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Electronic Signatures and Infrastructures (ESI);
Testing Conformance and Interoperability of Trusted Lists;
Part 1: Specifications for testing conformance of
XML representation of Trusted Lists

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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 Testing Conformance and Interoperability of Trusted Lists, as identified below:

Part 1: "Specifications for testing conformance of XML representation of Trusted Lists".

# 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 <u>ETSI Drafting Rules</u> (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 of Trusted Lists as specified in ETSI TS 119 612 [1].

Checks specified by the present document are exclusively constrained to elements specified by ETSI TS 119 612 [1], certain elements defined in ETSI TS 101 903 [2], and certain elements specified in XMLSig [3].

Regarding XML elements, the present document explicitly differentiates between structural requirements that are defined by the different XML Schemas where the tested elements are defined, and the rest of the requirements specified by ETSI TS 119 612 [1].

The present document is intentionally not linked to any software development technology and is also intentionally agnostic on implementation strategies. This is one of the reasons why the test assertions set includes tests on the correctness of the structure of all the elements specified by the XML Schemas associated with ETSI TS 119 612 [1].

## 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.

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

[1]	ETSI TS 119 612 (V2.2.1): "Electronic Signatures and Infrastructures (ESI); Trusted Lists".
[2]	ETSI TS 101 903: "Electronic Signatures and Infrastructures (ESI); XML Advanced Electronic Signatures (XAdES)".
[3]	W3C Recommendation (2008): "XML-Signature Syntax and Processing (Second Edition)".
[4]	IETF RFC 2368: "The mailto URL scheme".
[5]	IETF RFC 3061: "A URN Namespace of Object Identifiers".
[6]	IETF RFC 3986: "Uniform Resource Identifier (URI): Generic Syntax".
[7]	IETF RFC 5646: "Tags for Identifying Languages".
[8]	ISO/IEC 10646:2014: "Information technology - Universal Coded Character Set (UCS)".
[9]	Recommendation ITU-T X.509: "Information technology - Open Systems Interconnection - The Directory: Public-key and attribute certificate frameworks".
[10]	FIPS Publication 180-4 (2012): "Secure Hash Standard (SHS)".

#### 2.2 Informative references

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

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

[i.1] OASIS: "Test Assertions Model Version 1.0".

### 3 Abbreviations

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

DER Distinguished Encoding Rules
EC European Commission
EUMS European Union Member State
HTTP Hyper Text Transfer Protocol
OCSP Online Certificate Status Protocol
OID Object IDentifier

TSP Trusted Service Providers
URI Uniform Resource Identifier
URN Uniform Resource Name
XML eXtensible Markup Language

XMLDSIG eXtensible Markup Language Digital SIGnature

### 4 Overview

The present clause describes the main aspects of the technical approach used for specifying the set of tests to be performed for testing conformance of Trusted Lists against ETSI TS 119 612 [1].

Several types of tests are identified, namely:

- 1) Tests on the Trusted List structure that are directly derived from the XML Schemas associated to ETSI TS 119 612 [1]. These tests are specified in annex A.
- 2) Tests on the Trusted List structure that are not defined by the XML schemas associated to ETSI TS 119 612 [1] and that in consequence may not be tested by a XML Schema validator tool.
- 3) Tests on values of specific elements and/or attributes that cannot be tested by a XML Schema validator tool.
- 4) Tests on interrelationship between different elements present in the Trusted List (URIs that point to certain elements, for instance).
- 5) Tests on computations reflected in the contents of the Trusted Lists (digests of certain elements of some certificates, for instance).

Tests are defined as test assertions following the work produced by OASIS in "Test Assertions Model Version 1.0" [i.1].

For each Trusted List element, the present document defines a number of test assertions corresponding to the requirements specified in ETSI TS 119 612 [1].

Each test assertion includes:

1) Unique identifier for further referencing. The identifiers of the assertions start with a code identifying the set of requirements the assertion corresponds to, namely: "TL EUMS".

- 2) Reference to the **Normative source** for the test.
- 3) The **Target** of the assertion. In the normative part, this field identifies ETSI TS 119 612 [1].
- 4) **Prerequisite** (**optional**) is, according to [i.1], "a logical expression (similar to a Predicate) which further qualifies the Target for undergoing the core test (expressed by the Predicate) that addresses the Normative Statement". It is used for building test assertions corresponding to requirements that are imposed under certain conditions.
- 5) **Predicate** fully and unambiguously defining the assertion to be tested.
- 6) Prescription level. Three levels are defined: mandatory, preferred and permitted, whose semantics are as specified in [i.1].
- 7) **Tag:** information on the element tested by the assertion. This indicates that Trusted Lists as specified in ETSI TS 119 612 [1] is the origin of the assertion.

Unless indicated otherwise by the name of the clause where the test assertions are defined, any test assertion applies for both European Union Member States (EUMS hereