIME Header, Free text sub-section MIME Header

REMS/HEADER/INTRO/FREETEXT/FIELD/TA_05	
TA Id	REMS/HEADER/INTRO/FREETEXT/FIELD/TA_05
Normative source	ETSI EN 319 532-3 [1], clause 6.2.3.2 Content-Disposition Presence Optional
Target	Conformance to Introduction MIME section header, Free Text sub-section MIME header
Predicate	The 'Content-Disposition' field of the free text MIME sub-section header within Introduction MIME section is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, Introduction MIME Header, Free text sub-section MIME Header

REMS/HEADER/INTRO/FREETEXT/FIELD/TA_06	
TA Id	REMS/HEADER/INTRO/FREETEXT/FIELD/TA_06
Normative source	ETSI EN 319 532-3 [1], clause 6.2.3.2 Content-Transfer-Encoding The value for this field should be: 7bit, 8bit or quoted-printable
Target	Conformance to Introduction MIME section header, Free Text sub-section MIME header
Predicate	The value of 'Content-Transfer-Encoding' field of the free text MIME sub-section header within Introduction MIME section, is either "7bit", "8bit", or "quoted-printable"
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, Introduction MIME Header, Free text sub-section MIME Header

REMS/HEADER/INTRO/FREETEXT/FIELD/TA_07	
TA Id	REMS/HEADER/INTRO/FREETEXT/FIELD/TA_07
Normative source	ETSI EN 319 532-3 [1], clause 6.2.3.2 Content-Transfer-Encoding Presence Mandatory
Target	Conformance to Introduction MIME section header, Free Text sub-section MIME header
Predicate	The 'Content-Transfer-Encoding' field of the free text MIME sub-section header within Introduction MIME section is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Introduction MIME Header, Free text sub-section MIME Header

5.4.3 Test assertions for HTML MIME subsection header

REMS/HEADER/INTRO/HTML/FIELD/TA_01	
TA Id	REMS/HEADER/INTRO/HTML/FIELD/TA_01
Normative source	ETSI EN 319 532-3 [1], clause 6.2.3.3 Content-Type The value for this field shall be: "text/html;". 'charset' parameter value should be "UTF-8"
Target	Conformance to Introduction MIME section header, HTML sub-section MIME header
Predicate	The value of 'Content-Type' field of the HTML MIME sub-section header within Introduction MIME section, is "text/html"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Introduction MIME Header, HTML sub-section MIME Header

REMS/HEADER/INTRO/HTML/FIELD/TA_02	
TA Id	REMS/HEADER/INTRO/HTML/FIELD/TA_02
Normative source	ETSI EN 319 532-3 [1], clause 6.2.3.3 Content-Type The value for this field shall be: "text/html;" 'charset' parameter value should be "UTF-8"
Target	Conformance to Introduction MIME section header, HTML sub-section MIME header
Predicate	The value of the parameter 'charset' of 'Content-Type' field of the HTML MIME sub-section header within Introduction MIME section, is "UTF-8"
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, Introduction MIME Header, HTML sub-section MIME Header

REMS/HEADER/INTRO/HTML/FIELD/TA_03	
TA Id	REMS/HEADER/INTRO/HTML/FIELD/TA_03
Normative source	ETSI EN 319 532-3 [1], clause 6.2.3.3 Content-Type Presence Mandatory
Target	Conformance to Introduction MIME section header, HTML sub-section MIME header
Predicate	The 'Content-Type' field of the HTML MIME sub-section header within Introduction MIME section is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Introduction MIME Header, HTML sub-section MIME Header

REMS/HEADER/INTRO/HTML/FIELD/TA_04	
TA Id	REMS/HEADER/INTRO/HTML/FIELD/TA_04
Normative source	ETSI EN 319 532-3 [1], clause 6.2.3.3 Content-Transfer-Encoding The value for this field should be: 7bit, 8bit or quoted-printable
Target	Conformance to Introduction MIME section header, HTML sub-section MIME header
Predicate	The value of 'Content-Transfer-Encoding' field of the HTML MIME sub-section header within Introduction MIME section, is either "7bit", "8bit", or "quoted-printable"
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, Introduction MIME Header, HTML sub-section MIME Header

REMS/HEADER/INTRO/HTML/FIELD/TA_05	
TA Id	REMS/HEADER/INTRO/HTML/FIELD/TA_05
Normative source	ETSI EN 319 532-3 [1], clause 6.2.3.3 Content-Transfer-Encoding Presence Mandatory
Target	Conformance to Introduction MIME section header, HTML sub-section MIME header
Predicate	The 'Content-Transfer-Encoding' field of the HTML MIME sub-section header within Introduction MIME section is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Introduction MIME Header, HTML sub-section MIME Header

5.5 Test assertions for fields in original message MIME section header

REMS/HEADER/ORMESS/FIELD/TA_01	
TA Id	REMS/HEADER/ORMESS/FIELD/TA_01
Normative source	ETSI EN 319 532-3 [1], clause 6.2.4 Content-Type The value for this field shall be: "message/rfc822". 'name' parameter value shall be "AttachedMimeMessage"
Target	Conformance to Original Message MIME section header
Predicate	The value of 'Content-Type' field of the Original Message MIME section header, is "message/rfc822"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Original Message MIME Header

REMS/HEADER/ORMESS/FIELD/TA_02	
TA Id	REMS/HEADER/ORMESS/FIELD/TA_02
Normative source	ETSI EN 319 532-3 [1], clause 6.2.4 Content-Type The value for this field shall be: "message/rfc822" 'name' parameter value shall be "AttachedMimeMessage"
Target	Conformance to Original Message MIME section header
Predicate	The value of the parameter 'name' of 'Content-Type' field of the Original Message MIME section header, is "AttachedMimeMessage"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Original Message MIME Header

REMS/HEADER/ORMESS/FIELD/TA_03	
TA Id	REMS/HEADER/ORMESS/FIELD/TA_03
Normative source	ETSI EN 319 532-3 [1], clause 6.2.4 Content-Type Presence Mandatory
Target	Conformance to Original Message MIME section header
Predicate	The 'Content-Type' field of the Original Message MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Original Message MIME Header

REMS/HEADER/ORMESS/FIELD/TA_04	
TA Id	REMS/HEADER/ORMESS/FIELD/TA_04
Normative source	ETSI EN 319 532-3 [1], clause 6.2.4 Content-Transfer-Encoding The value of this header field shall be `binary`
Target	Conformance to Original Message MIME section header
Predicate	The value of 'Content-Transfer-Encoding' field of the Original Message MIME section header, is "binary"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Original Message MIME Header

REMS/HEADER/ORMESS/FIELD/TA_05	
TA Id	REMS/HEADER/ORMESS/FIELD/TA_05
Normative source	ETSI EN 319 532-3 [1], clause 6.2.4 Content-Transfer-Encoding Presence Mandatory
Target	Conformance to Original Message MIME section header
Predicate	The 'Content-Transfer-Encoding' field of the Original Message MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Original Message MIME Header

REMS/HEADER/ORMESS/FIELD/TA_06	
TA Id	REMS/HEADER/ORMESS/FIELD/TA_06
Normative source	ETSI EN 319 532-3 [1], clause 6.2.4 Content-Disposition The value for this field shall be: "attachment". 'filename' parameter value shall match the value of the 'name' parameter of the Content-Type: header field
Target	Conformance to Original Message MIME section header
Predicate	The value of 'Content-Disposition' field of the Original Message MIME section header, is "attachment"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Original Message MIME Header

REMS/HEADER/ORMESS/FIELD/TA_07	
TA Id	REMS/HEADER/ORMESS/FIELD/TA_07
Normative source	ETSI EN 319 532-3 [1], clause 6.2.4 Content-Disposition The value for this field shall be: "attachment" 'filename' parameter value shall match the value of the 'name' parameter of the Content-Type: header field
Target	Conformance to Original Message MIME section header
Predicate	The value of the parameter 'filename' of 'Content-Disposition' field of the Original Message MIME section header matches the value of the 'name' parameter of the Content-Type: header field
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Original Message MIME Header

REMS/HEADER/ORMESS/FIELD/TA_08	
TA Id	REMS/HEADER/ORMESS/FIELD/TA_08
Normative source	ETSI EN 319 532-3 [1], clause 6.2.4 Content-Disposition Presence Mandatory
Target	Conformance to Original Message MIME section header
Predicate	The 'Content-Disposition' field of the Original Message MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Original Message MIME Header

REMS/HEADER/ORMESS/FIELD/TA_09	
TA Id	REMS/HEADER/ORMESS/FIELD/TA_09
Normative source	ETSI EN 319 532-3 [1], clause 6.2.4 Content-Description Presence Optional
Target	Conformance to Original Message MIME section header
Predicate	The 'Content-Description' field of the Original Message MIME section header is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, Original Message MIME Header

REMS/HEADER/ORMESS/FIELD/TA_10	
TA Id	REMS/HEADER/ORMESS/FIELD/TA_10
Normative source	ETSI EN 319 532-3 [1], clause 6.2.4 REM-Section-Type The value of this field should be "rem_message/original"
Target	Conformance to Original Message MIME section header
Predicate	The value of 'REM-Section-Type' field of the Original Message MIME section header, is "rem_message/original"
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, Original Message MIME Header

REMS/HEADER/ORMESS/FIELD/TA_11	
TA Id	REMS/HEADER/ORMESS/FIELD/TA_11
Normative source	ETSI EN 319 532-3 [1], clause 6.2.4 REM-Section-Type Presence Optional
Target	Conformance to Original Message MIME section header
Predicate	The REM-Section-Type' field of the Original Message MIME section header is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, Original Message MIME Header

REMS/HEADER/ORMESS/FIELD/TA_12	
TA Id	REMS/HEADER/ORMESS/FIELD/TA_12
Normative source	ETSI EN 319 532-3 [1], clause 6.2.4 Changes in headers of the original message The REMS may modify some header fields of the original message, only if the change is limited to what is strictly necessary for the good working of the REM exchange of information
Target	Conformance to Original Message MIME section header
Prerequisite	The good working of the REM exchange of information requires modification of some headers of the original message
Predicate	The changes are done in the required headers of the original message
Prescription level	Optional
Tag	Conformance, REMS, REMSP, Original Message MIME Header

REMS/HEADER/ORMESS/FIELD/TA_13	
TA Id	REMS/HEADER/ORMESS/FIELD/TA_13
Normative source	ETSI EN 319 532-3 [1], clause 6.2.4 Changes in headers of the original message Furthermore, any necessary change shall be clearly indicated to the sender (e.g. in the evidence) and to the recipient (e.g. in the evidence and/or in the introduction message defined in clause 6.2.3.4 of ETSI EN 319 532-3 [1]
Target	Conformance to Original Message MIME section header
Prerequisite	The good working of the REM exchange of information required modification of some headers of the original message and the modifications were done
Predicate	The changes are clearly indicated to the sender and to the recipient
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Original Message MIME Header

5.6   Test assertions for fields in REMS extension MIME section header

REMS/HEADER/EXT/FIELD/TA_01	
TA Id	REMS/HEADER/EXT/FIELD/TA_01
Normative source	ETSI EN 319 532-3 [1], clause 6.2.5 Content-Type The value for this header field should be either "application/xml" or application/octet-stream or message/rfc822. . 'name' parameter value "<REM_EXTENSION_NAME>" should be pertinent with the name or the purpose of the extension . 'charset' parameter value should be "UTF-8" in case of xml attachments.
Target	Conformance to Extension MIME section header
Predicate	The value of 'Content-Type' field of the Extension MIME section header is either "application/xml" or "application/octet-stream" or "message/rfc822"
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, Extension MIME header

REMS/HEADER/EXT/FIELD/TA_02	
TA Id	REMS/HEADER/EXT/FIELD/TA_02
Normative source	ETSI EN 319 532-3 [1], clause 6.2.5 Content-Type The value for this header field should be either "application/xml" or application/octet-stream or message/rfc822. . 'name' parameter value "<REM_EXTENSION_NAME>" should be pertinent with the name or the purpose of the extension . 'charset' parameter value should be "UTF-8" in case of xml attachmentsof xml attachments
Target	Conformance to Extension MIME section header
Prerequisite	The extension contains structured metadata or evidence component
Predicate	The value of parameter 'name' of 'Content-Type' field of the Extension MIME section header is based on the component name identifying the related metadata or evidence component in Table 5 or Table 6 of ETSI EN 319 522-2 [8]
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, Extension MIME header

REMS/HEADER/EXT/FIELD/TA_03	
TA Id	REMS/HEADER/EXT/FIELD/TA_03
Normative source	ETSI EN 319 532-3 [1], clause 6.2.5 Content-Type The value for this header field should be either "application/xml" or application/octet-stream or message/rfc822. . 'name' parameter value "<REM_EXTENSION_NAME>" should be pertinent with the name or the purpose of the extension . OR 'charset' parameter value should be "UTF-8" in case of xml attachments
Target	Conformance to Extension MIME section header
Prerequisite	The extension is a XML attachment
Predicate	The value of parameter 'charset' of 'Content-Type' field of Extension MIME section header is "UTF-8"
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, Extension MIME header

REMS/HEADER/EXT/FIELD/TA_04	
TA Id	REMS/HEADER/EXT/FIELD/TA_04
Normative source	ETSI EN 319 532-3 [1], clause 6.2.5 Content-Type Presence Mandatory
Target	Conformance to Extension MIME section header
Predicate	The 'Content-Type' field of the Extension MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Extension MIME header

REMS/HEADER/EXT/FIELD/TA_05	
TA Id	REMS/HEADER/EXT/FIELD/TA_05
Normative source	ETSI EN 319 532-3 [1], clause 6.2.5 Content-Transfer-Encoding The value of this header field shall be either "quoted-printable", "base64" or "binary"
Target	Conformance to Extension MIME section header
Predicate	The value of 'Content-Transfer-Encoding' field of the Extension MIME section header is either "quoted-printable", "base64" or "binary"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Extension MIME header

REMS/HEADER/EXT/FIELD/TA_06	
TA Id	REMS/HEADER/EXT/FIELD/TA_06
Normative source	ETSI EN 319 532-3 [1], clause 6.2.5 Content-Transfer-Encoding Presence Mandatory
Target	Conformance to Extension MIME section header
Predicate	The 'Content-Transfer-Encoding' field of the Extension MIME section header is present
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, Extension MIME header

REMS/HEADER/EXT/FIELD/TA_07	
TA Id	REMS/HEADER/EXT/FIELD/TA_07
Normative source	ETSI EN 319 532-3 [1], clause 6.2.5 Content-Disposition The value of this header field shall be "attachment": • 'filename' parameter value shall match the value of the 'name' parameter of the Content-Type header field
Target	Conformance to Extension MIME section header
Predicate	The value of 'Content-Disposition' field of the Extension MIME section header is "attachment"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Extension MIME header

REMS/HEADER/EXT/FIELD/TA_08	
TA Id	REMS/HEADER/EXT/FIELD/TA_08
Normative source	ETSI EN 319 532-3 [1], clause 6.2.5 Content-Disposition The value of this header field shall be "attachment": • 'filename' parameter value shall match the value of the 'name' parameter of the Content-Type header field
Target	Conformance to Extension MIME section header
Predicate	The value of parameter 'filename' of 'Content-Disposition' field of the Extension MIME section header matches the value of the 'name' parameter of the 'Content-Type' header field
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Extension MIME header

REMS/HEADER/EXT/FIELD/TA_09	
TA Id	REMS/HEADER/EXT/FIELD/TA_09
Normative source	ETSI EN 319 532-3 [1], clause 6.2.5 Content-Disposition Presence Mandatory
Target	Conformance to Extension MIME section header
Predicate	The 'Content-Disposition' field of the Extension MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Extension MIME header

REMS/HEADER/EXT/FIELD/TA_10	
TA Id	REMS/HEADER/EXT/FIELD/TA_10
Normative source	ETSI EN 319 532-3 [1], clause 6.2.5 Content-Description Presence Optional
Target	Conformance to Extension MIME section header
Predicate	The 'Content-Description' field of the Extension MIME section header is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, Extension MIME header

REMS/HEADER/EXT/FIELD/TA_11	
TA Id	REMS/HEADER/EXT/FIELD/TA_11
Normative source	ETSI EN 319 532-3 [1], clause 6.2.5 REM-Section-Type The value of this field should be "rem_message/extension"
Target	Conformance to Extension MIME section header
Predicate	The value of 'REM-Section-Type' field of the Extension MIME section header is "rem_message/extension"
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, Extension MIME header

REMS/HEADER/EXT/FIELD/TA_12	
TA Id	REMS/HEADER/EXT/FIELD/TA_12
Normative source	ETSI EN 319 532-3 [1], clause 6.2.5 REM-Section-Type Presence Optional
Target	Conformance to Extension MIME section header
Predicate	The 'REM-Section-Type' field of the Extension MIME section header is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, Extension MIME header

REMS/HEADER/EXT/FIELD/TA_13	
TA Id	REMS/HEADER/EXT/FIELD/TA_13
Normative source	ETSI EN 319 532-3 [1], clause 6.2.5 REM-Extension-Code The value of this field should be, in accordance with the type of the attachment, a unique code identifying the type of extension in order to allow automatic processing
Target	Conformance to Extension MIME section header
Predicate	The value of 'REM-Extension-Code' field of the Extension MIME section header is a unique code identifying the type of extension, which identifies the related metadata or evidence component in Table 5 or Table 6 of ETSI EN 319 522-2 [8]
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, Extension MIME header

REMS/HEADER/EXT/FIELD/TA_14	
TA Id	REMS/HEADER/EXT/FIELD/TA_14
Normative source	ETSI EN 319 532-3 [1], clause 6.2.5 REM-Extension-Code Presence Optional
Target	Conformance to Extension MIME section header
Predicate	The 'REM-Extension-Code' field of the Extension MIME section header is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, Extension MIME header

REMS/HEADER/EXT/FIELD/TA_15	
TA Id	REMS/HEADER/EXT/FIELD/TA_15
Normative source	ETSI EN 319 532-3 [1], clause 6.2.5 REM-Extension-Namespace-URI The value of this field should contain the namespace URI relevant to the extension […] extensions may also contain structured metadata or evidence components. In these cases: […] REM-Extension-Namespace-URI: should contain the target name space URI for the structured component
Target	Conformance to Extension MIME section header
Predicate	The value of 'REM-Extension-Namespace-URI' field of the Extension MIME section header is a URI whose value contains the URI of the target namespace for the structured component
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, Extension MIME header

REMS/HEADER/EXT/FIELD/TA_16	
TA Id	REMS/HEADER/EXT/FIELD/TA_16
Normative source	ETSI EN 319 532-3 [1], clause 6.2.5 REM-Extension-Namespace-URI Presence Optional
Target	Conformance to Extension MIME section header
Predicate	The 'REM-Extension-Namespace-URI' field of the Extension MIME section header is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, Extension MIME header

REMS/HEADER/EXT/FIELD/TA_17	
TA Id	REMS/HEADER/EXT/FIELD/TA_17
Normative source	ETSI EN 319 532-3 [1], clause 6.2.5 As defined in table 2 and clause 6.2.1, extensions may also contain structured metadata or evidence components. In these cases: - REM-Extension-Code: value shall contain the component code identifying the related metadata or evidence component in table 5 or table 6 of ETSI EN 319 522-2 [8] (e.g. I06). - The "name" component of the Content-Type: header field: <REM_EXTENSION_NAME> shall be based on the component name identifying the related metadata or evidence component in table 5 or table 6 of ETSI EN 319 522-2 [8] (e.g. name="Recipient's delegate identifier.xml"). - REM-Extension-Namespace-URI: should contain the target name space URI for the structured component.
Target	Conformance to Extension MIME section header
Prerequisite	The extension contains structured metadata or evidence components
Predicate	The value of REM-Extension-Code shall contain the component code identifying the related metadata or evidence component in table 5 or table 6 of ETSI EN 319 522-2 [8]
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Extension MIME header

REMS/HEADER/EXT/FIELD/TA_18	
TA Id	REMS/HEADER/EXT/FIELD/TA_18
Normative source	ETSI EN 319 532-3 [1], clause 6.2.5 As defined in table 2 and clause 6.2.1, extensions may also contain structured metadata or evidence components. In these cases: • REM-Extension-Code: value shall contain the component code identifying the related metadata or evidence component in table 5 or table 6 of ETSI EN 319 522-2 [8] (e.g. I06). • The "name" component of the Content-Type: header field: <REM_EXTENSION_NAME> shall be based on the component name identifying the related metadata or evidence component in table 5 or table 6 of ETSI EN 319 522-2 [8] (e.g. name="Recipient's delegate identifier.xml"). • REM-Extension-Namespace-URI: should contain the target name space URI for the structured component
Target	Conformance to Extension MIME section header
Prerequisite	The extension contains structured metadata or evidence components
Predicate	The "name" component of the Content-Type: header field: <REM_EXTENSION_NAME> is based on the component name identifying the related metadata or evidence component in table 5 or table 6 of ETSI EN 319 522-2 [8]
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Extension MIME header

REMS/HEADER/EXT/FIELD/TA_19	
TA Id	REMS/HEADER/EXT/FIELD/TA_19
Normative source	ETSI EN 319 532-3 [1], clause 6.2.5 As defined in table 2 and clause 6.2.1, extensions may also contain structured metadata or evidence components. In these cases: - REM-Extension-Code: value shall contain the component code identifying the related metadata or evidence component in table 5 or table 6 of ETSI EN 319 522-2 [8] (e.g. I06). - The "name" component of the Content-Type: header field: <REM_EXTENSION_NAME> shall be based on the component name identifying the related metadata or evidence component in table 5 or table 6 of ETSI EN 319 522-2 [8] (e.g. name="Recipient's delegate identifier.xml"). - REM-Extension-Namespace-URI: should contain the target name space URI for the structured component
Target	Conformance to Extension MIME section header
Prerequisite	The extension contains structured metadata or evidence components
Predicate	REM-Extension-Namespace-URI contains the target name space URI for the structured component
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Extension MIME header

5.7 Test assertions for fields in ERDS evidence MIME section header

5.7.1 Test assertions for ERDS evidence MIME section header with XML ERDS evidence

REMS/HEADER/EVID/XML/FIELD/TA_01	
TA Id	REMS/HEADER/EVID/XML/FIELD/TA_01
Normative source	ETSI EN 319 532-3 [1], clause 6.2.6.2 Content-Type The value for this header field shall be "application/xml": • 'name' parameter value shall be "<REM_EVIDENCE_NAME>.xml" • 'charset' parameter value shall be "UTF-8"
Target	Conformance to ERDS Evidence MIME section header enclosing XML ERDS Evidence
Predicate	The value of 'Content-Type' field of the ERDS Evidence MIME section header is "application/xml"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, ERDS Evidence MIME header, ERDS Evidence, XML ERDS Evidence

REMS/HEADER/EVID/XML/FIELD/TA_02	
TA Id	REMS/HEADER/EVID/XML/FIELD/TA_02
Normative source	ETSI EN 319 532-3 [1], clause 6.2.6.2 Content-Type The value for this header field shall be "application/xml" • 'name' parameter value shall be "<REM_EVIDENCE_NAME>.xml": • 'charset' parameter value shall be "UTF-8"
Target	Conformance to ERDS Evidence MIME section header enclosing XML ERDS Evidence
Predicate	The value of parameter 'name' of 'Content-Type' field of the ERDS Evidence MIME section header is "<REM_EVIDENCE_NAME>.xml", where <REM_EVIDENCE_NAME> is the identifier of the event that has triggered the issuance of the ERDS evidence within the ERDS Evidence MIME section
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, ERDS Evidence MIME header, ERDS Evidence, XML ERDS Evidence

REMS/HEADER/EVID/XML/FIELD/TA_03	
TA Id	REMS/HEADER/EVID/XML/FIELD/TA_03
Normative source	ETSI EN 319 532-3 [1], clause 6.2.6.2 Content-Type The value for this header field shall be "application/xml": • 'name' parameter value shall be "<REM_EVIDENCE_NAME>.xml" • 'charset' parameter value shall be "UTF-8"
Target	Conformance to ERDS Evidence MIME section header enclosing XML ERDS Evidence
Predicate	The value of parameter 'charset' of 'Content-Type' field of ERDS Evidence MIME section header is "UTF-8"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, ERDS Evidence MIME header, ERDS Evidence, XML ERDS Evidence

REMS/HEADER/EVID/XML/FIELD/TA_04	
TA Id	REMS/HEADER/EVID/XML/FIELD/TA_04
Normative source	ETSI EN 319 532-3 [1], clause 6.2.6.2 Content-Type Presence Mandatory
Target	Conformance to ERDS Evidence MIME section header enclosing XML ERDS Evidence
Predicate	The 'Content-Type' field of the ERDS Evidence MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, ERDS Evidence MIME header, ERDS Evidence, XML ERDS Evidence

REMS/HEADER/EVID/XML/FIELD/TA_05	
TA Id	REMS/HEADER/EVID/XML/FIELD/TA_05
Normative source	ETSI EN 319 532-3 [1], clause 6.2.6.2 Content-Transfer-Encoding The value of this header field shall be either "quoted-printable", "base64" or "binary"
Target	Conformance to ERDS Evidence MIME section header enclosing XML ERDS Evidence
Predicate	The value of 'Content-Transfer-Encoding' field of ERDS Evidence MIME section header is either "quoted-printable", "base64" or "binary"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, ERDS Evidence MIME header, ERDS Evidence, XML ERDS Evidence

REMS/HEADER/EVID/XML/FIELD/TA_06	
TA Id	REMS/HEADER/EVID/XML/FIELD/TA_06
Normative source	ETSI EN 319 532-3 [1], clause 6.2.6.2 Content-Transfer-Encoding Presence Mandatory
Target	Conformance to ERDS Evidence MIME section header enclosing XML ERDS Evidence
Predicate	The 'Content-Transfer-Encoding' field of the ERDS Evidence MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, ERDS Evidence MIME header, ERDS Evidence, XML ERDS Evidence

REMS/HEADER/EVID/XML/FIELD/TA_07	
TA Id	REMS/HEADER/EVID/XML/FIELD/TA_07
Normative source	ETSI EN 319 532-3 [1], clause 6.2.6.2 Content-Disposition The value of this header field shall be "attachment" • 'filename' parameter value shall match the value of the 'name' parameter of the Content-Type: header field
Target	Conformance to ERDS Evidence MIME section header enclosing XML ERDS Evidence
Predicate	The value of 'Content-Disposition' field of the ERDS Evidence MIME section header is "attachment"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, ERDS Evidence MIME header, ERDS Evidence, XML ERDS Evidence

REMS/HEADER/EVID/XML/FIELD/TA_08	
TA Id	REMS/HEADER/EVID/XML/FIELD/TA_08
Normative source	ETSI EN 319 532-3 [1], clause 6.2.6.2 Content-Disposition The value of this header field shall be "attachment": • 'filename' parameter value shall match the value of the 'name' parameter of the Content-Type: header field
Target	Conformance to ERDS Evidence MIME section header enclosing XML ERDS Evidence
Predicate	The value of 'filename' parameter of 'Content-Disposition' field of the ERDS Evidence MIME section header matches the value of the 'name' parameter of the 'Content-Type' header field
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, ERDS Evidence MIME header, ERDS Evidence, XML ERDS Evidence

REMS/HEADER/EVID/XML/FIELD/TA_09	
TA Id	REMS/HEADER/EVID/XML/FIELD/TA_09
Normative source	ETSI EN 319 532-3 [1], clause 6.2.6.2 Content-Disposition Presence Mandatory
Target	Conformance to ERDS Evidence MIME section header enclosing XML ERDS Evidence
Predicate	The 'Content-Disposition' field of the ERDS Evidence MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, ERDS Evidence MIME header, ERDS Evidence, XML ERDS Evidence

REMS/HEADER/EVID/XML/FIELD/TA_10	
TA Id	REMS/HEADER/EVID/XML/FIELD/TA_10
Normative source	ETSI EN 319 532-3 [1], clause 6.2.6.2 Content-Description Presence Optional
Target	Conformance to ERDS Evidence MIME section header enclosing XML ERDS Evidence
Predicate	The 'Content-Description' field of the ERDS Evidence MIME section header is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, ERDS Evidence MIME header, ERDS Evidence, XML ERDS Evidence

REMS/HEADER/EVID/XML/FIELD/TA_11	
TA Id	REMS/HEADER/EVID/XML/FIELD/TA_11
Normative source	ETSI EN 319 532-3 [1], clause 6.2.6.2 REM-Section-Type The value of this field should be "rem_message/xml_evidence"
Target	Conformance to ERDS Evidence MIME section header enclosing XML ERDS Evidence
Predicate	The value of the 'REM-Section-Type' field of the ERDS Evidence MIME section header is "rem_message/xml_evidence"
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, ERDS Evidence MIME header, ERDS Evidence, XML ERDS Evidence

REMS/HEADER/EVID/XML/FIELD/TA_12	
TA Id	REMS/HEADER/EVID/XML/FIELD/TA_12
Normative source	ETSI EN 319 532-3 [1], clause 6.2.6.2 REM-Section-Type Presence Optional
Target	Conformance to ERDS Evidence MIME section header enclosing XML ERDS Evidence
Predicate	The 'REM-Section-Type' field of the ERDS Evidence MIME section header is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, ERDS Evidence MIME header, ERDS Evidence, XML ERDS Evidence

5.7.2   Test assertions for ERDS evidence MIME section header with PDF ERDS evidence

REMS/HEADER/EVID/PDF/FIELD/TA_01	
TA Id	REMS/HEADER/EVID/PDF/FIELD/TA_01
Normative source	ETSI EN 319 532-3 [1], clause 6.2.6.3 Content-Type The value for this header field shall be "application/pdf": • 'name' parameter value shall be "<REM EVIDENCE_NAME>.pdf"
Target	Conformance to ERDS Evidence MIME section header enclosing PDF ERDS Evidence
Predicate	The value of 'Content-Type' field of the ERDS Evidence MIME section header is "application/pdf"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, ERDS Evidence MIME header, ERDS Evidence, PDF ERDS Evidence

REMS/HEADER/EVID/PDF/FIELD/TA_02	
TA Id	REMS/HEADER/EVID/PDF/FIELD/TA_02
Normative source	ETSI EN 319 532-3 [1], clause 6.2.6.3 Content-Type The value for this header field shall be "application/pdf": • 'name' parameter value shall be "<REM EVIDENCE_NAME>.pdf"
Target	Conformance to ERDS Evidence MIME section header enclosing PDF ERDS Evidence
Predicate	The value of parameter 'name' of 'Content-Type' field of the ERDS Evidence MIME section header is "<REM EVIDENCE_NAME>.pdf", where <REM_EVIDENCE_NAME> is the identifier of the event that has triggered the issuance of the ERDS evidence within the ERDS Evidence MIME section
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, ERDS Evidence MIME header, ERDS Evidence, PDF ERDS Evidence

REMS/HEADER/EVID/PDF/FIELD/TA_03	
TA Id	REMS/HEADER/EVID/PDF/FIELD/TA_03
Normative source	ETSI EN 319 532-3 [1], clause 6.2.6.3 Content-Type Presence Mandatory
Target	Conformance to ERDS Evidence MIME section header enclosing PDF ERDS Evidence
Predicate	The of 'Content-Type' field of the ERDS Evidence MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, ERDS Evidence MIME header, ERDS Evidence, PDF ERDS Evidence

REMS/HEADER/EVID/PDF/FIELD/TA_04	
TA Id	REMS/HEADER/EVID/PDF/FIELD/TA_04
Normative source	ETSI EN 319 532-3 [1], clause 6.2.6.3 Content-Transfer-Encoding The value of this header field shall be "base64" or "binary"
Target	Conformance to ERDS Evidence MIME section header enclosing PDF ERDS Evidence
Predicate	The value of 'Content-Transfer-Encoding' field of ERDS Evidence MIME section header is either "base64" or "binary"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, ERDS Evidence MIME header, ERDS Evidence, PDF ERDS Evidence

REMS/HEADER/EVID/PDF/FIELD/TA_05	
TA Id	REMS/HEADER/EVID/PDF/FIELD/TA_05
Normative source	ETSI EN 319 532-3 [1], clause 6.2.6.3 Content-Transfer-Encoding Presence Mandatory
Target	Conformance to ERDS Evidence MIME section header enclosing PDF ERDS Evidence
Predicate	The 'Content-Transfer-Encoding' field of the ERDS Evidence MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, ERDS Evidence MIME header, ERDS Evidence, PDF ERDS Evidence

REMS/HEADER/EVID/PDF/FIELD/TA_06	
TA Id	REMS/HEADER/EVID/PDF/FIELD/TA_06
Normative source	ETSI EN 319 532-3 [1], clause 6.2.6.3 Content-Disposition The value of this header field shall be "attachment": • 'filename' parameter value shall match the value of the 'name' parameter of the Content-Type: header field
Target	Conformance to ERDS Evidence MIME section header enclosing PDF ERDS Evidence
Predicate	The value of 'Content-Disposition' field of ERDS Evidence MIME section header is "attachment"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, ERDS Evidence MIME header, ERDS Evidence, PDF ERDS Evidence

REMS/HEADER/EVID/PDF/FIELD/TA_07	
TA Id	REMS/HEADER/EVID/PDF/FIELD/TA_07
Normative source	ETSI EN 319 532-3 [1], clause 6.2.6.3 Content-Disposition The value of this header field shall be "attachment": • 'filename' parameter value shall match the value of the 'name' parameter of the Content-Type: header field
Target	Conformance to ERDS Evidence MIME section header enclosing PDF ERDS Evidence
Predicate	The value of 'filename' parameter of 'Content-Disposition' field of the ERDS Evidence MIME section header matches the value of the 'name' parameter of the 'Content-Type' header field
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, ERDS Evidence MIME header, ERDS Evidence, PDF ERDS Evidence

REMS/HEADER/EVID/PDF/FIELD/TA_08	
TA Id	REMS/HEADER/EVID/PDF/FIELD/TA_08
Normative source	ETSI EN 319 532-3 [1], clause 6.2.6.3 Content-Disposition Presence Mandatory
Target	Conformance to ERDS Evidence MIME section header enclosing PDF ERDS Evidence
Predicate	The 'Content-Disposition' field of the ERDS Evidence MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, ERDS Evidence MIME header, ERDS Evidence, PDF ERDS Evidence

REMS/HEADER/EVID/PDF/FIELD/TA_09	
TA Id	REMS/HEADER/EVID/PDF/FIELD/TA_09
Normative source	ETSI EN 319 532-3 [1], clause 6.2.6.3 Content-Description Presence Optional
Target	Conformance to ERDS Evidence MIME section header enclosing PDF ERDS Evidence
Predicate	The 'Content-Description' field of the ERDS Evidence MIME section header is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, ERDS Evidence MIME header, ERDS Evidence, PDF ERDS Evidence

REMS/HEADER/EVID/PDF/FIELD/TA_10	
TA Id	REMS/HEADER/EVID/PDF/FIELD/TA_10
Normative source	ETSI EN 319 532-3 [1], clause 6.2.6.3 REM-Section-Type The value of this field should be "rem_message/pdf_evidence"
Target	Conformance to ERDS Evidence MIME section header enclosing PDF ERDS Evidence
Predicate	The value of the 'REM-Section-Type' field of the ERDS Evidence MIME section header is "rem_message/pdf_evidence"
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, ERDS Evidence MIME header, ERDS Evidence, PDF ERDS Evidence

REMS/HEADER/EVID/PDF/FIELD/TA_11	
TA Id	REMS/HEADER/EVID/PDF/FIELD/TA_11
Normative source	ETSI EN 319 532-3 [1], clause 6.2.6.3 REM-Section-Type Presence Optional
Target	Conformance to ERDS Evidence MIME section header enclosing PDF ERDS Evidence
Predicate	The 'REM-Section-Type' field of the ERDS Evidence MIME section header is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, ERDS Evidence MIME header, ERDS Evidence, PDF ERDS Evidence

5.8 Test assertions for fields in REMS signature MIME section header

REMS/HEADER/REMSSIG/FIELD/TA_01	
TA Id	REMS/HEADER/REMSSIG/FIELD/TA_01
Normative source	ETSI EN 319 532-3 [1], clause 6.2.7 Content-Type: presence mandatory
Target	Conformance to REMS signature MIME section header
Predicate	The 'Content-Type' field of the REMS signature MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS signature, REMS signature MIME section

REMS/HEADER/REMSSIG/FIELD/TA_02	
TA Id	REMS/HEADER/REMSSIG/FIELD/TA_02
Normative source	ETSI EN 319 532-3 [1], clause 6.2.7 Content-Type The value for this header field shall be: "application/pkcs7-signature; name=smime.p7s": • The parameter 'name' should be present, indicating the SignedData with file name and extension as defined above
Target	Conformance to REMS signature MIME section header
Predicate	The value of 'Content-Type' field of the REMS signature MIME section header is "application/pkcs7-signature; name=smime.p7s"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS signature, REMS signature MIME section

REMS/HEADER/REMSSIG/FIELD/TA_03	
TA Id	REMS/HEADER/REMSSIG/FIELD/TA_03
Normative source	ETSI EN 319 532-3 [1], clause 6.2.7 Content-Type The value for this header field shall be: "application/pkcs7-signature; name=smime.p7s": • The parameter 'name' should be present, indicating the SignedData with file name and extension as defined above
Target	Conformance to REMS signature MIME section header
Predicate	The parameter 'name' of 'Content-Type' field of the REMS signature MIME section header is present
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, REMS signature, REMS signature MIME section

REMS/HEADER/REMSSIG/FIELD/TA_04	
TA Id	REMS/HEADER/REMSSIG/FIELD/TA_04
Normative source	ETSI EN 319 532-3 [1], clause 6.2.7 Content-Type The value for this header field shall be: "application/pkcs7-signature; name=smime.p7s": • The parameter 'name' should be present, indicating the SignedData with file name and extension as defined above
Target	Conformance to REMS signature MIME section header
Predicate	The value of parameter 'name' of 'Content-Type' field of the REMS signature MIME section header is "smime.p7s"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS signature, REMS signature MIME section

REMS/HEADER/REMSSIG/FIELD/TA_05	
TA Id	REMS/HEADER/REMSSIG/FIELD/TA_05
Normative source	ETSI EN 319 532-3 [1], clause 6.2.7 Content-Transfer-Encoding The value for this header field shall be: "base64"
Target	Conformance to REMS signature MIME section header enclosing PDF ERDS Evidence
Predicate	The value of 'Content-Transfer-Encoding' field of REMS signature MIME section header is "base64"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS signature, REMS signature MIME section

REMS/HEADER/REMSSIG/FIELD/TA_06	
TA Id	REMS/HEADER/REMSSIG/FIELD/TA_06
Normative source	ETSI EN 319 532-3 [1], clause 6.2.7 Content-Transfer-Encoding Presence Recommended
Target	Conformance to REMS signature MIME section header
Predicate	The 'Content-Transfer-Encoding' field of the REMS signature MIME section header is present
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, REMS signature, REMS signature MIME section

REMS/HEADER/REMSSIG/FIELD/TA_07	
TA Id	REMS/HEADER/REMSSIG/FIELD/TA_07
Normative source	ETSI EN 319 532-3 [1], clause 6.2.7 Content-Disposition The value for this header field shall be: "attachment": • 'filename' parameter value should be "smime.p7s"
Target	Conformance to REMS signature MIME section header
Predicate	The value of 'Content-Disposition' field of REMS signature MIME section header is "attachment"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS signature, REMS signature MIME section

REMS/HEADER/REMSSIG/FIELD/TA_08	
TA Id	REMS/HEADER/REMSSIG/FIELD/TA_08
Normative source	ETSI EN 319 532-3 [1], clause 6.2.7 Content-Disposition The value for this header field shall be: "attachment": • 'filename' parameter value should be "smime.p7s"
Target	Conformance to REMS signature MIME section header
Predicate	The value of 'filename' parameter of 'Content-Disposition' field of the REMS signature MIME section header is "smime.p7s"
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, REMS signature, REMS signature MIME section

REMS/HEADER/REMSSIG/FIELD/TA_09	
TA Id	REMS/HEADER/REMSSIG/FIELD/TA_09
Normative source	ETSI EN 319 532-3 [1], clause 6.2.7 Content-Disposition Presence Mandatory
Target	Conformance to REMS signature MIME section header
Predicate	The 'Content-Disposition' field of the REMS signature MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REMS signature, REMS signature MIME section

REMS/HEADER/REMSSIG/FIELD/TA_10	
TA Id	REMS/HEADER/REMSSIG/FIELD/TA_10
Normative source	ETSI EN 319 532-3 [1], clause 6.2.7 Content-Description The value for this header field may be: "S/MIME Cryptographic Signature"
Target	Conformance to REMS signature MIME section header
Predicate	The value of 'Content-Description' field of the REMS signature MIME section header is "S/MIME Cryptographic Signature"
Prescription level	Optional
Tag	Conformance, REMS, REMSP, REMS signature, REMS signature MIME section

REMS/HEADER/REMSSIG/FIELD/TA_11	
TA Id	REMS/HEADER/REMSSIG/FIELD/TA_11
Normative source	ETSI EN 319 532-3 [1], clause 6.2.7 Content-Description Presence Optional
Target	Conformance to REMS signature MIME section header
Predicate	The 'Content-Description' field of the REMS signature MIME section header is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, REMS signature, REMS signature MIME section

6   Test assertions for MIME sections bodies

6.1   Introduction

This clause defines the whole set of assertions required for testing compliance of the requirements defined by ETSI EN 319 532-3 [1] for REMS Plain text introduction MIME section body and the REMS HTML introduction MIME section body specified by ETSI EN 319 532-3 [1], clause 6.2.3.4.

6.2   Test assertions for Introduction MIME section body

This clause defines test assertions for the body of the Introduction MIME section as specified in clause 6.2.3.4 of ETSI EN 319 532-3 [1].

REMS/BODY/INTRO/CONTENT/TA_01	
TA Id	REMS/BODY/INTRO/CONTEN/TA_01
Normative source	ETSI EN 319 532-3 [1], clause 6.2.3.4 Introduction MIME section body If both sections are present their contents shall be an alternative and equivalent version of the same information in both plain text and HTML formats
Target	Conformance to Introduction MIME section body
Prerequisite	Free Text and HTML MIME sections are present and HTML MIME section body contains a URL
Predicate	The body of the Free Text MIME section contains the URL present in the body of the HTML MIME section
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Introduction MIME section body

REMS/BODY/INTRO/CONTENT/TA_02	
TA Id	REMS/BODY/INTRO/CONTEN/TA_02
Normative source	ETSI EN 319 532-3 [1], clause 6.2.3.4 Introduction MIME section body The body of HTML text shall not contain active code
Target	Conformance to Introduction MIME section body
Predicate	The body of the HTML MIME section does not contain active code
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Introduction MIME section body

REMS/BODY/INTRO/CONTENT/TA_03	
TA Id	REMS/BODY/INTRO/CONTEN/TA_03
Normative source	ETSI EN 319 532-3 [1], clause 6.2.3.4 Introduction MIME section body If it contains some URL, the printed part (that is the Hypertext visible to the user) shall be the same as the hidden part (that is the real location where the web browser is redirected clicking on it)
Target	Conformance to Introduction MIME section body
Prerequisite	The HTML MIME section body contains a URL
Predicate	The printed part of the URL is the same as the hidden part
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, Introduction MIME section body

7   Test assertions for REM messages structures

7.1   Introduction

This clause defines test assertions for testing presence and cardinality of the different MIME headers and bodies for each type of REM message.

7.2   Test assertions for REM payload structure

REMS/MSSG/STRUCT/REMPAYLOAD/TA_01	
TA Id	REMS/MSSG/STRUCT/REMPAYLOAD/TA_01
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 4
Target	Conformance to REM payload structure
Predicate	One conformant outermost MIME section is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM payload

REMS/MSSG/STRUCT/REMPAYLOAD/TA_02	
TA Id	REMS/MSSG/STRUCT/REMPAYLOAD/TA_02
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 4
Target	Conformance to REM payload structure
Predicate	One conformant signed data MIME section is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM payload

NOTE: The next test assertions check that the MIME sub-sections of signed MIME section are the ones specified in ETSI EN 319 532-3 [1].

REMS/MSSG/STRUCT/REMPAYLOAD/TA_03	
TA Id	REMS/MSSG/STRUCT/REMPAYLOAD/TA_03
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 4
Target	Conformance to REM payload structure
Predicate	One non-empty conformant Introduction MIME section is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM payload

REMS/MSSG/STRUCT/REMPAYLOAD/TA_04	
TA Id	REMS/MSSG/STRUCT/REMPAYLOAD/TA_04
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 4
Target	Conformance to REM payload structure
Predicate	One non-empty conformant free-text MIME sub-section is present within the Introduction MIME section
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM payload

REMS/MSSG/STRUCT/REMPAYLOAD/TA_05	
TA Id	REMS/MSSG/STRUCT/REMPAYLOAD/TA_05
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 4
Target	Conformance to REM payload structure
Predicate	One non-empty conformant HTML MIME sub-section is present within the Introduction MIME section
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM payload

REMS/MSSG/STRUCT/REMPAYLOAD/TA_06	
TA Id	REMS/MSSG/STRUCT/REMPAYLOAD/TA_06
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 4
Target	Conformance to REM payload structure
Predicate	One non-empty Original message MIME section is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM payload

REMS/MSSG/STRUCT/REMPAYLOAD/TA_07	
TA Id	REMS/MSSG/STRUCT/REMPAYLOAD/TA_07
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 4
Target	Conformance to REM payload structure
Predicate	1 or more non-empty Extension MIME sections are present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, REM payload

REMS/MSSG/STRUCT/REMPAYLOAD/TA_08	
TA Id	REMS/MSSG/STRUCT/REMPAYLOAD/TA_08
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 4
Target	Conformance to REM payload structure
Predicate	1 REMS signature MIME section is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM payload

7.3   Test assertions for REMS notification structure

REMS/MSSG/STRUCT/REMNOT/TA_01	
TA Id	REMS/MSSG/STRUCT/REMNOT/TA_01
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 3
Target	Conformance to REM notification structure
Predicate	One conformant outermost MIME section is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM notification

REMS/MSSG/STRUCT/REMNOT/TA_02	
TA Id	REMS/MSSG/STRUCT/REMNOT/TA_02
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 3
Target	Conformance to REM notification structure
Predicate	One conformant signed data MIME section is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM notification

NOTE: The next test assertions check that the MIME sub-sections of signed MIME section are the ones specified in ETSI EN 319 532-3 [1].

REMS/MSSG/STRUCT/REMNOT/TA_03	
TA Id	REMS/MSSG/STRUCT/REMNOT/TA_03
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 3
Target	Conformance to REM notification structure
Predicate	One non-empty conformant Introduction MIME section is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM notification

REMS/MSSG/STRUCT/REMNOT/TA_04	
TA Id	REMS/MSSG/STRUCT/REMNOT/TA_04
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 3
Target	Conformance to REM notification structure
Predicate	One non-empty conformant free-text MIME sub-section is present within the Introduction MIME section
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM notification

REMS/MSSG/STRUCT/REMNOT/TA_05	
TA Id	REMS/MSSG/STRUCT/REMNOT/TA_05
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 3
Target	Conformance to REM notification structure
Predicate	One non-empty conformant HTML MIME sub-section is present within the Introduction MIME section
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM notification

REMS/MSSG/STRUCT/REMNOT/TA_06	
TA Id	REMS/MSSG/STRUCT/REMNOT/TA_06
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 3
Target	Conformance to REM notification structure
Predicate	1 or more non-empty Extension MIME sections are present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, REM notification

REMS/MSSG/STRUCT/REMNOT/TA_07	
TA Id	REMS/MSSG/STRUCT/REMNOT/TA_07
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 3
Target	Conformance to REM notification structure
Predicate	1 or more non-empty ERDS Evidence MIME sections are present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, REM notification

REMS/MSSG/STRUCT/REMNOT/TA_08	
TA Id	REMS/MSSG/STRUCT/REMNOT/TA_08
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 3
Target	Conformance to REM notification structure
Predicate	1 REMS signature MIME section is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM notification

7.4   Test assertions for REMS notification structure

REMS/MSSG/STRUCT/REMRECEIPT/TA_01	
TA Id	REMS/MSSG/STRUCT/REMRECEIPT/TA_01
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 2
Target	Conformance to REM receipt structure
Predicate	One conformant outermost MIME section is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM receipt

REMS/MSSG/STRUCT/REMRECEIPT/TA_02	
TA Id	REMS/MSSG/STRUCT/REMRECEIPT/TA_02
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 2
Target	Conformance to REM receipt structure
Predicate	One conformant signed data MIME section is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM receipt

NOTE: The next test assertions check that the MIME sub-sections of signed MIME section are the ones specified in ETSI EN 319 532-3 [1].

REMS/MSSG/STRUCT/REMRECEIPT/TA_03	
TA Id	REMS/MSSG/STRUCT/REMRECEIPT/TA_03
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 2
Target	Conformance to REM receipt structure
Predicate	One non-empty conformant Introduction MIME section is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM receipt

REMS/MSSG/STRUCT/REMRECEIPT/TA_04	
TA Id	REMS/MSSG/STRUCT/REMRECEIPT/TA_04
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 2
Target	Conformance to REM receipt structure
Predicate	One non-empty conformant free-text MIME sub-section is present within the Introduction MIME section
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM receipt

REMS/MSSG/STRUCT/REMRECEIPT/TA_05	
TA Id	REMS/MSSG/STRUCT/REMRECEIPT/TA_05
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 2
Target	Conformance to REM receipt structure
Predicate	One non-empty conformant HTML MIME sub-section is present within the Introduction MIME section
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM receipt

REMS/MSSG/STRUCT/REMRECEIPT/TA_06	
TA Id	REMS/MSSG/STRUCT/REMRECEIPT/TA_06
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 2
Target	Conformance to REM receipt structure
Predicate	1 or more non-empty Extension MIME sections are present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, REM receipt

REMS/MSSG/STRUCT/REMRECEIPT/TA_07	
TA Id	REMS/MSSG/STRUCT/REMRECEIPT/TA_07
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 2
Target	Conformance to REM receipt structure
Predicate	1 or more non-empty ERDS Evidence MIME sections are present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM receipt

REMS/MSSG/STRUCT/REMRECEIPT/TA_08	
TA Id	REMS/MSSG/STRUCT/REMRECEIPT/TA_08
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 2
Target	Conformance to REM receipt structure
Predicate	1 REMS signature MIME section is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM receipt

7.5 Test assertions for REM dispatch structure

REMS/MSSG/STRUCT/REMDISPATCH/TA_01	
TA Id	REMS/MSSG/STRUCT/REMDISPATCH/TA_01
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 1
Target	Conformance to REM dispatch structure
Predicate	One conformant outermost MIME section is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM dispatch

REMS/MSSG/STRUCT/REMDISPATCH/TA_02	
TA Id	REMS/MSSG/STRUCT/REMDISPATCH/TA_02
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 1
Target	Conformance to REM dispatch structure
Predicate	One conformant signed data MIME section is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM dispatch

NOTE: The next test assertions check that the MIME sub-sections of signed MIME section are the ones specified in ETSI EN 319 532-3 [1].

REMS/MSSG/STRUCT/REMDISPATCH/TA_03	
TA Id	REMS/MSSG/STRUCT/REMDISPATCH/TA_03
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 1
Target	Conformance to REM dispatch structure
Predicate	One non-empty conformant Introduction MIME section is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM dispatch

REMS/MSSG/STRUCT/REMDISPATCH/TA_04	
TA Id	REMS/MSSG/STRUCT/REMDISPATCH/TA_04
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 1
Target	Conformance to REM dispatch structure
Predicate	One non-empty conformant free-text MIME sub-section is present within the Introduction MIME section
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM dispatch

REMS/MSSG/STRUCT/REMDISPATCH/TA_05	
TA Id	REMS/MSSG/STRUCT/REMDISPATCH/TA_05
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 1
Target	Conformance to REM dispatch structure
Predicate	One non-empty conformant HTML MIME sub-section is present within the Introduction MIME section
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM dispatch

REMS/MSSG/STRUCT/REMDISPATCH/TA_06	
TA Id	REMS/MSSG/STRUCT/REMDISPATCH/TA_06
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 1
Target	Conformance to REM dispatch structure
Predicate	One non-empty Original message MIME section is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM dispatch

REMS/MSSG/STRUCT/REMDISPATCH/TA_07	
TA Id	REMS/MSSG/STRUCT/REMDISPATCH/TA_07
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 1
Target	Conformance to REM dispatch structure
Predicate	1 or more non-empty Extension MIME sections are present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, REM dispatch

REMS/MSSG/STRUCT/REMDISPATCH/TA_08	
TA Id	REMS/MSSG/STRUCT/REMDISPATCH/TA_08
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 1
Target	Conformance to REM dispatch structure
Predicate	1 or more non-empty ERDS Evidence MIME sections are present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM dispatch

REMS/MSSG/STRUCT/REMDISPATCH/TA_09	
TA Id	REMS/MSSG/STRUCT/REMDISPATCH/TA_09
Normative source	ETSI EN 319 532-3 [1], clause 4.3 and Figure 1
Target	Conformance to REM dispatch structure
Predicate	1 REMS signature MIME section is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM dispatch

8　Test assertions for REM messages structures

8.1　Introduction

This clause defines test assertions for testing:

1)　signatures that individually sign ERDS evidence (clause 8.2); and

2)　signatures that sign REM messages (clause 8.3).

8.2　Test assertions for signatures individually signing ERDS evidence

REMS/ERDSEVIDSIG/TA_01	
TA Id	REMS/ERDSEVIDSIG/TA_01
Normative source	ETSI EN 319 532-3 [1], clause 8.1 The algorithms and key lengths used to generate digital signatures should be as specified in ETSI TS 119 312 [i.1]
Target	Conformance to signatures individually signing ERDS evidence
Predicate	The algorithms and key lengths used to generate the digital signature is as specified in ETSI TS 119 312 [i.1]
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, ERDS evidence, signature

REMS/ERDSEVIDSIG/TA_02	
TA Id	REMS/ERDSEVIDSIG/TA_02
Normative source	ETSI EN 319 532-3 [1], clause 8.1 Within a REM message the following digital signatures shall apply: • Signatures generated by a REMS or by the delegated entity on each ERDS evidence individually
Target	Conformance to signatures individually signing ERDS evidence
Predicate	The digital signature is generated by the REMS
Prescription level	Optional
Tag	Conformance, REMS, REMSP, ERDS evidence, signature

REMS/ERDSEVIDSIG/TA_03	
TA Id	REMS/ERDSEVIDSIG/TA_03
Normative source	ETSI EN 319 532-3 [1], clause 8.1 Within a REM message the following digital signatures shall apply: • Signatures generated by a REMS or by the delegated entity on each ERDS evidence individually
Target	Conformance to signatures individually signing ERDS evidence
Predicate	The digital signature is generated by an entity the REMS has delegated on
Prescription level	Optional
Tag	Conformance, REMS, REMSP, ERDS evidence, signature

REMS/ERDSEVIDSIG/TA_04	
TA Id	REMS/ERDSEVIDSIG/TA_04
Normative source	ETSI EN 319 532-3 [1], clause 8.2 Signatures individually signing ERDS evidence shall comply with ETSI EN 319 522-2 [8], clause 7.2 and ETSI EN 319 522-3 [9], clause 5.2.2.28
Target	Conformance to signatures individually signing ERDS evidence
Prerequisite	The ERDS evidence format is XML
Predicate	The digital signature is a XAdES signature compliant with ETSI EN 319 522-2 [8], clause 7.2 and with ETSI EN 319 522-3 [9], clause 5.2.2.28
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, ERDS evidence, signature

REMS/ERDSEVIDSIG/TA_05	
TA Id	REMS/ERDSEVIDSIG/TA_05
Normative source	ETSI EN 319 532-3 [1], clause 8.2 In addition, in case PDF evidence format is used, the evidence should be protected by PAdES digital signatures as defined in ETSI EN 319 142-1 [i.4]
Target	Conformance to signatures individually signing ERDS evidence
Prerequisite	The ERDS evidence format is PDF
Predicate	The digital signature is a PAdES signature compliant with ETSI EN 319 142-1 [i.4]
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, ERDS evidence, signature

8.3 Test assertions for signatures signing REM messages

REMS/REMMESSSIG/TA_01	
TA Id	REMS/REMMESSSIG/TA_01
Normative source	ETSI EN 319 532-3 [1], clause 8.1 The algorithms and key lengths used to generate digital signatures should be as specified in ETSI TS 119 312 [i.1]
Target	Conformance to REM Message signature
Predicate	The algorithms and key lengths used to generate the digital signature is as specified in ETSI TS 119 312 [i.1]
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, REM Message signature

REMS/REMMESSSIG/TA_02	
TA Id	REMS/REMMESSSIG/TA_02
Normative source	ETSI EN 319 532-3 [1], clause 8.3 The signature shall be applied to the message using S/MIME multipart/signed as defined in IETF RFC 8551 [3]. This signature shall protect all the MIME parts that constitute a REM message
Target	Conformance to REM Message signature
Predicate	The signature is applied to the message using S/MIME multipart/signed as defined in IETF RFC 8551 [3]
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM Message signature

REMS/REMMESSSIG/TA_03	
TA Id	REMS/REMMESSSIG/TA_03
Normative source	ETSI EN 319 532-3 [1], clause 8.3 The signature shall be applied to the message using S/MIME multipart/signed as defined in IETF RFC 8551 [3]. This signature shall protect all the MIME parts that constitute a REM message
Target	Conformance to REM Message signature
Predicate	The signature protects all the MIME parts that constitute a REM message
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM Message signature

REMS/REMMESSSIG/TA_04	
TA Id	REMS/REMMESSSIG/TA_04
Normative source	ETSI EN 319 532-3 [1], clause 8.3 This digital signature should be a CAdES baseline signature as specified in ETSI EN 319 122-1 [i.5]
Target	Conformance to REM Message signature
Predicate	The signature is a CAdES baseline signature as specified in ETSI EN 319 122-1 [i.5]
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, REM Message signature

REMS/REMMESSSIG/TA_05	
TA Id	REMS/REMMESSSIG/TA_05
Normative source	ETSI EN 319 532-3 [1], clause 8.3 This digital signature may include the signed attribute `signature-policy-identifier`, containing the explicit identifier of the signature policy governing the signing and validating processes
Target	Conformance to REM Message signature
Predicate	The signature includes the signed attribute `signature-policy-identifier`, containing the explicit identifier of the signature policy governing the signing and validating processes
Prescription level	Optional
Tag	Conformance, REMS, REMSP, REM Message signature

REMS/REMMESSSIG/TA_06	
TA Id	REMS/REMMESSSIG/TA_06
Normative source	ETSI EN 319 532-3 [1], clause 8.3 Once the CAdES-B-B baseline signature has been generated, it should be augmented to a CAdES-B-T baseline signature by incorporation into the digital signature of the unsigned attribute `signature-time-stamp`, containing a time-stamp token computed as specified in ETSI EN 319 122-1 [i.5]
Target	Conformance to REM Message signature
Predicate	Once generated the signature is augmented to a CAdES-B-T baseline signature by incorporation into the digital signature of the unsigned attribute `signature-time-stamp`
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, REM Message signature

REMS/REMMESSSIG/TA_07	
TA Id	REMS/REMMESSSIG/TA_07
Normative source	ETSI EN 319 532-3 [1], clause 8.3
	The signing certificate of this digital signature shall meet the requirements specified in in ETSI EN 319 522-2 [8], clause 9.3
Target	Conformance to REM Message signature
Predicate	The signing certificate of this digital signature meets the requirements specified in ETSI EN 319 522-2 [8], clause 9.3
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, REM Message signature

9   Test assertions for Common Service Interface

9.1   Introduction

This clause defines test assertions for testing conformance against the specifications in ETSI EN 319 532-3 [1] on the Common Service Interface.

9.2   Test assertions for routing information

REMS/CSI/ROUTING/TA_01	
TA Id	REMS/CSI/ROUTING/TA_01
Normative source	ETSI EN 319 532-3 [1], clause 9.2
	The REM RI (Relay Interface) should be identified by a transport protocol, a hostname and a port number
Target	Conformance to CSI Routing information
Predicate	The REM RI (Relay Interface) is identified by a transport protocol, a hostname and a port number
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, CSI, routing information

REMS/CSI/ROUTING/TA_02	
TA Id	REMS/CSI/ROUTING/TA_02
Normative source	ETSI EN 319 532-3 [1], clause 9.2
	Other techniques may be used either according to clause 6.1 of ETSI EN 319 522-3 [9], peer-to-peer agreements between REMSPs or based on the best practices recommended in annex A of ETSI EN 319 532-4 [11]
Target	Conformance to CSI Routing information
Predicate	The REM RI (Relay Interface) is identified by other techniques according to clause 6.1 of ETSI EN 319 522-3 [9], peer-to-peer agreements between REMSPs or based on the best practices recommended in Annex A of ETSI EN 319 532-4 [11]
Prescription level	Optional
Tag	Conformance, REMS, REMSP, CSI, routing information

9.3   Test assertions for trust information binding

If the information on REMS and REMSPs are published using Trusted Lists, the test assertions defined below shall apply to the contents of the Trusted Lists listing REM services.

REMS/CSI/TRUST/TA_01	
TA Id	REMS/CSI/TRUST/TA_01
Normative source	ETSI EN 319 532-3 [1], clause 9.3
	If Trusted List (TL) is used to publish trust information about a REMS, then the TL's section describing a REM service shall be populated in conformance to ETSI TS 119 612 [10]
Target	Conformance to CSI Trust information
Prerequisite	Trusted Lists are used to publish trust information about a REMS
Predicate	The information of the REMS appears in a trust service provider service section of the Trusted List in conformance to ETSI TS 119 612 [10]
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Trusted List

REMS/CSI/TRUST/TA_02	
TA Id	REMS/CSI/TRUST/TA_02
Normative source	ETSI EN 319 532-3 [1], clause 9.3
	Presence of service type identifier (as per clause 5.5.1 of ETSI TS 119 612 [10]) is Mandatory
Target	Conformance to CSI Trust information
Prerequisite	Trusted Lists are used to publish trust information about a REMS
Predicate	The service type identifier (as per clause 5.5.1 of ETSI TS 119 612 [10]) is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Trusted List

REMS/CSI/TRUST/TA_03	
TA Id	REMS/CSI/TRUST/TA_03
Normative source	ETSI EN 319 532-3 [1], clause 9.3
	This element (service type identifier) shall be one of the following:
	• http://uri.etsi.org/TrstSvc/Svctype/EDS/REM
	• http://uri.etsi.org/TrstSvc/Svctype/EDS/REM/Q
Target	Conformance to CSI Trust information
Prerequisite	Trusted Lists are used to publish trust information about a REMS and the REMS is not Qualified
Predicate	The value of the service type identifier is "http://uri.etsi.org/TrstSvc/Svctype/EDS/REM"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Trusted List

REMS/CSI/TRUST/TA_04	
TA Id	REMS/CSI/TRUST/TA_04
Normative source	ETSI EN 319 532-3 [1], clause 9.3
	This element (service type identifier) shall be one of the following:
	• http://uri.etsi.org/TrstSvc/Svctype/EDS/REM
	• http://uri.etsi.org/TrstSvc/Svctype/EDS/REM/Q
Target	Conformance to CSI Trust information
Prerequisite	Trusted Lists are used to publish trust information about a REMS and the REMS is Qualified
Predicate	The value of the service type identifier is "http://uri.etsi.org/TrstSvc/Svctype/EDS/REM/Q"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Trusted List

REMS/CSI/TRUST/TA_05	
TA Id	REMS/CSI/TRUST/TA_05
Normative source	ETSI EN 319 532-3 [1], clause 9.3
	Presence of service digital identity (as per clause 5.5.3 of ETSI TS 119 612 [10]) is Mandatory
Target	Conformance to CSI Trust information
Prerequisite	Trusted Lists are used to publish trust information about a REMS
Predicate	The service digital identity (as per clause 5.5.3 of ETSI TS 119 612 [10]) is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Trusted List

REMS/CSI/TRUST/TA_06	
TA Id	REMS/CSI/TRUST/TA_06

Normative source	ETSI EN 319 532-3 [1], clause 9.3
	This element shall contain an X.509 certificate, which shall be one of the following:
	   • A single certificate used by the REMS for digital signing of all REM messages and ERDS evidence
	   • A single CA certificate that is used solely for the purpose of issuing certificates to components of the REMS for digital signing of REM messages and/or ERDS evidence
	This element may contain optionally the corresponding X509SKI element

Target	Conformance to CSI Trust information
Prerequisite	Trusted Lists are used to publish trust information about a REMS
Predicate	The service digital identity contains either the single certificate used by the REMS for digital signing of all REM messages and ERDS evidence or a single CA certificate that is used solely for the purpose of issuing certificates to components of the REMS for digital signing of REM messages and/or ERDS evidence
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Trusted List

REMS/CSI/TRUST/TA_07	
TA Id	REMS/CSI/TRUST/TA_07

Normative source	ETSI EN 319 532-3 [1], clause 9.3
	This element shall contain an X.509 certificate, which shall be one of the following:
	   • A single certificate used by the REMS for digital signing of all REM messages and ERDS evidence
	   • A single CA certificate that is used solely for the purpose of issuing certificates to components of the REMS for digital signing of REM messages and/or ERDS evidence
	This element may contain optionally the corresponding X509SKI element

Target	Conformance to CSI Trust information
Prerequisite	Trusted Lists are used to publish trust information about a REMS
Predicate	The service digital identity contains the X509SKI element including the `subjectKeyIdentifier` field of the X509 certificate present in the service digital identity
Prescription level	Optional
Tag	Conformance, REMS, REMSP, CSI, trust information, Trusted List

REMS/CSI/TRUST/TA_08	
TA Id	REMS/CSI/TRUST/TA_08
Normative source	ETSI EN 319 532-3 [1], clause 9.3 Presence of service supply point (as per clause 5.5.7 of ETSI TS 119 612 [10]) is Mandatory
Target	Conformance to CSI Trust information
Prerequisite	Trusted Lists are used to publish trust information about a REMS
Predicate	The service supply point (as per clause 5.5.7 of ETSI TS 119 612 [10]) is present
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Trusted List

REMS/CSI/TRUST/TA_09	
TA Id	REMS/CSI/TRUST/TA_09
Normative source	ETSI EN 319 532-3 [1], clause 9.3 This element should provide one or more URIs to access the REM RI (Relay Interface) defined in clause 5 of ETSI EN 319 532-1 [2]
Target	Conformance to CSI Trust information
Prerequisite	Trusted Lists are used to publish trust information about a REMS
Predicate	The service supply point contains one or more URIs to access the REM Relay Interface
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, CSI, trust information, Trusted List

REMS/CSI/TRUST/TA_10	
TA Id	REMS/CSI/TRUST/TA_10
Normative source	ETSI EN 319 532-3 [1], clause 9.3 If the Relay Interface is provided using SMTP then this URI should be an smtp: URI
Target	Conformance to CSI Trust information
Prerequisite	Trusted Lists are used to publish trust information about a REMS and the REM Relay Interface is provided using SMTP (IETF RFC 5321 [i.7])
Predicate	The URI values within the service supply point element are smtp URIs
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, CSI, trust information, Trusted List

REMS/CSI/TRUST/TA_11	
TA Id	REMS/CSI/TRUST/TA_11
Normative source	ETSI EN 319 532-3 [1], clause 9.3 Presence of TSP service definition URI (as per clause 5.5.8 of ETSI TS 119 612 [10]) is Optional
Target	Conformance to CSI Trust information
Prerequisite	Trusted Lists are used to publish trust information about a REMS
Predicate	The TSP service definition URI (as per clause 5.5.8 of ETSI TS 119 612 [10]) is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, CSI, trust information, Trusted List

REMS/CSI/TRUST/TA_12	
TA Id	REMS/CSI/TRUST/TA_12
Normative source	ETSI EN 319 532-3 [1], clause 9.3 Presence of service information extensions (as per clause 5.5.9 of ETSI TS 119 612 [10]) is Optional
Target	Conformance to CSI Trust information
Prerequisite	Trusted Lists are used to publish trust information about a REMS
Predicate	The service information extensions element (as per clause 5.5.9 of ETSI TS 119 612 [10]) is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, CSI, trust information, Trusted List

REMS/CSI/TRUST/TA_13	
TA Id	REMS/CSI/TRUST/TA_13
Normative source	ETSI EN 319 532-3 [1], clause 9.3 If present, extensions shall not be set as critical
Target	Conformance to CSI Trust information
Prerequisite	Trusted Lists are used to publish trust information about a REMS and Service information extensions (as per clause 5.5.9 of ETSI TS 119 612 [10]) are present
Predicate	Every service information extension element (as per clause 5.5.9 of ETSI TS 119 612 [10]) is not set to critical
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Trusted List

9.4   Test assertions for capability discovery and management

REMS/CSI/CAPMNG/TA_01	
TA Id	REMS/CSI/CAPMNG/TA_01
Normative source	ETSI EN 319 532-3 [1], clause 9.4 If the REMS uses TL to publish trust information about itself, the REMS capability metadata may also be published using the TL, as indicated for ERDS capability metadata in clause 7.2 of ETSI EN 319 522-4-3 [i.6]
Target	Conformance to CSI Capability information
Prerequisite	Trusted Lists are used to publish capability management information about a REMS
Predicate	The information of the REMS appears in a trust service provider service section of the Trusted List in conformance to ETSI TS 119 612 [10]
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Trusted List

REMS/CSI/CAPMNG/TA_02	
TA Id	REMS/CSI/CAPMNG/TA_02
Normative source	ETSI EN 319 532-3 [1], clause 9.4 The presence of TSP service definition URI (as per clause 5.5.8 of ETSI TS 119 612 [10]) is optional
Target	Conformance to CSI Capability information
Prerequisite	Trusted Lists are used to publish capability management information about a REMS
Predicate	The TSP service definition URI (as per clause 5.5.8 of ETSI TS 119 612 [10]) is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, CSI, trust information, Trusted List

REMS/CSI/CAPMNG/TA_03	
TA Id	REMS/CSI/CAPMNG/TA_03
Normative source	ETSI EN 319 532-3 [1], clause 9.4 this element (TSP service definition URI) may contain a URI, where the REMS capability metadata is downloadable
Target	Conformance to CSI Capability information
Prerequisite	Trusted Lists are used to publish capability management information about a REMS
Predicate	The value of the TSP service definition URI (as per clause 5.5.8 of ETSI TS 119 612 [10]) contains an URI where the REMS capability metadata is downloadable from
Prescription level	Optional
Tag	Conformance, REMS, REMSP, CSI, trust information, Trusted List

REMS/CSI/CAPMNG/TA_04	
TA Id	REMS/CSI/CAPMNG/TA_04
Normative source	ETSI EN 319 532-3 [1], clause 9.4 The presence of service information extensions (as per clause 5.5.9 of ETSI TS 119 612 [10]) is optional
Target	Conformance to CSI Capability information
Prerequisite	Trusted Lists are used to publish capability management information about a REMS
Predicate	The service information extensions (as per clause 5.5.9 of ETSI TS 119 612 [10]) is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, CSI, trust information, Trusted List

REMS/CSI/CAPMNG/TA_05	
TA Id	REMS/CSI/CAPMNG/TA_05
Normative source	ETSI EN 319 532-3 [1], clause 9.4 If present, the additionalServiceInformation field, as per clause 5.5.9.4 of ETSI TS 119 612 [10] may contain a URI, where the REMS capability metadata is downloadable, or alternatively, it may embed the REMS capability metadata structure itself (if it is in XML format)
Target	Conformance to CSI Capability information
Prerequisite	Trusted Lists are used to publish capability management information about a REMS
Predicate	The value of additionalServiceInformation is either an URI where the REMS capability metadata is downloadable from, or the REMS capability metadata itself as XML structured data
Prescription level	Optional
Tag	Conformance, REMS, REMSP, CSI, trust information, Trusted List

REMS/CSI/CAPMNG/TA_06	
TA Id	REMS/CSI/CAPMNG/TA_06
Normative source	ETSI EN 319 532-3 [1], clause 9.4 If present, ServiceSupplyPoint field may contain URIs, where the REMS capability and security metadata are downloadable
Target	Conformance to CSI Capability information
Prerequisite	Trusted Lists are used to publish capability management information about a REMS
Predicate	The ServiceSupplyPoint is present
Prescription level	Optional
Tag	Conformance, REMS, REMSP, CSI, trust information, Trusted List

REMS/CSI/CAPMNG/TA_07	
TA Id	REMS/CSI/CAPMNG/TA_07
Normative source	ETSI EN 319 532-3 [1], clause 9.4 If present, ServiceSupplyPoint field may contain URIs, where the REMS capability and security metadata are downloadable
Target	Conformance to CSI Capability information
Prerequisite	Trusted Lists are used to publish capability management information about a REMS
Predicate	The value of ServiceSupplyPoint contains URIs, where the REMS capability and security metadata are downloadable
Prescription level	Optional
Tag	Conformance, REMS, REMSP, CSI, trust information, Trusted List

10   Test assertions for ERDS evidence structure and content

Test assertions specified in ETSI TS 119 524-1 [7], clause 6 shall apply.

11   Test assertions for provision of the service

11.1   Introduction

This clause contains test assertions directly related with the provision of the service itself, namely:

1)   The generation of ERDS evidence in response to the occurrence of an event.

2)   The provision of security features, like confidentiality.

11.2   Test assertions on generation of ERDS evidence in response to events

REMS/SERV_PROV/ERDSEVGEN/TA_01	
TA Id	REMS/SERV_PROV/ERDSEVGEN/TA_01
Normative source	ETSI EN 319 522-1 [5], clause 6.1 Generation of SubmissionAcceptance ERDS evidence following the acceptance of the user content sent by sender is mandatory
Target	Conformance to generation of ERDS evidence following acceptance of user content
Prerequisite	Sender has submitted the user content to the S-REMS and it has accepted submission
Predicate	The S-REMS issues a compliant SubmissionAcceptance ERDS evidence
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, service provision, ERDS evidence

REMS/SERV_PROV/ERDSEVGEN/TA_02	
TA Id	REMS/SERV_PROV/ERDSEVGEN/TA_02
Normative source	ETSI EN 319 522-1 [5], clause 6.1 Generation of SubmissionRejection ERDS evidence following the rejection of the user content sent by sender is mandatory
Target	Conformance to generation of ERDS evidence following rejection of user content
Prerequisite	Sender has submitted the user content to the S-REMS and it has rejected submission
Predicate	The S-REMS issues a compliant SubmissionRejection ERDS evidence identifying the reason for rejection
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, service provision, ERDS evidence

REMS/SERV_PROV/ERDSEVGEN/TA_03	
TA Id	REMS/SERV_PROV/ERDSEVGEN/TA_03
Normative source	ETSI EN 319 522-1 [5], clause 6.1 Generation of RelayAcceptance ERDS evidence following the acceptance of the relaying of a REM message requested by another REMS is Mandatory
Target	Conformance to generation of ERDS evidence following acceptance of relaying
Prerequisite	The REMS has accepted a REM message containing user content as relayed by another REMS
Predicate	The REMS issues a compliant RelayAcceptance ERDS evidence
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, service provision, ERDS evidence

REMS/SERV_PROV/ERDSEVGEN/TA_04	
TA Id	REMS/SERV_PROV/ERDSEVGEN/TA_04
Normative source	ETSI EN 319 522-1 [5], clause 6.1 Generation of RelayRejection ERDS evidence following the rejection of the relaying of a REM message requested by another REMS is Mandatory
Target	Conformance to generation of ERDS evidence following rejection of relaying
Prerequisite	The REMS has rejected that another REMS relays a REM message containing user content
Predicate	The REMS issues a compliant RelayRejection ERDS evidence identifying the reason for rejection
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, service provision, ERDS evidence

REMS/SERV_PROV/ERDSEVGEN/TA_05	
TA Id	REMS/SERV_PROV/ERDSEVGEN/TA_05
Normative source	ETSI EN 319 522-1 [5], clause 6.1 Generation of RelayFailure ERDS evidence following failure of the relaying of a REM message is Mandatory
Target	Conformance to generation of ERDS evidence following failure of relaying
Prerequisite	The relaying REMS has tried to relay a REM message to another REMS and it has failed
Predicate	The relaying REMS issues a compliant RelayFailure ERDS evidence
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, service provision, ERDS evidence

REMS/SERV_PROV/ERDSEVGEN/TA_06	
TA Id	REMS/SERV_PROV/ERDSEVGEN/TA_06
Normative source	ETSI EN 319 522-1 [5], clause 6.1 Generation of ContentConsignment ERDS evidence following the successful consignment of the user content
Target	Conformance to generation of ERDS evidence following successful consignment of the user content
Prerequisite	The REMS has successfully consigned the user content
Predicate	The REMS issues a compliant ContentConsignment ERDS evidence
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, service provision, ERDS evidence

REMS/SERV_PROV/ERDSEVGEN/TA_07	
TA Id	REMS/SERV_PROV/ERDSEVGEN/TA_07
Normative source	ETSI EN 319 532-3 [1] Generation of ContentConsignmentFailure ERDS evidence following the unsuccessful consignment of the user content
Target	Conformance to generation of ERDS evidence following unsuccessful consignment of the user content
Prerequisite	The REMS has failed in consigning the user content
Predicate	The REMS issues a compliant ContentConsignmentFailure ERDS evidence
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, service provision, ERDS evidence

REMS/SERV_PROV/ERDSEVGEN/TA_08	
TA Id	REMS/SERV_PROV/ERDSEVGEN/TA_08
Normative source	ETSI EN 319 522-1 [5], clause 6.1 Generation of ContentHandover ERDS evidence following the successful handing over of the user content is conditional
Target	Conformance to generation of ERDS evidence following successful handing of the user content
Prerequisite	The REMS has successfully handed over the user content and did not try to consign it.
Predicate	The REMS issues a compliant ContentHandover ERDS evidence
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, service provision, ERDS evidence

REMS/SERV_PROV/ERDSEVGEN/TA_09	
TA Id	REMS/SERV_PROV/ERDSEVGEN/TA_09
Normative source	ETSI EN 319 522-1 [5], clause 6.1 Generation of ContentHandoverFailure ERDS evidence following the unsuccessful handing over of the user content is conditional
Target	Conformance to generation of ERDS evidence following unsuccessful handing over of the user content
Prerequisite	The REMS has failed in handing over the user content and REMS did not try to consign it
Predicate	The REMS issues a compliant ContentHandoverFailure ERDS evidence
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, service provision, ERDS evidence

REMS/SERV_PROV/ERDSEVGEN/TA_10	
TA Id	REMS/SERV_PROV/ERDSEVGEN/TA_10
Normative source	ETSI EN 319 532-3 [1] Generation of NotificationForAcceptance ERDS evidence following the successful issuance of a notification for acceptance is recommended
Target	Conformance to generation of ERDS evidence following successful issuance of a notification for acceptance
Prerequisite	The R-REMS has successfully sent a notification for acceptance to a recipient subscribed to the REMS
Predicate	The R-REMS issues a compliant NotificationForAcceptance ERDS evidence
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, service provision, ERDS evidence

REMS/SERV_PROV/ERDSEVGEN/TA_11	
TA Id	REMS/SERV_PROV/ERDSEVGEN/TA_11
Normative source	ETSI EN 319 522-1 [5], clause 6.1 Generation of NotificationForAcceptanceFailure ERDS evidence following the unsuccessful issuance of a notification for acceptance is recommended
Target	Conformance to generation of ERDS evidence following unsuccessful issuance of a notification for acceptance
Prerequisite	The R-REMS has failed in sending a notification for acceptance to a recipient subscribed to the REMS
Predicate	The R-REMS issues a compliant NotificationForAcceptanceFailure ERDS evidence
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, service provision, ERDS evidence

REMS/SERV_PROV/ERDSEVGEN/TA_12	
TA Id	REMS/SERV_PROV/ERDSEVGEN/TA_12
Normative source	ETSI EN 319 532-1 [2], clause 6.2.3 The notifying REMS shall issue ERDS evidence about exactly one of the events regarding the response of each of the recipients (Consignment Acceptance, ConsignmentRejection, and AcceptanceRejectionExpiry) for each user content.
Target	Conformance to generation of ERDS evidence following consignment acceptance by the recipient
Prerequisite	The REMS handles the user content in S&N style and the recipient has accepted consignment
Predicate	The REMS issues a compliant ConsignmentAcceptance ERDS evidence
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, service provision, ERDS evidence

REMS/SERV_PROV/ERDSEVGEN/TA_13	
TA Id	REMS/SERV_PROV/ERDSEVGEN/TA_13
Normative source	ETSI EN 319 532-1 [2], clause 6.2.3 The notifying REMS shall issue ERDS evidence about exactly one of the events regarding the response of each of the recipients (Consignment Acceptance, ConsignmentRejection, and AcceptanceRejectionExpiry) for each user content.
Target	Conformance to generation of ERDS evidence following consignment rejection by the recipient
Prerequisite	The REMS handles the user content in S&N style and the recipient has rejected consignment
Predicate	The REMS issues a compliant ConsignmentRejection ERDS evidence
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, service provision, ERDS evidence

REMS/SERV_PROV/ERDSEVGEN/TA_14	
TA Id	REMS/SERV_PROV/ERDSEVGEN/TA_14
Normative source	ETSI EN 319 532-1 [2], clause 6.2.3 The notifying REMS shall issue ERDS evidence about exactly one of the events regarding the response of each of the recipients (Consignment Acceptance, ConsignmentRejection, and AcceptanceRejectionExpiry) for each user content.
Target	Conformance to generation of ERDS evidence following expiration of the time for reacting to a notification for acceptance without any reaction by the recipient
Prerequisite	The REMS handles the user content in S&N style and the recipient has not reacted to a notification for acceptance before the expiration time assigned to that notification
Predicate	The REMS issues a compliant AcceptancetRejectionExpiry ERDS evidence
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, service provision, ERDS evidence

REMS/SERV_PROV/ERDSEVGEN/TA_15	
TA Id	REMS/SERV_PROV/ERDSEVGEN/TA_15
Normative source	ETSI EN 319 532-1 [2], clause 6.2.4 R-REMS may optionally notify the recipient about the consigned user content
Target	Conformance to generation of ERDS evidence following successful submission of a notification for consignment
Prerequisite	The REMS has successfully submitted a notification of consignment
Predicate	The REMS issues a compliant ConsignmentNotification ERDS evidence
Prescription level	Optional
Tag	Conformance, REMS, REMSP, service provision, ERDS evidence

REMS/SERV_PROV/ERDSEVGEN/TA_16	
TA Id	REMS/SERV_PROV/ERDSEVGEN/TA_16
Normative source	ETSI EN 319 532-1 [2], clause 6.2.4 R-REMS may optionally notify the recipient about the consigned user content
Target	Conformance to generation of ERDS evidence following unsuccessful submission of a notification for consignment
Prerequisite	The REMS has failed in submitting a notification of consignment
Predicate	The REMS issues a compliant ConsignmentNotificationFailure ERDS evidence
Prescription level	Optional
Tag	Conformance, REMS, REMSP, service provision, ERDS evidence

REMS/SERV_PROV/ERDSEVGEN/TA_17	
TA Id	REMS/SERV_PROV/ERDSEVGEN/TA_17
Normative source	ETSI EN 319 522-1 [5], clause 6.1 Generation of RelayToNonERDS ERDS evidence following successful relaying of the user content to a non ERDS system, is recommended
Target	Conformance to generation of ERDS evidence following successful relaying of the user content to a non ERDS system
Prerequisite	The REMS has relayed the user content to a non ERDS system
Predicate	The REMS issues a compliant RelayToNonERDS ERDS evidence
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, service provision, ERDS evidence

REMS/SERV_PROV/ERDSEVGEN/TA_18	
TA Id	REMS/SERV_PROV/ERDSEVGEN/TA_18
Normative source	ETSI EN 319 522-1 [5], clause 6.1 Generation of RelayToNonERDSFailure ERDS evidence following unsuccessful relaying of the user content to a non ERDS system, is recommended
Target	Conformance to generation of ERDS evidence following unsuccessful relaying of the user content to a non ERDS system
Prerequisite	The REMS has failed in relaying the user content to a non ERDS system
Predicate	The REMS issues a compliant RelayToNonERDSFailure ERDS evidence
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, service provision, ERDS evidence

REMS/SERV_PROV/ERDSEVGEN/TA_19	
TA Id	REMS/SERV_PROV/ERDSEVGEN/TA_19
Normative source	ETSI EN 319 522-1 [5], clause 6.1 Generation of ReceivedFromNonERDS ERDS evidence following reception of a message coming from a non ERDS system, is recommended
Target	Conformance to generation of ERDS evidence following reception of a message coming from a non ERDS system
Prerequisite	The REMS has received a message from a non ERDS system
Predicate	The REMS issues a compliant ReceivedFromNonERDS ERDS evidence
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, service provision, ERDS evidence

11.3   Test assertions on REM interfaces

11.3.1   Introduction

This clause defines test assertions on REM interfaces. Clause 11.3.2 defines test assertions for testing security measures implemented in REM interfaces. Clause 11.3.3 defines test assertions for testing the provision of the REM interfaces.

11.3.2   Security measures on REM interfaces

The test assertions defined in ETSI TS 119 524-1 [7] clause 11.3.2, replacing ERDS by REMS, shall apply except the following ones:

- ERDS/SERV_PROV/INTFACE/SEC_MEAS/TA_03, ERDS/SERV_PROV/INTFACE/SEC_MEAS/TA_07, and ERDS/SERV_PROV/INTFACE/SEC_MEAS/TA_11, because they deal with ERD-UA MEPI, which, as stated in clause 5 of ETSI EN 319 532-1 [2], is an interface not defined for REMS.

- ERDS/SERV_PROV/INTFACE/SEC_MEAS/TA_02, ERDS/SERV_PROV/INTFACE/SEC_MEAS/TA_06, and ERDS/SERV_PROV/INTFACE/SEC_MEAS/TA_10, because they deal with ERDS MERI interface, which as stated in clause 5 of ETSI EN 319 532-1 [2], is split in two in REMS, namely:

  - REM MRI; and

  - REM ERI.

In addition, the following test assertions shall also apply, for REM MRI and REM ERI interfaces.

REMS/SERV_PROV/INTFACE/SEC_MEAS/TA_01	
TA Id	REMS/SERV_PROV/INTFACE/SEC_MEAS/TA_01
Normative source	ETSI EN 319 532-1 [2], clause 5 This interface (MRI: Message Retrieval Interface) shall require identification and authentication
Target	Conformance to security requirements in interfaces
Predicate	The REMS ensures authentication for interactions through the Message Retrieval Interface
Prescription level	Mandatory
Tag	Conformance, ERDS, ERDSP, service provision, authentication

REMS/SERV_PROV/INTFACE/SEC_MEAS/TA_02	
TA Id	REMS/SERV_PROV/INTFACE/SEC_MEAS/TA_02
Normative source	ETSI EN 319 532-1 [2], clause 5 This interface (ERI: Evidence Retrieval Interface) shall require identification and authentication
Target	Conformance to security requirements in interfaces
Predicate	The REMS ensures authentication for interactions through the Evidence Retrieval Interface
Prescription level	Mandatory
Tag	Conformance, ERDS, ERDSP, service provision, authentication

REMS/SERV_PROV/INTFACE/SEC_MEAS/TA_03	
TA Id	REMS/SERV_PROV/INTFACE/SEC_MEAS/TA_03
Normative source	ETSI EN 319 532-1 [2], clause 5 This interface (MRI: Message Retrieval Interface) shall implement confidentiality (…) preserving measures
Target	Conformance to security requirements in interfaces
Predicate	The REMS implements measures for preserving confidentiality through the Message Retrieval Interface
Prescription level	Mandatory
Tag	Conformance, ERDS, ERDSP, service provision, authentication

REMS/SERV_PROV/INTFACE/SEC_MEAS/TA_04	
TA Id	REMS/SERV_PROV/INTFACE/SEC_MEAS/TA_04
Normative source	ETSI EN 319 532-1 [2], clause 5 This interface (ERI: Evidence Retrieval Interface) shall implement confidentiality (…) preserving measures
Target	Conformance to security requirements in interfaces
Predicate	The REMS implements measures for preserving confidentiality through the Evidence Retrieval Interface
Prescription level	Mandatory
Tag	Conformance, ERDS, ERDSP, service provision, authentication

REMS/SERV_PROV/INTFACE/SEC_MEAS/TA_05	
TA Id	REMS/SERV_PROV/INTFACE/SEC_MEAS/TA_05
Normative source	ETSI EN 319 532-1 [2], clause 5 This interface (MRI: Message Retrieval Interface) shall implement (…) integrity preserving measures
Target	Conformance to security requirements in interfaces
Predicate	The REMS implements measures for preserving integrity through the Message Retrieval Interface
Prescription level	Mandatory
Tag	Conformance, ERDS, ERDSP, service provision, authentication

REMS/SERV_PROV/INTFACE/SEC_MEAS/TA_06	
TA Id	REMS/SERV_PROV/INTFACE/SEC_MEAS/TA_06
Normative source	ETSI EN 319 532-1 [2], clause 5 This interface (ERI: Evidence Retrieval Interface) shall implement (…) integrity preserving measures
Target	Conformance to security requirements in interfaces
Predicate	The REMS implements measures for preserving integrity through the Evidence Retrieval Interface
Prescription level	Mandatory
Tag	Conformance, ERDS, ERDSP, service provision, authentication

11.3.3   Test assertions on provision of REM interfaces

The test assertions defined in ETSI TS 119 524-1 [7] clause 11.3.3, replacing ERDS by REMS, shall apply, except the following one:

- ERDS/SERV_PROV/INTFACE/PROV/TA_02, because this test assertion deals with ERD-UA MEPI, which, as stated in clause 5 of ETSI EN 319 532-1 [2], is an interface not defined for REMS, and the ERDS MERI interface, which in ETSI EN 319 532-1 [2] is split in two, namely:

  - REM MRI; and

  - REM ERI.

In addition, the following test assertions shall also apply.

REMS/SERV_PROV/INTFACE/PROV/TA_01	
TA Id	REMS/SERV_PROV/INTFACE/PROV/TA_01
Normative source	ETSI EN 319 532-1 [2], clause 5 The REM MSI should be provided using SMTP over TLS
Target	Conformance to provision of REM interfaces
Predicate	The REMS provides the REM MSI interface using SMTP see IETF RFC 5321 [i.7] over TLS in IETF RFC 5246 [i.8])
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, service provision, REM interfaces

REMS/SERV_PROV/INTFACE/PROV/TA_02	
TA Id	REMS/SERV_PROV/INTFACE/PROV/TA_02
Normative source	ETSI EN 319 532-1 [2], clause 5 Other protocols may be used only if they create a secure channel providing confidentiality, integrity and authenticity of data sent through the channel
Target	Conformance to provision of REM interfaces
Predicate	The REMS provides the REM MSI interface using protocols different than SMTP over TLS
Prescription level	Optional
Tag	Conformance, REMS, REMSP, service provision, REM interfaces

REMS/SERV_PROV/INTFACE/PROV/TA_03	
TA Id	REMS/SERV_PROV/INTFACE/PROV/TA_03
Normative source	ETSI EN 319 532-1 [2], clause 5 The REM MRI shall be provided
Target	Conformance to provision of REM interfaces
Predicate	The REMS provides the REM MRI interface
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, service provision, REM interfaces

REMS/SERV_PROV/INTFACE/PROV/TA_04	
TA Id	REMS/SERV_PROV/INTFACE/PROV/TA_04
Normative source	ETSI EN 319 532-1 [2], clause 5 The REM MRI should be provided using IMAP over TLS or POP3 over TLS
Target	Conformance to provision of REM interfaces
Predicate	The REMS provides the REM MRI interface using IMAP (IETF RFC 3501 [i.9]) over TLS (IETF RFC 5246 [i.8]) or POP3 over TLS
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, service provision, REM interfaces

REMS/SERV_PROV/INTFACE/PROV/TA_05	
TA Id	REMS/SERV_PROV/INTFACE/PROV/TA_05
Normative source	ETSI EN 319 532-1 [2], clause 5 Other protocols may be used only if they create a secure channel providing confidentiality, integrity and authenticity of data sent through the channel
Target	Conformance to provision of REM interfaces
Predicate	The REMS provides the REM MRI interface using protocols different than IMAP over TLS and POP3 over TLS
Prescription level	Optional
Tag	Conformance, REMS, REMSP, service provision, REM interfaces

REMS/SERV_PROV/INTFACE/PROV/TA_06	
TA Id	REMS/SERV_PROV/INTFACE/PROV/TA_06
Normative source	ETSI EN 319 532-1 [2], clause 5 The REM ERI shall be provided
Target	Conformance to provision of REM interfaces
Predicate	The REMS provides the REM ERI interface
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, service provision, REM interfaces

REMS/SERV_PROV/INTFACE/PROV/TA_07	
TA Id	REMS/SERV_PROV/INTFACE/PROV/TA_07
Normative source	ETSI EN 319 532-1 [2], clause 5 The REM ERI may use the same channel as the REM MRI, but may also use separate channels
Target	Conformance to provision of REM interfaces
Predicate	The REM ERI interface uses the same channel as the REM MRI
Prescription level	Optional
Tag	Conformance, REMS, REMSP, service provision, REM interfaces

REMS/SERV_PROV/INTFACE/PROV/TA_08	
TA Id	REMS/SERV_PROV/INTFACE/PROV/TA_08
Normative source	ETSI EN 319 532-1 [2], clause 5 The REM ERI may use the same channel as the REM MRI, but may also use separate channels
Target	Conformance to provision of REM interfaces
Predicate	The REM ERI interface uses a different channel than the channel used by REM MRI
Prescription level	Optional
Tag	Conformance, REMS, REMSP, service provision, REM interfaces

REMS/SERV_PROV/INTFACE/PROV/TA_09	
TA Id	REMS/SERV_PROV/INTFACE/PROV/TA_09
Normative source	ETSI EN 319 532-1 [2], clause 5 A REMS may provide more than one REM RI
Target	Conformance to security requirements in interfaces
Predicate	The REMS provides more than one REM RI interfaces
Prescription level	Optional
Tag	Conformance, REMS, REMSP, service provision, REM interfaces

REMS/SERV_PROV/INTFACE/PROV/TA_10	
TA Id	REMS/SERV_PROV/INTFACE/PROV/TA_10
Normative source	ETSI EN 319 532-1 [2], clause 5 The REM RI should be provided using SMTP over TLS
Target	Conformance to security requirements in interfaces
Predicate	The REMS provides the REM RI interface using SMTP over TLS
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, service provision, REM interfaces

REMS/SERV_PROV/INTFACE/PROV/TA_11	
TA Id	REMS/SERV_PROV/INTFACE/PROV/TA_11
Normative source	ETSI EN 319 532-1 [2], clause 5 for REM RI provision Other protocols may be used only if they create a secure channel providing confidentiality, integrity and authenticity of data sent through the channel (e.g. TLS)
Target	Conformance to provision of REM interfaces
Predicate	The REMS provides the REM RI interface using protocols different than SMTP over TLS
Prescription level	Optional
Tag	Conformance, REMS, REMSP, service provision, REM interfaces

REMS/SERV_PROV/INTFACE/PROV/TA_12	
TA Id	REMS/SERV_PROV/INTFACE/PROV/TA_12
Normative source	ETSI EN 319 532-1 [2], clause 5 for REM RI provision Implementation of this interface should follow the requirements defined in clause 5 of ETSI EN 319 532-4 [11]
Target	Conformance to provision of REM interfaces
Predicate	The REMS implements the REM RI interface following the requirements defined in clause 5 of ETSI EN 319 532-4 [11]
Prescription level	Recommended
Tag	Conformance, REMS, REMSP, service provision, REM interfaces

REMS/SERV_PROV/INTFACE/PROV/TA_13	
TA Id	REMS/SERV_PROV/INTFACE/PROV/TA_13
Normative source	ETSI EN 319 532-1 [2], clause 5 The REM ARI (Acceptance/Rejection Interface) shall be provided when the REMS operates in S&N style
Target	Conformance to provision of REM interfaces
Prerequisite	The REMS operates in Store and Notify style
Predicate	The REMS provides the REM ARI
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, service provision, REM interfaces

12   Test assertions for REM Baseline

12.1   Introduction

This clause contains test assertions which are specific for testing conformance of REM Baseline.

Testing conformance of REM Baseline shall require testing the test assertions specified in the present clause and test assertions specified in clauses 5 to 11 of the present document, except those ones that are superseded or explicitly suppressed in this clause.

12.2   Test assertions for SMIME sections headers

12.2.1   Introduction

Clause 12.2 specifies the test assertions required for testing compliance of the requirements defined in REM Baseline for the header fields present in the following REM messages' MIME section headers for REM Baseline SMIME sections in REM messages.

1)   The REMS Relay metadata MIME section header. This clause defines new test assertions ETSI EN 319 532-4 [11], clause 5.4.1.

2)   The signed data MIME section header. No new test assertions are defined.

3)   The REMS introduction MIME section header. This clause defines new test assertions ETSI EN 319 532-4 [11], clause 5.4.3.

4)   The original message MIME section header. This clause defines new test assertions ETSI EN 319 532-4 [11], clause 5.4.4.

5)   The REMS extension MIME section header. This clause defines new test assertions ETSI EN 319 532-4 [11], clause 5.4.5.

6)   The ERDS evidence MIME section header. This clause defines new test assertions ETSI EN 319 532-4 [11], clause 5.4.6.

7)   The REMS signature MIME section header. This clause defines new test assertions ETSI EN 319 532-4 [11], clause 5.4.7.

12.2.2   Test assertions for the REMS Relay metadata header

All the tests assertions defined in clause 5.2 with a prescription level of Mandatory shall apply, unless stated otherwise.

In addition, the following test assertions shall also apply.

REMS/BS/HEADER/REMSRELAY/FIELD/TA_01	
TA Id	REMS/BS/HEADER/REMSRELAY/FIELD/TA_01
Normative source	ETSI EN 319 532-4 [11] clause C.4.5.4, Table C.26 row for MD03 REM-ExpirationDate
Target	Conformance to REMS relay metadata MIME section header in REM Baseline
Predicate	The REM-ExpirationDate header is not present
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, REMS relay metadata

REMS/BS/HEADER/REMSRELAY/FIELD/TA_02	
TA Id	REMS/BS/HEADER/REMSRELAY/FIELD/TA_02
Normative source	ETSI EN 319 532-4 [11] clause C.4.5.4, Table C.26 row for MD07 REM-ScheduledDelivery
Target	Conformance to REMS relay metadata MIME section header in REM Baseline
Predicate	The REM-ScheduledDelivery header is not present
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, REMS relay metadata

REMS/BS/HEADER/REMSRELAY/FIELD/TA_03	
TA Id	REMS/BS/HEADER/REMSRELAY/FIELD/TA_03
Normative source	ETSI EN 319 532-4 [11] clause C.4.5.4, Table C.26 row for MD08 REM-MD08
Target	Conformance to REMS relay metadata MIME section header in REM Baseline
Predicate	The REM-MD08 header is present
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, REMS relay metadata

REMS/BS/HEADER/REMSRELAY/FIELD/TA_04	
TA Id	REMS/BS/HEADER/REMSRELAY/FIELD/TA_04
Normative source	ETSI EN 319 532-4 [11] clause C.4.5.4, Table C.26 row for Signature
Target	Conformance to REMS relay metadata MIME section header in REM Baseline
Predicate	The Signature is present
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, REMS relay metadata

REMS/BS/HEADER/REMSRELAY/FIELD/TA_05					
TA Id	REMS/BS/HEADER/REMSRELAY/FIELD/TA_05				
Normative source	ETSI EN 319 532-4 [11], clause 5.4.1				

	Nº	Service/Protocol element	ETSI EN 319 532-3 [1] reference	Requirement	Implementation guidance	Notes
	3	REM-Evidence-ID	Clause 6.2.1	M	c)	

c)   Its value shall be the G01 component corresponding to the evidence specified inside the "EvidenceIdentifier" ERDS evidence element defined in ETSI EN 319 522-3 [9], clause 5.2.2.3.

Target	Conformance to REMS relay metadata MIME section header in REM Baseline
Predicate	The value of 'REM-Evidence-ID' field of the REMS relay metadata MIME section header is the G01 component corresponding to the evidence identifier "Id" defined inside the Evidence root element structure in ETSI EN 319 522-3 [9], clause 5.2.2.3
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, REMS relay metadata

REMS/BS/HEADER/REMSRELAY/FIELD/TA_06	
TA Id	REMS/BS/HEADER/REMSRELAY/FIELD/TA_06
Normative source	ETSI EN 319 532-3 [1], clause 6.1 It shall contain the evidence identifier component and in REM it should be mapped with the same format as the Message-ID: header
Target	Conformance to REMS relay metadata MIME section header in REM Baseline
Predicate	The value of 'REM-Evidence-ID' field of the REMS relay metadata MIME section header is mapped with the same format as the Message-ID: header
Prescription level	Recommended
Tag	Conformance, REM Baseline, REMS, REMSP, REMS relay metadata

REMS/BS/HEADER/REMSRELAY/FIELD/TA_07					
TA Id	REMS/BS/HEADER/REMSRELAY/FIELD/TA_07				
Normative source	ETSI EN 319 532-4 [11], clause 5.4.1				

	Nº	Service/Protocol element	ETSI EN 319 532-3 [1] reference	Requirement	Implementation guidance	Notes
	3	REM-Evidence-ID	Clause 6.2.1	M	c)	

c)   Its value shall be the G01 component corresponding to the evidence specified inside the "EvidenceIdentifier" ERDS evidence element defined in ETSI EN 319 522-3 [9], clause 5.2.2.3.

Target	Conformance to REMS relay metadata MIME section header in REM Baseline
Predicate	The value of 'REM-Evidence-ID' field of the REMS relay metadata MIME section header is present
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, REMS relay metadata

12.2.3   Test assertions for fields in the signed data MIME section header

All the tests assertions defined in clause 5.3 with a prescription level of Mandatory shall apply, unless stated otherwise.

12.2.4   Test assertions for fields in REMS introduction MIME section header

12.2.4.1   Test assertions for Introduction MIME section header

All the tests assertions defined in clause 5.4.1 with a prescription level of Mandatory shall apply, unless stated otherwise.

The tests assertions referenced in the table below shall not apply.

Test assertions that shall not apply		
Test assertion identifier	**ETSI document**	**clause**
REMS/HEADER/INTRO/FIELD/TA_01	The present document	5.4.1
REMS/HEADER/INTRO/FIELD/TA_02	The present document	5.4.1
NOTE: ETSI EN 319 532-4 [11], clause 5.4.3.1 has changed the requirements for REM-Section-Type specified in ETSI EN 319 532-3 [1], clause 6.2.3.1.		

The test assertions referenced in the table below shall apply.

Test assertions that shall apply		
Test assertion identifier	**ETSI document**	**clause**
REMS/HEADER/INTRO/FIELD/TA_04	The present document	5.4.1
NOTE: ETSI EN 319 532-4 [11], clause 5.4.3.1 did not change the requirements for Content-Type specified in ETSI EN 319 532-3 [1], clause 6.2.3.1.		

Furthermore, the following test assertions shall apply.

REMS/BS/HEADER/INTRO/FIELD/TA_01					
TA Id	REMS/BS/HEADER/INTRO/FIELD/TA_06				
Normative source	ETSI EN 319 532-4 [11], clause 5.4.3.1				
	Nº	**Service/Protocol element**	**ETSI EN 319 532-3 [1] reference**	**Requirement**	**Implementation guidance**	**Notes**
	1	REM-Section-Type	Clause 6.2.3.1	M	a)	
	a) A REM-Section-Type header shall have the value "rem_message/introduction".				
Target	Conformance to Introduction MIME section header				
Predicate	The 'REM-Section-Type' field of the Introduction MIME section header is present				
Prescription level	Mandatory				
Tag	Conformance, REM Baseline, REMS, REMSP, Introduction MIME Header				

REMS/BS/HEADER/INTRO/FIELD/TA_02					
TA Id	REMS/BS/HEADER/INTRO/FIELD/TA_02				
Normative source	ETSI EN 319 532-4 [11], clause 5.4.3.1				
	Nº	**Service/Protocol element**	**ETSI EN 319 532-3 [1] reference**	**Requirement**	**Implementation guidance**	**Notes**
	1	REM-Section-Type	Clause 6.2.3.1	M	a)	
	a) A REM-Section-Type header shall have the value "rem_message/introduction".				
Target	Conformance to Introduction MIME section header				
Predicate	The value of 'REM-Section-Type' field of the Introduction MIME section header is "rem_message/introduction"				
Prescription level	Mandatory				
Tag	Conformance, REM Baseline, REMS, REMSP, Introduction MIME Header				

12.2.4.2 Test assertions for free text MIME subsection header

All the tests assertions defined in clause 5.4.2 with a prescription level of Mandatory shall apply, unless stated otherwise.

12.2.4.3 Test assertions for HTML MIME subsection header

All the tests assertions defined in clause 5.4.3 with a prescription level of Mandatory shall apply, unless stated otherwise.

12.2.5   Test assertions for fields in original message MIME section header

All the tests assertions defined in clause 5.5 with a prescription level of Mandatory shall apply, unless stated otherwise.

In addition, the test assertions defined below shall apply.

REMS/BS/HEADER/ORMESS/FIELD/TA_01					
TA Id	REMS/BS/HEADER/ORMESS/FIELD/TA_01				
Normative source	ETSI EN 319 532-4 [11], clause 5.4.4				
	Nº	**Service/Protocol element**	**ETSI EN 319 532-3 [1] reference**	**Requirement**	**Implementation guidance**	**Notes**
	1	REM-Section-Type	Clause 6.2.4.2	M	a)	
	a) A REM-Section-Type header shall have the value "rem_message/original".				
Target	Conformance to Original Message MIME section header				
Predicate	The value of 'REM-Section-Type' field of the Original Message MIME section header, is "rem_message/original"				
Prescription level	Mandatory				
Tag	Conformance, REM Baseline, REMS, REMSP, Original Message MIME Header				

REMS/BS/HEADER/ORMESS/FIELD/TA_02					
TA Id	REMS/BS/HEADER/ORMESS/FIELD/TA_02				
Normative source	ETSI EN 319 532-4 [11], clause 5.4.4				
	Nº	**Service/Protocol element**	**ETSI EN 319 532-3 [1] reference**	**Requirement**	**Implementation guidance**	**Notes**
	1	REM-Section-Type	Clause 6.2.4.2	M	a)	
	a) A REM-Section-Type header shall have the value "rem_message/original".				
Target	Conformance to Original Message MIME section header				
Predicate	The REM-Section-Type' field of the Original Message MIME section header is present				
Prescription level	Mandatory				
Tag	Conformance, REM Baseline, REMS, REMSP, Original Message MIME Header				

12.2.6   Test assertions for fields in REMS extension MIME section header

All the tests assertions defined in clause 5.6 with a prescription level of Mandatory shall apply, unless stated otherwise.

In addition, the test assertions defined in the tables below shall apply.

REMS/BS/HEADER/EXT/FIELD/TA_01					
TA Id	REMS/BS/HEADER/EXT/FIELD/TA_01				
Normative source	ETSI EN 319 532-4 [11], clause 5.4.5				
	Nº	**Service/Protocol element**	**ETSI EN 319 532-3 [1] reference**	**Requirement**	**Implementation guidance**	**Notes**
	1	REM-Section-Type	Clause 6.2.5	M	a)	1
	a) A REM-Section-Type header shall have the value "rem_message/extension".				
Target	Conformance to Extension MIME section header				
Predicate	The value of 'REM-Section-Type' field of the Extension MIME section header, is "rem_message/extension"				
Prescription level	Mandatory				
Tag	Conformance, REM Baseline, REMS, REMSP, Extension MIME section header				

REMS/BS/HEADER/EXT/FIELD/TA_02						
TA Id	REMS/BS/HEADER/EXT/FIELD/TA_02					
Normative source	ETSI EN 319 532-4 [11], clause 5.4.5					
	Nº	**Service/Protocol element**	**ETSI EN 319 532-3 [1] reference**	**Requirement**	**Implementation guidance**	**Notes**
	1	REM-Section-Type	Clause 6.2.5	M	a)	1
	a) The REM-Section-Type header shall have the value "rem_message/extension".					
Target	Conformance to Extension MIME section header					
Predicate	The REM-Section-Type' field of the Extension MIME section header is present					
Prescription level	Mandatory					
Tag	Conformance, REM Baseline, REMS, REMSP, Extension MIME section header					

12.2.7   Test assertions for fields in ERDS evidence MIME section header

All the tests assertions defined in clause 5.7.1 with a prescription level of Mandatory shall apply, unless stated otherwise.

Furthermore, the test assertions defined in the tables below shall apply.

REMS/BS/HEADER/EVID/FIELD/TA_01						
TA Id	REMS/BS/HEADER/EVID/FIELD/TA_01					
Normative source	ETSI EN 319 532-4 [11], clause 5.4.6					
	Nº	**Service/Protocol element**	**ETSI EN 319 532-3 [1] reference**	**Requirement**	**Implementation guidance**	**Notes**
	1	REM-Section-Type	Clause 6.2.6.2	M	a)	
	a) A REM-Section-Type header shall have the value "rem_message/xml_evidence".					
Target	Conformance to ERDS evidence MIME section header					
Predicate	The value of 'REM-Section-Type' field of the ERDS Evidence MIME section header, is "rem_message/xml_evidence"					
Prescription level	Mandatory					
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence MIME section header					

REMS/BS/HEADER/EVID/FIELD/TA_02						
TA Id	REMS/BS/HEADER/EVID/FIELD/TA_02					
Normative source	ETSI EN 319 532-4 [11], clause 5.4.6					
	Nº	**Service/Protocol element**	**ETSI EN 319 532-3 [1] reference**	**Requirement**	**Implementation guidance**	**Notes**
	1	REM-Section-Type	Clause 6.2.5	M	a)	1
	a) A REM-Section-Type header shall have the value "rem_message/xml_evidence".					
Target	Conformance to ERDS evidence MIME section header					
Predicate	The REM-Section-Type' field of the ERDS Evidence MIME section header is present					
Prescription level	Mandatory					
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence MIME section header					

12.2.8   Test assertions for fields in REMS signature MIME section header

All the tests assertions defined in clause 5.8 with a prescription level of Mandatory shall apply, unless stated otherwise.

In addition, the test assertions defined in the tables below shall apply.

REMS/BS/HEADER/REMSSIG/FIELD/TA_01					
TA Id	REMS/BS/HEADER/REMSSIG/FIELD/TA_01				
Normative source	ETSI EN 319 532-4 [11], clause 5.4.7				
	Nº	**Service/Protocol element**	**ETSI EN 319 532-3 [1] reference**	**Requirement**	**Implementation guidance**	**Notes**
	1	Content-Type	Clause 6.2.7	M	a)	
	a)	The value of the Content-Type header field shall be: "application/pkcs7-signature". An additional "name" parameter shall have the value "smime.p7s".				
Target	Conformance to REMS signature MIME section header				
Predicate	The parameter 'name' of 'Content-Type' field of the REMS signature MIME section header is present				
Prescription level	Mandatory				
Tag	Conformance, REM Baseline, REMS, REMSP, REMS signature MIME section header				

REMS/BS/HEADER/REMSSIG/FIELD/TA_02					
TA Id	REMS/BS/HEADER/REMSSIG/FIELD/TA_02				
Normative source	ETSI EN 319 532-4 [11], clause 5.4.7				
	Nº	**Service/Protocol element**	**ETSI EN 319 532-3 [1] reference**	**Requirement**	**Implementation guidance**	**Notes**
	2	Content-Disposition	Clause 6.2.7	M	b), c)	
	b)	The value of the Content-Disposition header field shall be "attachment". An additional "filename" parameter shall have the value "smime.p7s".				
Target	Conformance to REMS signature MIME section header				
Predicate	The value of 'filename' parameter of 'Content-Disposition' field of the REMS signature MIME section header is "smime.p7s"				
Prescription level	Mandatory				
Tag	Conformance, REM Baseline, REMS, REMSP, REMS signature MIME section header				

12.3   Test assertions for MIME sections body

12.3.1   Introduction

This clause defines test assertions on the bodies of some of the MIME sections within REM Baseline messages.

12.3.2   Test assertions for Introduction MIME section body

Test assertions defined in clause 6.2 shall apply.

12.4   Test assertions for REM messages structures

12.4.1   Introduction

The tests assertions referenced in the table below shall apply.

Test assertions that shall apply		
Test assertion identifier	**ETSI document**	**clause**
REMS/MSSG/STRUCT/REMPAYLOAD/TA_01	The present document	7.2
REMS/MSSG/STRUCT/REMPAYLOAD/TA_02	The present document	7.2
REMS/MSSG/STRUCT/REMPAYLOAD/TA_03	The present document	7.2
REMS/MSSG/STRUCT/REMPAYLOAD/TA_04	The present document	7.2
REMS/MSSG/STRUCT/REMPAYLOAD/TA_05	The present document	7.2
REMS/MSSG/STRUCT/REMPAYLOAD/TA_06	The present document	7.2
REMS/MSSG/STRUCT/REMPAYLOAD/TA_08	The present document	7.2

12.4.2   Test assertions for REM payload structure

12.4.2.1   Test assertions for ERDS serviceinfo structure

The tests assertions referenced in the table below shall apply when the REMS notification is an ERDS serviceinfo.

Test assertions that shall apply		
Test assertion identifier	ETSI document	clause
REMS/MSSG/STRUCT/REMNOT/TA_01	The present document	7.3
REMS/MSSG/STRUCT/REMNOT/TA_02	The present document	7.3
REMS/MSSG/STRUCT/REMNOT/TA_03	The present document	7.3
REMS/MSSG/STRUCT/REMNOT/TA_04	The present document	7.3
REMS/MSSG/STRUCT/REMNOT/TA_05	The present document	7.3
REMS/MSSG/STRUCT/REMNOT/TA_08	The present document	7.3

12.4.2.2   Test assertions for ERDS receipt structure

The tests assertions referenced in the table below shall apply when the REMS notification is an ERDS receipt.

Test assertions that shall apply		
Test assertion identifier	ETSI document	clause
REMS/MSSG/STRUCT/REMRECEIPT/TA_01	The present document	7.4
REMS/MSSG/STRUCT/REMRECEIPT/TA_02	The present document	7.4
REMS/MSSG/STRUCT/REMRECEIPT/TA_03	The present document	7.4
REMS/MSSG/STRUCT/REMRECEIPT/TA_04	The present document	7.4
REMS/MSSG/STRUCT/REMRECEIPT/TA_05	The present document	7.4
REMS/MSSG/STRUCT/REMRECEIPT/TA_07	The present document	7.4
REMS/MSSG/STRUCT/REMRECEIPT/TA_08	The present document	7.4

12.4.3   Test assertions for REMS dispatch structure

The tests assertions referenced in the table below shall apply.

Test assertions that shall apply		
Test assertion identifier	ETSI document	clause
REMS/MSSG/STRUCT/REMDISPATCH/TA_01	The present document	7.5
REMS/MSSG/STRUCT/REMDISPATCH/TA_02	The present document	7.5
REMS/MSSG/STRUCT/REMDISPATCH/TA_03	The present document	7.5
REMS/MSSG/STRUCT/REMDISPATCH/TA_04	The present document	7.5
REMS/MSSG/STRUCT/REMDISPATCH/TA_05	The present document	7.5
REMS/MSSG/STRUCT/REMDISPATCH/TA_06	The present document	7.5
REMS/MSSG/STRUCT/REMDISPATCH/TA_08	The present document	7.5
REMS/MSSG/STRUCT/REMDISPATCH/TA_09	The present document	7.5

12.4.4   Test assertions for signatures for signatures signing REM messages

The tests assertions referenced in the table below shall apply.

Test assertions that shall apply		
Test assertion identifier	ETSI document	clause
REMS/REMMESSSIG/TA_02	The present document	8.3
REMS/REMMESSSIG/TA_03	The present document	8.3
REMS/REMMESSSIG/TA_08	The present document	8.3
REMS/REMMESSSIG/TA_02	The present document	8.3

In addition to that, the following Test assertion shall apply for these signatures:

REMS/BS/REMMESSSIG/TA_01	
TA Id	REMS/BS/REMMESSSIG/TA_01
Normative source	ETSI EN 319 532-4 [11], clause C.4.2 implementation guidance a) The digital signature shall be a CAdES baseline signature according to the semantics specified in ETSI EN 319 522-2 [8], clause 8.2.9, and the baseline signature as specified in ETSI EN 319 122-1 [i.5], clause 6.
Target	Conformance to REMS INTERFACES
Predicate	The digital signature on a REM message is a CAdES-B-B
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, REMS Interfaces

Finally, the test assertions defined in ETSI TS 119 124-4 [12], shall apply

12.5   Test assertions for REMS – Interfaces

12.5.1   Introduction

The present clause defines Test Assertions for the different interfaces present in REMS.

12.5.2   Test assertions for REM Message Submission Interface (MSI)

REMS/BS/INTERFACES/MSI/TA_01	
TA Id	REMS/BS/INTERFACES/MSI/TA_01
Normative source	ETSI EN 319 532-4 [11], clause 5.3.2 The Message Submission Interface shall be implemented with a protocol that shall secure the communication from the originating mail User Agent to the SMTP server. More specifically, this protocol shall ensure proper identification and authentication of the user, confidentiality of the communication, authenticity and integrity of the submitted data.
Target	Conformance to REMS INTERFACES
Predicate	The interface is implemented with a protocol that secures the communication from the originating mail User Agent to the SMTP server
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, REMS Interfaces

REMS/BS/INTERFACES/MSI/TA_02	
TA Id	REMS/BS/INTERFACES/MSI/TA_02
Normative source	ETSI EN 319 532-4 [11], clause 5.3.2 The Message Submission Interface shall be implemented with a protocol that shall secure the communication from the originating mail User Agent to the SMTP server. More specifically, this protocol shall ensure proper identification and authentication of the user, confidentiality of the communication, authenticity and integrity of the submitted data.
Target	Conformance to REMS INTERFACES
Predicate	The protocol used in this interface ensures: • Proper identification and authentication of the user • Confidentiality of the communication • Authenticity and integrity of the submitted data
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, REMS Interfaces

12.5.3 Test assertions for REM Message and Evidence Retrieval Interface (MERI)

REMS/BS/INTERFACES/MERI/TA_01	
TA Id	REMS/BS/INTERFACES/MERI/TA_01
Normative source	ETSI EN 319 532-4 [11], clause 5.3.3 The Message and Evidence Retrieval Interface shall be implemented with a protocol that shall secure the communication from the sender/recipient mail User Agent to the REMSP server. More specifically, this protocol shall ensure proper identification and authentication of the user, confidentiality of the communication, authenticity and integrity of the retrieved data.
Target	Conformance to REMS INTERFACES
Predicate	The interface is implemented with a protocol that secures the communication from the sender/recipient mail User Agent to the REMSP server.
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, REMS Interfaces

REMS/BS/INTERFACES/MERI/TA_02	
TA Id	REMS/BS/INTERFACES/MERI/TA_02
Normative source	ETSI EN 319 532-4 [11], clause 5.3.3 The Message and Evidence Retrieval Interface shall be implemented with a protocol that shall secure the communication from the sender/recipient mail User Agent to the REMSP server. More specifically, this protocol shall ensure proper identification and authentication of the user, confidentiality of the communication, authenticity and integrity of the retrieved data.
Target	Conformance to REMS INTERFACES
Predicate	The protocol used in this interface ensures: • Proper identification and authentication of the user • Confidentiality of the communication • Authenticity and integrity of the submitted data
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, REMS Interfaces

12.5.4 Test assertions for REM Rely Interface (RI)

REMS/BS/INTERFACES/RI/TA_01	
TA Id	REMS/BS/INTERFACES/RI/TA_01
Normative source	ETSI EN 319 532-4 [11], clause 5.3.4 The Relay Interface shall be implemented using SMTP protocol securing the communication from the sender REMSP server to the recipient REMSP server using TLS according to IETF RFC 3207 [15]
Target	Conformance to REMS INTERFACES
Predicate	The interface is implemented using SMTP protocol securing the communication from the sender REMSP server to the recipient REMSP server and using TLS according to IETF RFC 3207 [15].
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, REMS Interfaces

12.5.5 Test assertions for Common Service Interface (CSI)

12.5.5.1 Introduction

The present clause defines Test Assertions for the Common Service Interface.

12.5.5.2   Test assertions for routing information

REMS/BS/INTERFACES/ROUTINGINFO/TA_01	
TA Id	REMS/BS/INTERFACES/ROUTINGINFO/TA_01
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.2 The Routing Interface, part of CSI, shall be implemented using DNS protocol properly secured.
Target	Conformance to REMS INTERFACES
Predicate	The routing interface of the Common Service Interface is implemented using DNS protocol properly secured.
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, REMS Interfaces

REMS/BS/INTERFACES/ROUTINGINFO/TA_02	
TA Id	REMS/BS/INTERFACES/ROUTINGINFO/TA_02
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.2 The REMS shall ensure that the hostname of the server providing the REM RI is available in the MX records of the DNS to all other REMSs, which need to relay messages to this REMS; and that the hostname provided shall be the same as the one included in the URI contained in Service Supply Point, according to ETSI EN 319 532-2 [14], clause 9.4.2.
Target	Conformance to REMS INTERFACES
Predicate	Ensure that the hostname of the server providing the REM RI is available in the MX records of the DNS to all other REMSs, which need to relay messages to this REMS.
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, REMS Interfaces

REMS/BS/INTERFACES/ROUTINGINFO/TA_03	
TA Id	REMS/BS/INTERFACES/ROUTINGINFO/TA_03
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.2 The REMS shall ensure that the hostname of the server providing the REM RI is available in the MX records of the DNS to all other REMSs, which need to relay messages to this REMS; and that the hostname provided shall be the same as the one included in the URI contained in Service Supply Point, according to ETSI EN 319 532-2 [14], clause 9.4.2.
Target	Conformance to REMS INTERFACES
Predicate	Ensure that the hostname provided shall be the same as the one included in the URI contained in Service Supply Point.
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, REMS Interfaces

12.5.5.3   Test assertions for trust information binding

The following test assertion shall apply.

REMS/BS/INTERFACES/TRUSTINFO/TA_01	
TA Id	REMS/BS/INTERFACES/TRUSTINFO/TA_01
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.3.1 implementation guidance b.2.1.3) The Trusting Interface, part of CSI trust infrastructure, allowing the cooperation among participants to the trust domain defined for electronic registered mail delivery services shall be implemented by use of a Trusted List; and in the case of qualified REM services, by the use of EU Trusted List system.
Target	Conformance to REMS INTERFACES
Predicate	The trusting interface of the Common Service Interface uses Trusted Lists for REM services
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, REMS Interfaces

REMS/BS/INTERFACES/TRUSTINFO/TA_02	
TA Id	REMS/BS/INTERFACES/TRUSTINFO/TA_02
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.3.1 implementation guidance b.2.1.3) The Trusting Interface, part of CSI trust infrastructure, allowing the cooperation among participants to the trust domain defined for electronic registered mail delivery services shall be implemented by use of a Trusted List; and in the case of qualified REM services, by the use of EU Trusted List system.
Target	Conformance to REMS INTERFACES
Predicate	The trusting interface of the Common Service Interface uses EU Trusted Lists for qualified REM services
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, REMS Interfaces

REMS/BS/INTERFACES/TRUSTINFO/TA_03	
TA Id	REMS/BS/INTERFACES/TRUSTINFO/TA_03
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.3.2 implementation guidance b.2.3.1) The service digital identity (ServiceDigitalIdentity element) of a REMS shall be represented by an X.509 certificate as a component of TL by the following tuple according to ETSI TS 119 612 [10], clause 5.5.3: • One X509Certificate elements expressed in Base64 encoded format as specified in XML-Signature, used by the REMS for "digital signing of REM messages and/or ERD evidence XML structures" (see the derived rationales from statements 1 and 3 of table B.4) • Optionally, one X509SubjectName element that contains a Distinguished Name encoded as established by XML-Signature (see the derived rationales from statement 3 of table B.4) • Optionally, one public key identifier expressed as an X.509 certificate Subject Key Identifier (X509SKI element) as specified in XML-Signature (see the derived rationales from statement 3 of table B.4).
Target	Conformance to REMS INTERFACES
Predicate	The service digital identity has one X509Certificate element that contains the base-64 encoding of the certificate used by the REMS for "digital signing of REM messages and/or ERD evidence XML structures"
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, REMS Interfaces

REMS/BS/INTERFACES/TRUSTINFO/TA_04	
TA Id	REMS/BS/INTERFACES/TRUSTINFO/TA_04
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.3.2 implementation guidance b.2.3.1) The service digital identity (ServiceDigitalIdentity element) of a REMS shall be represented by an X.509 certificate as a component of TL by the following tuple according to ETSI TS 119 612 [10], clause 5.5.3: • One X509Certificate elements expressed in Base64 encoded format as specified in XML-Signature, used by the REMS for "digital signing of REM messages and/or ERD evidence XML structures" (see the derived rationales from statements 1 and 3 of table B.4) • Optionally, one X509SubjectName element that contains a Distinguished Name encoded as established by XML-Signature (see the derived rationales from statement 3 of table B.4) • Optionally, one public key identifier expressed as an X.509 certificate Subject Key Identifier (X509SKI element) as specified in XML-Signature (see the derived rationales from statement 3 of table B.4).
Target	Conformance to REMS INTERFACES
Predicate	The service digital identity has one X509SubjectName element that contains a Distinguished Name encoded as established by XML-Signature
Prescription level	Optional
Tag	Conformance, REM Baseline, REMS, REMSP, REMS Interfaces

REMS/BS/INTERFACES/TRUSTINFO/TA_05	
TA Id	REMS/BS/INTERFACES/TRUSTINFO/TA_05
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.3.2 implementation guidance b.2.3.1) The service digital identity (ServiceDigitalIdentity element) of a REMS shall be represented by an X.509 certificate as a component of TL by the following tuple according to ETSI TS 119 612 [10], clause 5.5.3: • One X509Certificate elements expressed in Base64 encoded format as specified in XML-Signature, used by the REMS for "digital signing of REM messages and/or ERD evidence XML structures" (see the derived rationales from statements 1 and 3 of table B.4) • Optionally, one X509SubjectName element that contains a Distinguished Name encoded as established by XML-Signature (see the derived rationales from statement 3 of table B.4) • Optionally, one public key identifier expressed as an X.509 certificate Subject Key Identifier (X509SKI element) as specified in XML-Signature (see the derived rationales from statement 3 of table B.4).
Target	Conformance to REMS INTERFACES
Predicate	The service digital identity has one public key identifier expressed as an X.509 certificate Subject Key Identifier (X509SKI element) as specified in XML-Signature
Prescription level	Optional
Tag	Conformance, REM Baseline, REMS, REMSP, REMS Interfaces

REMS/BS/INTERFACES/TRUSTINFO/TA_06	
TA Id	REMS/BS/INTERFACES/TRUSTINFO/TA_06
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.3.2 implementation guidance b.2.4.1), b.2.4.2), and b.2.4.3) The ServiceSupplyPoints shall contain two entries, components of TL, with the following values: • b.2.4.2) One value of the ServiceSupplyPoint shall be the pointer to the SMTP server in the form of: "smtp://<DNS mx record of the REMS SMTP ServiceEndpoint>[:<optional port number>]" • b.2.4.3) Another value of the ServiceSupplyPoint shall be the pointer to the capability and security metadata XML structure in the form of: "https://<URI of the Capability and Security Information XML>"
Target	Conformance to REMS INTERFACES
Predicate	The ServiceSupplyPoints contains two entries
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, REMS Interfaces

REMS/BS/INTERFACES/TRUSTINFO/TA_07	
TA Id	REMS/BS/INTERFACES/TRUSTINFO/TA_07
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.3.2 implementation guidance b.2.4.1), b.2.4.2), and b.2.4.3) The ServiceSupplyPoints shall contain two entries, components of TL, with the following values: • b.2.4.2) One value of the ServiceSupplyPoint shall be the pointer to the SMTP server in the form of: "smtp://<DNS mx record of the REMS SMTP ServiceEndpoint>[:<optional port number>]" • b.2.4.3) Another value of the ServiceSupplyPoint shall be the pointer to the capability and security metadata XML structure in the form of: "https://<URI of the Capability and Security Information XML>"
Target	Conformance to REMS INTERFACES
Predicate	One of the values is the pointer to the SMTP server in the form of: "smtp://<DNS mx record of the REMS SMTP ServiceEndpoint>[:<optional port number>]" AND the other value is the pointer to the capability and security metadata XML structure, in the form of: "https://<URI of the Capability and Security Information XML>"
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, REMS Interfaces

In addition, the tests assertions referenced in the table below shall apply.

Test assertions that shall apply		
Test assertion identifier	ETSI document	clause
REMS/CSI/TRUST/TA_01	The present document	9.3
REMS/CSI/TRUST/TA_02	The present document	9.3
REMS/CSI/TRUST/TA_03	The present document	9.3
REMS/CSI/TRUST/TA_04	The present document	9.3
REMS/CSI/TRUST/TA_05	The present document	9.3
REMS/CSI/TRUST/TA_08	The present document	9.3
REMS/CSI/TRUST/TA_13	The present document	9.3

12.5.5.4   Test assertions for capability discovery and management

12.5.5.4.1 Test assertions for referencing in Trusted Lists

REMS/BS/CAPMNG/TA_01	
TA Id	REMS/CSI/CAPMNG/TA_01
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.4.1 implementation guidance c.3.1.4) The common capabilities constituted according to ETSI EN 319 532-4 [11], clause C.2.3.4.1, point c.3.1.3) shall be referenced in the Trusted List according to the format specified in ETSI EN 319 532-3 [1], clause 9.4 and downloadable by a URI specified in ServiceSupplyPoint TL element; and in the case of qualified REM services, by the use of EU Trusted List system
Target	Conformance to CSI Capability information
Predicate	The common capabilities are referenced by an URI in ServiceSupplyPoint element of a TL.
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Trusted List, Capability discovery and management

12.5.5.4.2 Test assertions for XML schema and contents

12.5.5.4.2.1 Test assertions for instances of tl:NonEmptyString type

REMS/TL/XSD/TA_01	
TA Id	REMS/TL/XSD/TA_01
Normative source	XML schema file containing the base schema definitions, as identified in annex C of ETSI TS 119 612 [10]
Target	Conformance to XML Schema
Predicate	Instances of tl:NonEmptyString have a non-empty string as value
Prescription level	Mandatory
Tag	Conformance, trusted list, xml schema

REMS/TL/XSD/TA_02	
TA Id	REMS/TL/XSD/TA_02
Normative source	XML schema file containing the base schema definitions, as identified in annex C of ETSI TS 119 612 [10]
Target	Conformance to XML Schema
Predicate	Instances of tl:NonEmptyString do not have any XML attribute except the attributes declaring namespaces
Prescription level	Mandatory
Tag	Conformance, trusted list, xml schema

12.5.5.4.2.2 Test assertions for instances of tl:InternationalNamesType type

REMS/TL/XSD/TA_03	
TA Id	REMS/TL/XSD/TA_03
Normative source	XML schema file containing the base schema definitions, as identified in annex C of ETSI TS 119 612 [10]
Target	Conformance to XML Schema
Predicate	The content of instances of tl:InternationalNamesType type, in terms of children, is as follows: Name+.
Prescription level	Mandatory
Tag	Conformance, trusted list, xml schema
NOTE: Character "+" indicates that the child element/group of children elements may have 1, or more than 1 occurrences at that position; otherwise the absence of indication indicates that the child element shall appear once at that position.	

REMS/TL/XSD/TA_04	
TA Id	REMS/TL/XSD/TA_04
Normative source	XML schema file containing the base schema definitions, as identified in annex C of ETSI TS 119 612 [10]
Target	Conformance to XML Schema
Predicate	The value of Name child of an instance of tl:InternationalNamesType type is a non empty normalized string
Prescription level	Mandatory
Tag	Conformance, trusted list, xml schema

REMS/TL/XSD/TA_05	
TA Id	REMS/TL/XSD/TA_05
Normative source	XML schema file containing the base schema definitions, as identified in annex C of ETSI TS 119 612 [10]
Target	Conformance to XML Schema
Predicate	The Name child of an instance of tl:InternationalNamesType type contains the attribute xml:lang
Prescription level	Mandatory
Tag	Conformance, trusted list, xml schema

12.5.5.4.2.3 Test assertions for instances of tl:AddressType type

REMS/TL/XSD/TA_06	
TA Id	REMS/TL/XSD/TA_06
Normative source	XML schema file containing the base schema definitions, as identified in annex C of ETSI TS 119 612 [10]
Target	Conformance to XML Schema
Predicate	The content of instances of tl:AddressType type, in terms of children, is as follows: PostalAddresses, ElectronicAddress.
Prescription level	Mandatory
Tag	Conformance, trusted list, xml schema

REMS/TL/XSD/TA_07	
TA Id	REMS/TL/XSD/TA_07
Normative source	XML schema file containing the base schema definitions, as identified in annex C of ETSI TS 119 612 [10]
Target	Conformance to XML Schema
Predicate	The content of PostalAddresses child element of instances of tl:AddressType type, in terms of children, is as follows: PostalAddress+.
Prescription level	Mandatory
Tag	Conformance, trusted list, xml schema
NOTE: Character "+" indicates that the child element/group of children elements may have 1, or more than 1 occurrences at that position; otherwise the absence of indication indicates that the child element shall appear once at that position.	

REMS/TL/XSD/TA_08	
TA Id	REMS/TL/XSD/TA_08
Normative source	XML schema file containing the base schema definitions, as identified in annex C of ETSI TS 119 612 [10]
Target	Conformance to XML Schema
Predicate	The PostalAddresses child element of instances of tl:AddressType type has an attribute xml:lang.
Prescription level	Mandatory
Tag	Conformance, trusted list, xml schema

REMS/TL/XSD/TA_09	
TA Id	REMS/TL/XSD/TA_09
Normative source	XML schema file containing the base schema definitions, as identified in annex C of ETSI TS 119 612 [10]
Target	Conformance to XML Schema
Predicate	The content of PostalAddresses child element of instances of tl:AddressType type is, in terms of children, as follows StreetAddress, Locality, StateOrProvince?, PostalCode?, CountryName.
Prescription level	Mandatory
Tag	Conformance, trusted list, xml schema
NOTE:	Character "?" indicates that the child element/group of children elements may have 0 or 1 occurrences at that position; otherwise the absence of indication indicates that the child element shall appear once at that position.

REMS/TL/XSD/TA_10	
TA Id	REMS/TL/XSD/TA_10
Normative source	XML schema file containing the base schema definitions, as identified in annex C of ETSI TS 119 612 [10]
Target	Conformance to XML Schema
Predicate	The StreetAddress child of PostalAddresses child element of instances of tl:AddressType type is an instance of tl:NonEmptyString type, and meets the test assertions defined in clause 12.5.5.4.2.1 of the present document.
Prescription level	Mandatory
Tag	Conformance, trusted list, xml schema

REMS/TL/XSD/TA_11	
TA Id	REMS/TL/XSD/TA_11
Normative source	XML schema file containing the base schema definitions, as identified in annex C of ETSI TS 119 612 [10]
Target	Conformance to XML Schema
Predicate	The Locality child of PostalAddresses child element of instances of tl:AddressType type is an instance of tl:NonEmptyString type, and meets the test assertions defined in clause 12.5.5.4.2.1 of the present document.
Prescription level	Mandatory
Tag	Conformance, trusted list, xml schema

REMS/TL/XSD/TA_12	
TA Id	REMS/TL/XSD/TA_12
Normative source	XML schema file containing the base schema definitions, as identified in annex C of ETSI TS 119 612 [10]
Target	Conformance to XML Schema
Predicate	The StateOrProvince child of PostalAddresses child element of instances of tl:AddressType type is an instance of tl:NonEmptyString type, and meets the test assertions defined in clause 12.5.5.4.2.1 of the present document.
Prescription level	Mandatory
Tag	Conformance, trusted list, xml schema

REMS/TL/XSD/TA_13	
TA Id	REMS/TL/XSD/TA_13
Normative source	XML schema file containing the base schema definitions, as identified in annex C of ETSI TS 119 612 [10]
Target	Conformance to XML Schema
Predicate	The PostalCode child of PostalAddresses child element of instances of tl:AddressType type is an instance of tl:NonEmptyString type, and meets the test assertions defined in clause 12.5.5.4.2.1 of the present document.
Prescription level	Mandatory
Tag	Conformance, trusted list, xml schema

REMS/TL/XSD/TA_14	
TA Id	REMS/TL/XSD/TA_14
Normative source	XML schema file containing the base schema definitions, as identified in annex C of ETSI TS 119 612 [10]
Target	Conformance to XML Schema
Predicate	The CountryName child of PostalAddresses child element of instances of tl:AddressType type is an instance of tl:NonEmptyString type, and meets the test assertions defined in clause 12.5.5.4.2.1 of the present document.
Prescription level	Mandatory
Tag	Conformance, trusted list, xml schema

12.5.5.4.2.4 Test assertions for instances of tl:NextUpdateType type

REMS/TL/XSD/TA_15	
TA Id	REMS/TL/XSD/TA_15
Normative source	XML schema file containing the base schema definitions, as identified in annex C of ETSI TS 119 612 [10]
Target	Conformance to XML Schema
Predicate	The content of instances of tl:NextUpdateType type, in terms of children, is as follows: dateTime?
Prescription level	Mandatory
Tag	Conformance, trusted list, xml schema
NOTE:	Character "?" indicates that the child element/group of children elements may have 0 or 1 occurrences at that position; otherwise the absence of indication indicates that the child element shall appear once at that position.

REMS/TL/XSD/TA_16	
TA Id	REMS/TL/XSD/TA_16
Normative source	XML schema file containing the base schema definitions, as identified in annex C of ETSI TS 119 612 [10]
Target	Conformance to XML Schema
Predicate	Instances of tl:NextUpdateType type do not have any children
Prescription level	Mandatory
Tag	Conformance, trusted list, xml schema

REMS/TL/XSD/TA_17	
TA Id	REMS/TL/XSD/TA_17
Normative source	XML schema file containing the base schema definitions, as identified in annex C of ETSI TS 119 612 [10]
Target	Conformance to XML Schema
Predicate	dateTime child of instances of tl:NextUpdateType type meet the test assertions defined in ETSI TS 119 524-1 [7], clause 5.5
Prescription level	Mandatory
Tag	Conformance, trusted list, xml schema

12.5.5.4.2.5 Test assertions for instances of tl:ExtensionsListType type

REMS/TL/XSD/TA_18	
TA Id	REMS/TL/XSD/TA_18
Normative source	XML schema file containing the base schema definitions, as identified in annex C of ETSI TS 119 612 [10]
Target	Conformance to XML Schema
Predicate	The content of instances of tl:ExtensionsListType is, in terms of children, as follows: Extension+
Prescription level	Mandatory
Tag	Conformance, trusted list, xml schema
NOTE: Character "+" indicates that the child element/group of children elements may have 1, or more than 1 occurrences at that position; otherwise the absence of indication indicates that the child element shall appear once at that position.	

REMS/TL/XSD/TA_19	
TA Id	REMS/TL/XSD/TA_19
Normative source	XML schema file containing the base schema definitions, as identified in annex C of ETSI TS 119 612 [10]
Target	Conformance to XML Schema
Predicate	Instances of tl:ExtensionsListType do not have any XML attribute except the attributes declaring namespaces
Prescription level	Mandatory
Tag	Conformance, trusted list, xml schema

REMS/TL/XSD/TA_20	
TA Id	REMS/TL/XSD/TA_20
Normative source	XML schema file containing the base schema definitions, as identified in annex C of ETSI TS 119 612 [10]
Target	Conformance to XML Schema
Predicate	Extension child element of tl:ExtensionsListType has the attribute Critical
Prescription level	Mandatory
Tag	Conformance, trusted list, xml schema

REMS/TL/XSD/TA_21	
TA Id	REMS/TL/XSD/TA_21
Normative source	XML schema file containing the base schema definitions, as identified in annex C of ETSI TS 119 612 [10]
Target	Conformance to XML Schema
Predicate	The Critical attribute of Extension child element of tl:ExtensionsListType has a Boolean value
Prescription level	Mandatory
Tag	Conformance, trusted list, xml schema

12.5.5.4.2.6 Test assertions for CapabilityAndSecurityInformation element

REMS/BS/CAPMNG/XSD/TA_01	
TA Id	REMS/BS/CAPMNG/XSD/TA_01
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The content of element CapabilityAndSecurityInformation, in terms of children, is as follows: SchemeData, CapabilityMetadata, SecurityMetadata, ds:Signature?.
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management
NOTE: Character "?" indicates that the child element/group of children elements may have 0 or 1 occurrences at that position; otherwise the absence of indication indicates that the child element shall appear once at that position.	

REMS/BS/CAPMNG/XSD/TA_02	
TA Id	REMS/BS/CAPMNG/XSD/TA_02
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The content of element CapabilityAndSecurityInformation, in terms of attributes, is as follows: version, Id?
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management
NOTE: Character "?" indicates that the child element/group of children elements may have 0 or 1 occurrences at that position; otherwise the absence of indication indicates that the child element shall appear once at that position.	

REMS/BS/CAPMNG/XSD/TA_03	
TA Id	REMS/BS/CAPMNG/XSD/TA_03
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The value of version attribute of CapabilityAndSecurityInformation element is "EN319532v1"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

12.5.5.4.2.7 Test assertions for SchemeData element

REMS/BS/CAPMNG/XSD/TA_04	
TA Id	REMS/BS/CAPMNG/XSD/TA_04
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The content of element SchemeData, in terms of children, is as follows: CSIVersionIdentifier, CSISequenceNumber, CSISchemeOperatorName, CSISchemeOperatorAddress, CSISchemeInformationURI, CSISchemePolicyCommunityRules, CSIPointerToTL, CSIIssueDateTime, CSINextUpdate, CSIDistributionPoints, CSISchemeExtensions*.
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management
NOTE: Character "*" indicates that the child element/group of children elements may have 0, 1, or more than 1 occurrences at that position; otherwise the absence of indication indicates that the child element shall appear once at that position	

REMS/BS/CAPMNG/XSD/TA_05	
TA Id	REMS/BS/CAPMNG/XSD/TA_05
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The content of element SchemeData does not have any XML attribute except the attributes declaring namespaces
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_06	
TA Id	REMS/BS/CAPMNG/XSD/TA_06
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The CSIVersionIdentifier element has an integer value.
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_07	
TA Id	REMS/BS/CAPMNG/XSD/TA_07
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The CSISequenceNumber element has a positive integer value.
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_08	
TA Id	REMS/BS/CAPMNG/XSD/TA_08
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The CSISchemeOperatorName element is an instance of type tl:InternationalNamesType and meets the test assertions defined in clause 12.5.5.4.2.2 of the present document.
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_09	
TA Id	REMS/BS/CAPMNG/XSD/TA_09
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The CSISchemeOperatorAddress element is an instance of type tl:AddressType and meets the test assertions defined in clause 12.5.5.4.2.3 of the present document.
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_10	
TA Id	REMS/BS/CAPMNG/XSD/TA_10
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The CSISchemeInformationURI element is an instance of type tl:NonEmptyMultiLangURIListType and meets the test assertions defined in ETSI TS 119 524-1 [7], clause 5.2.5.
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_11	
TA Id	REMS/BS/CAPMNG/XSD/TA_11
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The CSISchemePolicyCommunityRules element is an instance of type tl:NonEmptyMultiLangURIListType and meets the test assertions defined in ETSI TS 119 524-1 [7], clause 5.2.5.
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_12	
TA Id	REMS/BS/CAPMNG/XSD/TA_12
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The CSIPointerToTL element is an instance of type tl:NonEmptyURIType and meets the test assertions defined in ETSI TS 119 524-1 [7], clause 5.2.2.
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_13	
TA Id	REMS/BS/CAPMNG/XSD/TA_13
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The CSIIssueDateTime element is an instance of type xsd:dateTime and meets the test assertions defined in ETSI TS 119 524-1 [7], clause 5.5.
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_14	
TA Id	REMS/BS/CAPMNG/XSD/TA_14
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The CSINextUpdate element is an instance of type tl:NextUpdateType and meets the test assertions defined in clause 12.5.5.4.2.4 of the present document.
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_15	
TA Id	REMS/BS/CAPMNG/XSD/TA_15
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The CSIDistributionPoint element is an instance of type tl:NonEmptyMultiLangURIListType and meets the test assertions defined in ETSI TS 119 524-1 [7], clause 5.2.5.
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_16	
TA Id	REMS/BS/CAPMNG/XSD/TA_16
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The CSIPointersToOtherMetadata element is an instance of type tl:NonEmptyMultiLangURIListType and meets the test assertions defined in ETSI TS 119 524-1 [7], clause 5.2.5.
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_17	
TA Id	REMS/BS/CAPMNG/XSD/TA_17
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The CSISchemeExtensions element is an instance of type tl:ExtensionsListType and meets the test assertions defined in clause 12.5.5.4.2.5 of the present document.
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

12.5.5.4.2.8 Test assertions for CapabilityMetadata element

REMS/BS/CAPMNG/XSD/TA_18	
TA Id	REMS/BS/CAPMNG/XSD/TA_18
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The content of element CapabilityMetadata, in terms of children, is as follows: ERDSMetadata, CSISchemeExtensions?
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management
NOTE: Character "?" indicates that the child element/group of children elements may have 0 or 1 occurrences at that position; otherwise the absence of indication indicates that the child element shall appear once at that position.	

REMS/BS/CAPMNG/XSD/TA_19	
TA Id	REMS/BS/CAPMNG/XSD/TA_19
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The content of element CapabilityMetadata does not have any XML attribute except the attributes declaring namespaces
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_20	
TA Id	REMS/BS/CAPMNG/XSD/TA_20
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The CSISchemeExtensions child element of CapabilityMetadata element meets the test assertions defined in clause 12.5.5.4.2.5 of the present document
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_21	
TA Id	REMS/BS/CAPMNG/XSD/TA_21
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The ERDSMetadata child element of CapabilityMetadata element meets the test assertions defined in ETSI TS 119 524-1 [7], clause 10.2.1.1
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_22	
TA Id	REMS/BS/CAPMNG/XSD/TA_22
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.4.2, implementation guidance c.3.2.4) ERDSMetadata element shall have "EN319522v1.1.1" as value for version attribute, and ERDSId element shall have "http" as value for IdentifierSchemeName attribute
Target	Conformance to REM Baseline
Predicate	The "version" attribute of ERDSMetadata child element of CapabilityMetadata element has the value "EN319522v1.1.1"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_23	
TA Id	REMS/BS/CAPMNG/XSD/TA_23
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.4.2, implementation guidance c.3.3.1) The ERDSDomain element of ERDSMetadata shall have the same value set to the "DNS mx record of the REMS SMTP ServiceEndpoint" (e.g. with a value like recipientdomain.rem or as in the following more complete example 1 below); and its content shall match the ServiceSupplyPoint with the exclusion of the "scheme" and the "service port number" if present
Target	Conformance to REM Baseline
Predicate	The IdentifierSchemeName attribute of ERDSId child element of ERDSMetadata child element of CapabilityMetadata element has the value "http"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_24	
TA Id	REMS/BS/CAPMNG/XSD/TA_24
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.4.2, implementation guidance c.3.3.1) The ERDSDomain element of ERDSMetadata shall have the same value set to the "DNS mx record of the REMS SMTP ServiceEndpoint" (e.g. with a value like recipientdomain.rem or as in the following more complete example 1 below); and its content shall match the ServiceSupplyPoint with the exclusion of the "scheme" and the "service port number" if present
Target	Conformance to REM Baseline
Predicate	The content of the ERDSDomain child element of ERDSMetadata matches the content of ServiceSupplyPoint in the Trusted List, without "scheme" and the "service port number".
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_25	
TA Id	REMS/BS/CAPMNG/XSD/TA_25
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.4.2, implementation guidance c.3.3.2) The ERDSGoverningBody element of ERDSMetadata shall have the same value set to the "en" International/English language form of TL TSPName element
Target	Conformance to REM Baseline
Predicate	The value of the ERDSGoverningBody child element of ERDSMetadata is equal to the English value (element with attribute xml:lang set to "en") of TSPName element in the Trusted List
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_26	
TA Id	REMS/BS/CAPMNG/XSD/TA_26
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.4.2, implementation guidance c.3.3.3) The ERDSProfileSupported element of ERDSMetadata shall have the same the URI identifying the present REM baseline specification defined in clause C.1: • http://uri.etsi.org/19532/v1#/REMbaseline
Target	Conformance to REM Baseline
Predicate	The value of the ERDSProfileSupported child element of ERDSMetadata is "http://uri.etsi.org/19532/v1#/REMbaseline"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_27	
TA Id	REMS/BS/CAPMNG/XSD/TA_27
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.4.2, implementation guidance c.3.3.4) The ERDSExpiryDateAndTimeSupport element of ERDSMetadata shall be set to false
Target	Conformance to REM Baseline
Predicate	The value of the ERDSExpiryDateAndTimeSupport child element of ERDSMetadata is "false"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_28	
TA Id	REMS/BS/CAPMNG/XSD/TA_28
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.4.2, implementation guidance c.3.3.5) The ERDSScheduledDeliverySupport element of ERDSMetadata shall be set to `false`
Target	Conformance to REM Baseline
Predicate	The value of the ERDSScheduledDeliverySupport child element of ERDSMetadata is `"false"`
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_29	
TA Id	REMS/BS/CAPMNG/XSD/TA_29
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.4.2, implementation guidance c.3.3.6) The ERDSAssuranceLevelsSupported element of ERDSMetadata, shall be set to the "substantial" level represented by the following URI: • `http://eidas.europa.eu/LoA/substantial`
Target	Conformance to REM Baseline
Predicate	The value of the ERDSAssuranceLevelsSupported child element of ERDSMetadata is `"http://eidas.europa.eu/LoA/substantial"`
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_30	
TA Id	REMS/BS/CAPMNG/XSD/TA_30
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.4.2, implementation guidance c.3.3.7) The ERDSSupportedConsignmentModes element of ERDSMetadata shall be set to the "basic" consignment level, represented by the following URI: `http://uri.etsi.org/19522/v1#/consignment/basic`
Target	Conformance to REM Baseline
Predicate	The value of the ERDSSupportedConsignmentModes child element of ERDSMetadata is `"http://uri.etsi.org/19522/v1#/consignment/basic"`
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

12.5.5.4.2.9 Test assertions for SecurityMetadata element

REMS/BS/CAPMNG/XSD/TA_31	
TA Id	REMS/BS/CAPMNG/XSD/TA_31
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The content of element SecurityMetadata, in terms of children, is as follows: CapabilityBasedSecurity, SISchemeExtensions?
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management
NOTE:	Character "?" indicates that the child element/group of children elements may have 0 or 1 occurrences at that position; otherwise the absence of indication indicates that the child element shall appear once at that position.

REMS/BS/CAPMNG/XSD/TA_32	
TA Id	REMS/BS/CAPMNG/XSD/TA_32
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The SISchemeExtensions child element of SecurityMetadata element meets the test assertions defined in clause 12.5.5.4.2.5 of the present document
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_33	
TA Id	REMS/BS/CAPMNG/XSD/TA_33
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The content of CapabilityBasedSecurity child element of SecurityMetadata element, in terms of children, is as follows: TLSCertificate,DomainSigningCertificate?,CBSSchemeExtensions
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management
NOTE: Character "?" indicates that the child element/group of children elements may have 0 or 1 occurrences at that position; otherwise the absence of indication indicates that the child element shall appear once at that position.	

REMS/BS/CAPMNG/XSD/TA_34	
TA Id	REMS/BS/CAPMNG/XSD/TA_34
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	CapabilityBasedSecurity child element of SecurityMetadata element has the attribute "version"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_35	
TA Id	REMS/BS/CAPMNG/XSD/TA_35
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.4.4, implementation guidance c.3.4.4) CapabilityBasedSecurity element shall have "EN319532v1" as value for version attribute
Target	Conformance to XML Schema
Predicate	The "version" attribute of CapabilityBasedSecurity child element of SecurityMetadata element has the value set to "EN319532v1"
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_36	
TA Id	REMS/BS/CAPMNG/XSD/TA_36
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The TLSCertificate child element of CapabilityBasedSecurity element is a string that contains the base64 encoding of a DER-encoded X.509 certificate
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_37	
TA Id	REMS/BS/CAPMNG/XSD/TA_37
Normative source	ETSI EN 319 532-4 [11]
Target	Conformance to XML Schema
Predicate	The TLSCertificate child element of CapabilityBasedSecurity element does not have any XML attribute except the attributes declaring namespaces
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_38	
TA Id	REMS/BS/CAPMNG/XSD/TA_38
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.4.4, implementation guidance c.3.5.1)
Target	Conformance to XML Schema
Predicate	The TLSCertificate child element of CapabilityBasedSecurity element contains the X.509 certificate used for the TLS mechanism of REMS SMTP ServiceEndpoint, for the basic handshake
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_39	
TA Id	REMS/BS/CAPMNG/XSD/TA_39
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The DomainSigningCertificate child element of CapabilityBasedSecurity element is a string that contains the base64 encoding of a DER-encoded X.509 certificate
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_40	
TA Id	REMS/BS/CAPMNG/XSD/TA_40
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The DomainSigningCertificate child element of CapabilityBasedSecurity element does not have any XML attribute except the attributes declaring namespaces
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_41	
TA Id	REMS/BS/CAPMNG/XSD/TA_41
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The CBSSchemeExtensions child element of CapabilityBasedSecurity element meets the test assertions defined in clause 12.5.5.4.2.5 of the present document
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

12.5.5.4.2.10   Test assertions for ds:Signature element

REMS/BS/CAPMNG/XSD/TA_42	
TA Id	REMS/BS/CAPMNG/XSD/TA_42
Normative source	XML schema defined in https://forge.etsi.org/rep/esi/x19_53204_rem_services/-/blob/main/1953204CSIxmlSchema.xsd
Target	Conformance to XML Schema
Predicate	The ds:Signature child element of CapabilityAndSecurityInformation element meets the test assertions defined in ETSI TS 119 524-1 [7], clause 9
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_43	
TA Id	REMS/BS/CAPMNG/XSD/TA_43
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.4.1, implementation guideline c.3.1.11 The `Signature` element shall be a XAdES-B-B baseline digital signature as specified in ETSI EN 319 132-1 [16]
Target	Conformance to REM Baseline
Predicate	The ds:Signature child element of CapabilityAndSecurityInformation element is a XAdES-B-B signature
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_44	
TA Id	REMS/BS/CAPMNG/XSD/TA_44
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.4.1, implementation guideline c.3.1.11 The REMID policy may specify, once the XAdES-B-B baseline signature has been generated if it should be also subject to time-stamp (e.g. through a XAdES-B-T baseline signature level, by incorporation into the digital signature of the unsigned attribute signature-timestamp, containing a time-stamp token computed as specified in ETSI EN 319 132-1 [16], clause 6
Target	Conformance to REM Baseline
Prerequisite	The REMID policy specifies that the signature should be subject to time-stamp
Predicate	The ds:Signature child element of CapabilityAndSecurityInformation element is a XAdES-B-T signature
Prescription level	Optional
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

REMS/BS/CAPMNG/XSD/TA_45	
TA Id	REMS/BS/CAPMNG/XSD/TA_45
Normative source	ETSI EN 319 532-4 [11], clause C.2.3.4.1, implementation guideline c.3.1.12 With regards to ETSI EN 319 532-4 [11], clause C.2.3.4.1, point c.3.1.11, the certificate supporting the validation of the signature on the document shall either be one of the certificates used as digital identity of the REM service or be a certificate, issued to the REMSP, for which a valid certification path can be established to one of the certificates used as digital identity of the REM service, or a certificate issued to the REMID Authority
Target	Conformance to REM Baseline
Predicate	The certificate supporting the validation of the signature is either one of the used as digital identity of the REMS or a certificate issued to the REMSP, for which a valid certification path can be established to one of the certificates used as digital identity of the REM service, or a certificate issued to the REMID Authority
Prescription level	Mandatory
Tag	Conformance, REMS, REMSP, CSI, trust information, Capability discovery and management

12.6   Test assertions for ERDS evidence structure and content

12.6.1   Introduction

Clause 12.6 defines test assertions that shall apply to ERDS Evidence in REM Baseline, specified in ETSI EN 319 532-4 [11], Annex C.

Test assertions defined in ETSI TS 119 524-1 [7], clause 6 which have a prescription level equal to Mandatory shall apply, unless otherwise stated in clause 12.6 of the present document.

12.6.2   ERDS evidence set in REM Baseline

The tests assertions referenced in the table below shall apply.

Test assertions that shall apply		
Test assertion identifier	ETSI document	clause
REMS/SERV_PROV/ERDSEVGEN/TA_01	The present document	11.2
REMS/SERV_PROV/ERDSEVGEN/TA_02	The present document	11.2
REMS/SERV_PROV/ERDSEVGEN/TA_03	The present document	11.2
REMS/SERV_PROV/ERDSEVGEN/TA_04	The present document	11.2
REMS/SERV_PROV/ERDSEVGEN/TA_05	The present document	11.2
REMS/SERV_PROV/ERDSEVGEN/TA_06	The present document	11.2
REMS/SERV_PROV/ERDSEVGEN/TA_07	The present document	11.2

The test assertions referenced in the table below shall NOT apply.

Test assertions that shall apply		
Test assertion identifier	**ETSI document**	**clause**
REMS/SERV_PROV/ERDSEVGEN/TA_08	The present document	11.2
REMS/SERV_PROV/ERDSEVGEN/TA_09	The present document	11.2
REMS/SERV_PROV/ERDSEVGEN/TA_10	The present document	11.2
REMS/SERV_PROV/ERDSEVGEN/TA_11	The present document	11.2
REMS/SERV_PROV/ERDSEVGEN/TA_12	The present document	11.2
REMS/SERV_PROV/ERDSEVGEN/TA_13	The present document	11.2
REMS/SERV_PROV/ERDSEVGEN/TA_14	The present document	11.2
REMS/SERV_PROV/ERDSEVGEN/TA_15	The present document	11.2
REMS/SERV_PROV/ERDSEVGEN/TA_16	The present document	11.2
REMS/SERV_PROV/ERDSEVGEN/TA_17	The present document	11.2
REMS/SERV_PROV/ERDSEVGEN/TA_18	The present document	11.2
REMS/SERV_PROV/ERDSEVGEN/TA_19	The present document	11.2

NOTE: In REM Baseline the ERDS Evidence that are generated are SubmissionAcceptance, SubmissionRejection, RelayAcceptance, RelayRejection, RelayFailure, ContentConsignment, and ContentConsignmentFailure. As the test assertions referenced in the table above refer to other ERDS Evidence, they do not apply to REM Baseline.

12.6.3   Test assertions on presence and cardinality of components in ERDS Evidence in REM Baseline

This clause defines test assertions extracted from ETSI EN 319 532-4 [11], clause C.4.5.4, table C.27, which complete the mandatory test assertions defined in ETSI TS 119 524-1 [7], clause 6.

REMS/BS/EVIDENCE/TA_01	
TA Id	REMS/BS/EVIDENCE/TA_01
Normative source	ETSI EN 319 532-4 [11], clause C.4.5.4, table C.27 The EventReasons component shall have a cardinality of 1 in SubmissionAcceptance and ContentConsignment ERDS Evidence, and a cardinality of 1 or more in SubmissionRejection, RelayAcceptance, RelayFailure, ContentConsignmentFailure ERDS Evidence
Target	Conformance ERDS Evidence REM Baseline
Prerequisite	The ERDS Evidence is either SubmissionAcceptance or ContentConsignment
Predicate	The EventReasons component is present with a cardinality of 1
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_02	
TA Id	REMS/BS/EVIDENCE/TA_02
Normative source	ETSI EN 319 532-4 [11], clause C.4.5.4, table C.27 The EvidenceIssuerPolicyID component shall have a cardinality of 2 or more in all the ERDS Evidence generated in REM Baseline
Target	Conformance ERDS Evidence REM Baseline
Predicate	The EvidenceIssuerPolicyID component is present with a cardinality of 2 or more
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_03	
TA Id	REMS/BS/EVIDENCE/TA_03
Normative source	ETSI EN 319 532-4 [11], clause C.4.5.4, table C.27 The Signature component shall be present in all the ERDS Evidence generated in REM Baseline with a cardinality of 1
Target	Conformance ERDS Evidence REM Baseline
Predicate	The Signature component is present with a cardinality of 1
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_04	
TA Id	REMS/BS/EVIDENCE/TA_04
Normative source	ETSI EN 319 532-4 [11], clause C.4.5.4, table C.27 The Identifier child element of SenderDetails component shall be present in all the ERDS Evidence generated in REM Baseline
Target	Conformance ERDS Evidence REM Baseline
Predicate	The Identifier child element of SenderDetails component is present
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_05	
TA Id	REMS/BS/EVIDENCE/TA_05
Normative source	ETSI EN 319 532-4 [11], clause C.4.5.4, table C.27 The EvidenceRefersTo component shall have a cardinality of 1 in ContentConsignment and ContentConsignmentFailure ERDS Evidence, and shall not be present in SubmissionAcceptance, SubmissionRejection, RelayAcceptance, and RelayFailure ERDS Evidence
Target	Conformance ERDS Evidence REM Baseline
Prerequisite	The ERDS Evidence is either SubmissionAcceptance, or SubmissionRejection, or RelayAcceptance, or RelayFailure
Predicate	The EvidenceRefersTo component is NOT present
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_06	
TA Id	REMS/BS/EVIDENCE/TA_06
Normative source	ETSI EN 319 532-4 [11], clause C.4.5.4, table C.27 The EvidenceRefersTo component shall have a cardinality of 1 in ContentConsignment and ContentConsignmentFailure ERDS Evidence, and shall not be present in SubmissionAcceptance, SubmissionRejection, RelayAcceptance, and RelayFailure ERDS Evidence
Target	Conformance ERDS Evidence REM Baseline
Prerequisite	The ERDS Evidence is either ContentConsignment or ContentConsignmentFailure
Predicate	The EvidenceRefersTo component is present with a cardinality of 1
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_07	
TA Id	REMS/BS/EVIDENCE/TA_07
Normative source	ETSI EN 319 532-4 [11], clause C.4.5.4, table C.27 The AssuranceLevelDetails child element of SenderDetails component shall be present in all the ERDS Evidence in REM Baseline
Target	Conformance ERDS Evidence REM Baseline
Predicate	The AssuranceLevelDetails child element of SenderDetails component is present
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_08	
TA Id	REMS/BS/EVIDENCE/TA_08
Normative source	ETSI EN 319 532-4 [11], clause C.4.5.4, table C.27 The MessageIdentifier component shall be present in all ERDS Evidence in REM Baseline
Target	Conformance ERDS Evidence REM Baseline
Predicate	The MessageIdentifier component is present
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_09	
TA Id	REMS/BS/EVIDENCE/TA_09
Normative source	ETSI EN 319 532-4 [11], clause C.4.5.4, table C.27 The UserContentInfo component shall be present in all ERDS Evidence in REM Baseline
Target	Conformance ERDS Evidence REM Baseline
Predicate	The UserContentInfo component is present
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_10	
TA Id	REMS/BS/EVIDENCE/TA_10
Normative source	ETSI EN 319 532-4 [11], clause C.4.5.4, table C.27 The AssuranceLevelDetails child element of RecipientDetails component shall NOT be present in any ERDS Evidence in REM Baseline
Target	Conformance ERDS Evidence REM Baseline
Predicate	The AssuranceLevelDetails child element of RecipientDetails component is NOT present
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_11	
TA Id	REMS/BS/EVIDENCE/TA_11
Normative source	ETSI EN 319 532-4 [11], clause C.4.5.4, table C.27 The SubmissionTime component shall be present in SubmissionAcceptance and SubmissionRejection ERDS Evidence, and shall be optional in ContentConsignmentFailure, ContentConsignment, RelayAcceptance, RelayRejection, and RelayFailure ERDS Evidence
Target	Conformance ERDS Evidence REM Baseline
Prerequisite	The ERDS Evidence is either SubmissionAcceptance or SubmissionRejection
Predicate	The SubmissionTime component is present
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_12	
TA Id	REMS/BS/EVIDENCE/TA_12
Normative source	ETSI EN 319 532-4 [11], clause C.4.5.4, table C.27 The SubmissionTime component shall be present in SubmissionAcceptance and SubmissionRejection ERDS Evidence, and shall be optional in ContentConsignmentFailure, ContentConsignment, RelayAcceptance, RelayRejection, and RelayFailure ERDS Evidence
Target	Conformance ERDS Evidence REM Baseline
Prerequisite	The ERDS Evidence is either RelayAcceptance, or RelayRejection, or RelayFailure, or ContentConsignment, or ContentConsignmentFailure
Predicate	The SubmissionTime component is NOT present
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_13	
TA Id	REMS/BS/EVIDENCE/TA_13
Normative source	ETSI EN 319 532-4 [11], clause C.4.5.4, table C.27 The ForwardedToExternalSystem component shall NOT be present in any ERDS Evidence in REM Baseline
Target	Conformance ERDS Evidence REM Baseline
Predicate	The ForwardedToExternalSystem component is NOT present
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_14	
TA Id	REMS/BS/EVIDENCE/TA_14
Normative source	ETSI EN 319 532-4 [11], clause C.4.5.4, table C.27 The ExternalERDSDetails component shall be present in RelayAcceptance, RelayRejection, and RelayFailure ERDS Evidence, and it shall NOT be present in SubmissionAcceptance, SubmissionRejection, ContentConsignmentFailure, and ContentConsignment and ERDS Evidence
Target	Conformance ERDS Evidence REM Baseline
Prerequisite	The ERDS Evidence is either RelayAcceptance, or RelayRejection, or RelayFailure
Predicate	The ExternalERDSDetails component is present
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_15	
TA Id	REMS/BS/EVIDENCE/TA_15
Normative source	ETSI EN 319 532-4 [11], clause C.4.5.4, table C.27 The ExternalERDSDetails component shall be present in RelayAcceptance, RelayRejection, and RelayFailure ERDS Evidence, and it shall NOT be present in SubmissionAcceptance, SubmissionRejection, ContentConsignmentFailure, and ContentConsignment and ERDS Evidence
Target	Conformance ERDS Evidence REM Baseline
Prerequisite	The ERDS Evidence is either SubmissionAcceptance, or SubmissionRejection, or ContentConsignment, or ContentConsignmentFailure
Predicate	The ExternalERDSDetails component is NOT present
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_16	
TA Id	REMS/BS/EVIDENCE/TA_16
Normative source	ETSI EN 319 532-4 [11], clause C.4.5.4, table C.27 The `GeneralEvidenceInfo` extension component is optional in all the ERDS Evidence of REM Baseline
Target	Conformance ERDS Evidence REM Baseline
Predicate	The `GeneralEvidenceInfo` extension component is present in any ERDS Evidence of REM Baseline
Prescription level	Optional
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_17	
TA Id	REMS/BS/EVIDENCE/TA_17
Normative source	ETSI EN 319 532-4 [11], clause C.3.2.1 The Extension (child of Extensions) root element for general additional ERDS information shall be `GeneralEvidenceInfo,` and it shall have "`false`"
Target	Conformance ERDS Evidence REM Baseline
Predicate	The Extension XML element parent of GeneralEvidenceInfo element has its attribute "isCritical" set to "false"
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_18	
TA Id	REMS/BS/EVIDENCE/TA_18
Normative source	ETSI EN 319 532-4 [11], clause C.4.5.4, table C.27 The RelayEvidenceInfo extension component is optional in RelayAcceptance, RelayRejection, and RelayFailure ERDS Evidence, and it shall NOT be present in SubmissionAcceptance, SubmissionRejection, ContentConsignment, and ContentConsignmentFaluire ERDS Evidence of REM Baseline
Target	Conformance ERDS Evidence REM Baseline
	The ERDS Evidence is either RelayAcceptance, or RelayRejection, or RelayFailure
Predicate	The RelayEvidenceInfo extension component is present
Prescription level	Optional
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_19	
TA Id	REMS/BS/EVIDENCE/TA_19
Normative source	ETSI EN 319 532-4 [11], clause C.4.5.4, table C.27 The RelayEvidenceInfo extension component is optional in RelayAcceptance, RelayRejection, and RelayFailure ERDS Evidence, and it shall NOT be present in SubmissionAcceptance, SubmissionRejection, ContentConsignment, and ContentConsignmentFaluire ERDS Evidence of REM Baseline
Target	Conformance ERDS Evidence REM Baseline
	The ERDS Evidence is either SubmissionAcceptance, or SubmissionRejection, or ContentConsignment, or ContentConsignmentFaluire
Predicate	The RelayEvidenceInfo extension component is NOT present
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

12.6.4   Test assertions for new ERDS Evidence Extensions

12.6.4.1   Test assertions for GeneralEvidenceInfo extension

REMS/BS/EVIDENCE/TA_20	
TA Id	REMS/BS/EVIDENCE/TA_20
Normative source	ETSI EN 319 532-4 [11], clause C.3.2.1 The Extension (child of Extensions) root element for general additional ERDS information shall be `GeneralEvidenceInfo`, and it shall have "false"
Target	Conformance to XML Schema of GeneralEvidenceInfo extension
Predicate	The Extension XML element parent of GeneralEvidenceInfo element has its attribute "isCritical" set to "false"
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_21	
TA Id	REMS/BS/EVIDENCE/TA_21
Normative source	ETSI EN 319 532-4 [11], clause C.3.2.1 XML schema
Target	Conformance to XML Schema of GeneralEvidenceInfo extension
Predicate	The content of GeneralEvidenceInfo element, in terms of XML children, is as follows: Subject?, UntrustedPathToRecipient*
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence
NOTE 1: Character "*" indicates that the child element/group of children elements may have 0, 1, or more than 1 occurrences at that position; otherwise the absence of indication indicates that the child element shall appear once at that position.	
NOTE 2: Character "?" indicates that the child element/group of children elements may have 0 or 1 occurrences at that position.	

REMS/BS/EVIDENCE/TA_22	
TA Id	REMS/BS/EVIDENCE/TA_22
Normative source	ETSI EN 319 532-4 [11], clause C.3.2.1 XML schema
Target	Conformance to XML Schema of GeneralEvidenceInfo extension
Predicate	The GeneralEvidenceInfo element does not have any XML attribute except the attributes declaring namespaces
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_23	
TA Id	REMS/BS/EVIDENCE/TA_23
Normative source	ETSI EN 319 532-4 [11], clause C.3.2.1 XML schema
Target	Conformance to XML Schema of GeneralEvidenceInfo extension
Predicate	The content of Subject child element of GeneralEvidenceInfo element is a string
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_24	
TA Id	REMS/BS/EVIDENCE/TA_24
Normative source	ETSI EN 319 532-4 [11], clause C.3.2.1 XML schema
Target	Conformance to XML Schema of GeneralEvidenceInfo extension
Predicate	The Subject child element of GeneralEvidenceInfo element does not have any XML attribute except the attributes declaring namespaces
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_25	
TA Id	REMS/BS/EVIDENCE/TA_25
Normative source	ETSI EN 319 532-4 [11], clause C.3.2.1 XML schema
Target	Conformance to XML Schema of GeneralEvidenceInfo extension
Predicate	The content of UntrustedPathToRecipient child element of GeneralEvidenceInfo element is an integer
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_26	
TA Id	REMS/BS/EVIDENCE/TA_26
Normative source	ETSI EN 319 532-4 [11], clause C.3.2.1 XML schema
Target	Conformance to XML Schema of GeneralEvidenceInfo extension
Predicate	The UntrustedPathToRecipient child element of GeneralEvidenceInfo element does not have any XML attribute except the attributes declaring namespaces
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

12.6.4.2   Test assertions for RelayEvidenceInfo extension

REMS/BS/EVIDENCE/TA_27	
TA Id	REMS/BS/EVIDENCE/TA_27
Normative source	ETSI EN 319 532-4 [11], clause C.3.2.2 The Extension (child of Extensions) root element for general additional ERDS information shall be `RelayEvidenceInfo`, and it shall have "false"
Target	Conformance REM Baseline
Predicate	The Extension XML element parent of RelayEvidenceInfo element has its attribute "isCritical" set to "false"
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_28	
TA Id	REMS/BS/EVIDENCE/TA_28
Normative source	ETSI EN 319 532-4 [11], clause C.3.2.2 XML schema
Target	Conformance to XML Schema of RelayEvidenceInfo extension
Predicate	The content of RelayEvidenceInfo element, in terms of XML children, is as follows: RelayEvidenceRefersTo*
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence
NOTE: Character "*" indicates that the child element/group of children elements may have 0, 1, or more than 1 occurrences at that position; otherwise the absence of indication indicates that the child element shall appear once at that position.	

REMS/BS/EVIDENCE/TA_29	
TA Id	REMS/BS/EVIDENCE/TA_29
Normative source	ETSI EN 319 532-4 [11], clause C.3.2.2 XML schema
Target	Conformance to XML Schema of RelayEvidenceInfo extension
Predicate	The RelayEvidenceInfo element does not have any XML attribute except the attributes declaring namespaces
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_30	
TA Id	REMS/BS/EVIDENCE/TA_30
Normative source	ETSI EN 319 532-4 [11], clause C.3.2.2 XML schema
Target	Conformance to XML Schema of RelayEvidenceInfo extension
Predicate	The RelayEvidenceRefersTo of RelayEvidenceInfo element is an integer
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_31	
TA Id	REMS/BS/EVIDENCE/TA_31
Normative source	ETSI EN 319 532-4 [11], clause C.3.2.2 XML schema
Target	Conformance to XML Schema of RelayEvidenceInfo extension
Predicate	The RelayEvidenceRefersTo child element of RelayEvidenceInfo element does not have any XML attribute except the attributes declaring namespaces
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

12.6.5   Test assertions for contents of ERDS Evidence components

12.6.5.1   Introduction

This clause defines new test assertions derived from the constraints imposed by REM Baseline in ETSI EN 319 532-4 [11], clause C.3.4.

12.6.5.2   Test assertions for EvidenceIdentifier element

REMS/BS/EVIDENCE/TA_32	
TA Id	REMS/BS/EVIDENCE/TA_32
Normative source	ETSI EN 319 532-4 [11],clause C.3.4, implementation guideline a) The EvidenceIdentifier element shall be a UID generated according to IETF RFC 5322 [4], clause 3.6.4
Target	Conformance to ERDS Evidence in REM Baseline
Predicate	The EvidenceIdentifier child element of Evidence element is an UID generated according to IETF RFC 5322 [4], clause 3.6.4
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

12.6.5.3   Test assertions for EventReason element

The test assertion ERDS/EVIDENCE/EVENT_REASONS/TA_01 defined in ETSI TS 119 524-1 [7] shall not apply.

REMS/BS/EVIDENCE/TA_33	
TA Id	REMS/BS/EVIDENCE/TA_33
Normative source	ETSI EN 319 532-4 [11], clause C.3.4, implementation guideline d.I) The EventReason element shall be set as follows: I Code: field set to the appropriate URI of table 3 of ETSI EN 319 522-3 [9], clause 5.2.2.7 according to one of the reasons, summarized in the 'URI code' cell of table C.28 for REM baseline, as prescribed in clauses C.4.5.1, C.4.5.2 and C.4.5.3
Target	Conformance to ERDS Evidence in REM Baseline
Predicate	The Code child element of EventReason has one of the URIs listed in ETSI EN 319 532-4 [11], Table C.28
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_34	
TA Id	REMS/BS/EVIDENCE/TA_34
Normative source	ETSI EN 319 532-4 [11], clause C.3.4, implementation guideline d.II and d.III)
Target	Conformance to ERDS Evidence in REM Baseline
Predicate	The EventReason element has two or more Details XML children
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_35	
TA Id	REMS/BS/EVIDENCE/TA_35
Normative source	ETSI EN 319 532-4 [11], clause C.3.4, implementation guideline d.II) first `Details`: field set to the appropriate "Details code" value, from the second column of table C.28
Target	Conformance to ERDS Evidence in REM Baseline
Predicate	The first Details child element of EventReason element has as content one of the values in the second column of ETSI EN 319 532-4 [11], Table C.28
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_36	
TA Id	REMS/BS/EVIDENCE/TA_36
Normative source	ETSI EN 319 532-4 [11], clause C.3.4, implementation guideline d.III) second `Details`: field set to the appropriate "reason details" textual description of the event reason, got from the third column of table C.28. Other possible `Details` components shall appear after the two canonical elements, as for the previous prescription.
Target	Conformance to ERDS Evidence in REM Baseline
Predicate	The second Details child element of EventReason element has as content one of textual descriptions of the event reason present in third column of ETSI EN 319 532-4 [11], Table C.28
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

12.6.5.4   Test assertions for EvidenceIssuerPolicyID element

REMS/BS/EVIDENCE/TA_37	
TA Id	REMS/BS/EVIDENCE/TA_37
Normative source	ETSI EN 319 532-4 [11], clause C.3.4, implementation guideline f.I and d.II)
Target	Conformance to ERDS Evidence in REM Baseline
Predicate	The EvidenceIssuerPolicyID element has two or more PolicyID XML children
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_38	
TA Id	REMS/BS/EVIDENCE/TA_38
Normative source	ETSI EN 319 532-4 [11], clause C.3.4, implementation guideline f.I) The EvidenceIssuerPolicyID element shall be set at least with the following URIs: • I. http://uri.etsi.org/19532/v1#/REMbaseline
Target	Conformance to ERDS Evidence in REM Baseline
Predicate	The value of the first PolicyID child element of EvidenceIssuerPolicyID element is "http://uri.etsi.org/19532/v1#/REMbaseline"
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_39	
TA Id	REMS/BS/EVIDENCE/TA_39
Normative source	ETSI EN 319 532-4 [11], clause C.3.4, implementation guideline g) The EvidenceIssuerDetails element shall be set as follows, according to eIDAS Technical Specifications SAML Attribute Profile [17], clauses 2.3.2 and 2.3.4
Target	Conformance to ERDS Evidence in REM Baseline
Predicate	The EvidenceIssuerDetails element meets the requirements specified in eIDAS TS SAML Attribute Profile [17], clauses 2.3.2 and 2.3.4
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

12.6.5.5   Test assertions for EvidenceIssuerDetails element

REMS/BS/EVIDENCE/TA_40	
TA Id	REMS/BS/EVIDENCE/TA_40
Normative source	ETSI EN 319 532-4 [11], clause C.3.4, implementation guideline f.I) The `EvidenceIssuerPolicyID` element shall be set at least with the following URIs: • I. `http://uri.etsi.org/19532/v1#/REMbaseline`
Target	Conformance to ERDS Evidence in REM Baseline
Predicate	The value of the first PolicyID child element of EvidenceIssuerPolicyID element is "`http://uri.etsi.org/19532/v1#/REMbaseline`"
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

12.6.5.6   Test assertions for Identity child element of RecipientDetails element

REMS/BS/EVIDENCE/TA_41	
TA Id	REMS/BS/EVIDENCE/TA_41
Normative source	ETSI EN 319 532-4 [11], clause C.3.4, implementation guideline h) The SenderDetails/Sender's Identity attributes element shall be set as follows, according to eIDAS TS SAML Attribute Profile [17], clauses 2.2.2 and 2.2.3
Target	Conformance to ERDS Evidence in REM Baseline
Predicate	The Identity child element of SenderDetails element meets the requirements specified in eIDAS TS SAML Attribute Profile [17], clauses 2.2.2 and 2.2.3
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

12.6.5.7   Test assertions for Identity child element of SenderDetails element

REMS/BS/EVIDENCE/TA_42	
TA Id	REMS/BS/EVIDENCE/TA_42
Normative source	ETSI EN 319 532-4 [11], clause C.3.4, implementation guideline i) The RecipientDetails/Recipient's Identity attributes element shall be set as follows, according to IDAS Technical Specifications SAML Attribute Profile [17], clauses 2.2.2 and 2.2.3
Target	Conformance to ERDS Evidence in REM Baseline
Predicate	The Identity child element of RecipientDetails element meets the requirements specified in eIDAS TS SAML Attribute Profile [17], clauses 2.2.2 and 2.2.3
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

12.6.5.8   Test assertions for UserContentInfo element

REMS/BS/EVIDENCE/TA_43	
TA Id	REMS/BS/EVIDENCE/TA_43
Normative source	ETSI EN 319 532-4 [11], clause C.3.4, implementation guideline l) The value of the element "AppLayerIdentifier" shall be set to the original message's Message-ID header taking care of the necessary transcoding of the not admitted characters in the values of XML elements (e.g. the '<' and '>' characters, systematically present in Message-ID headers, are translated in '< ' and '>' entities)
Target	Conformance to ERDS Evidence in REM Baseline
Predicate	The value of AppLayerIdentifier child element of UserContentInfo element shall be set to the original message's Message-ID header taking care of the necessary transcoding of the not admitted characters in the values of XML elements
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

12.6.5.9   Test assertions for MessageIdentifier element

REMS/BS/EVIDENCE/TA_44	
TA Id	REMS/BS/EVIDENCE/TA_44
Normative source	ETSI EN 319 532-4 [11], clause C.3.4, implementation guideline k) The MessageIdentifier element shall be a UID generated according to IETF RFC 5322 [4], section 3.6.4
Target	Conformance to ERDS Evidence in REM Baseline
Predicate	The value of MessageIdentifier element is a UID generated according to IETF RFC 5322 [4], section 3.6.4
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

12.6.5.10   Test assertions for AssuranceLevelsDetails child element of SenderDetails element

REMS/BS/EVIDENCE/TA_45	
TA Id	REMS/BS/EVIDENCE/TA_45
Normative source	ETSI EN 319 532-4 [11], clause C.3.4, implementation guideline p): • The "AssuranceLevel" element value shall be set to the URI: `http://eidas.europa.eu/LoA/substantial` • The "PolicyID" element value shall be set to a URI referencing the assurance levels definitions
Target	Conformance to ERDS Evidence in REM Baseline
Predicate	The value of AssuranceLevel child element of AssuranceLevelsDetails child element of SenderDetails element is set to "`http://eidas.europa.eu/LoA/substantial`"
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_46	
TA Id	REMS/BS/EVIDENCE/TA_46
Normative source	ETSI EN 319 532-4 [11], clause C.3.4, implementation guideline p) • The "AssuranceLevel" element value shall be set to the URI: `http://eidas.europa.eu/LoA/substantial` • The "PolicyID" element value shall be set to a URI referencing the assurance levels definitions
Target	Conformance to ERDS Evidence in REM Baseline
Predicate	The value of PolicyID child element of AssuranceLevelsDetails child element of SenderDetails element is set to a URI that references the definitions of the assurance levels
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

12.6.5.11   Test assertions for ExternalERDSDetails element

REMS/BS/EVIDENCE/TA_47	
TA Id	REMS/BS/EVIDENCE/TA_47
Normative source	ETSI EN 319 532-4 [11], clause C.3.4, implementation guideline q) The ExternalERDSDetails element (..) shall be set as follows, according to eIDAS TS SAML Attribute Profile [17], clauses 2.3.2 and 2.3.4 (…) where The value "LEGAL NAME OF THE SERVICE PROVIDER" shall be set to the same value used in ERDSGoverningBody ERDSMetadata element of the "other party" of the transaction in respect to the issuer
Target	Conformance to ERDS Evidence in REM Baseline
Predicate	The content of ExternalERDSDetails element is set according to eIDAS TS SAML Attribute Profile [17], clauses 2.3.2 and 2.3.4
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

REMS/BS/EVIDENCE/TA_48	
TA Id	REMS/BS/EVIDENCE/TA_48
Normative source	ETSI EN 319 532-4 [11], clause C.3.4, implementation guideline q) The ExternalERDSDetails element (..)shall be set as follows, according to eIDAS TS SAML Attribute Profile [17], clauses 2.3.2 and 2.3.4 (…) where The value "LEGAL NAME OF THE SERVICE PROVIDER" shall be set to the same value used in ERDSGoverningBody ERDSMetadata element of the "other party" of the transaction in respect to the issuer
Target	Conformance to ERDS Evidence in REM Baseline
Predicate	The value of the element saml:AttributeValue, with attribute xsi:type set to "elp:LegalNameType" is set to the same value as the element affected by test assertion REMS/BS/CAPMNG/XSD/TA_25 of the present document
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

12.6.5.12   Test assertions for ds:Signature element

The test assertions defined in ETSI TS 119 134-4 [13] shall apply.

In addition, the tests assertions referenced in the table below shall apply.

Test assertions that shall apply		
Test assertion identifier	**ETSI document**	**clause**
REMS/ERDSEVIDSIG/TA_04	The present document	8.2

Finally, the following test assertion shall also apply.

REMS/BS/EVIDENCE/TA_49	
TA Id	REMS/BS/EVIDENCE/TA_49
Normative source	ETSI EN 319 532-4 [11], clause C.3.4, implementation guideline m), clause C.4.3, and clause C.4.4 The Signature element shall include digital signature and time-stamp token as defined in clauses C.4.3 and C.4.4
Target	Conformance to ERDS Evidence in REM Baseline
Predicate	The ds:Signature contains a XAdES-B-T signature
Prescription level	Mandatory
Tag	Conformance, REM Baseline, REMS, REMSP, ERDS Evidence

Annex A (informative):
Change History

Date	Version	Information about changes
April 2023	1.1.2	First incomplete set of test assertions for REM Baselines
October 2023	1.1.3	Complete set of test assertions for REM Baseline (clause 12). Changes implemented resulting from comments to version v1.1.2.
October 2023	1.1.4	Changes implemented resulting from some comments to version 1.1.2 not implemented in v1.1.3.
November 2023	1.1.5	Several editorial changes: suppression of hanging paragraphs, completion of references, fixing one wrong reference from reference to 5.7.1 to a reference to 5.8

History

Document history		
V1.1.1	February 2019	Publication
V1.2.1	December 2023	Publication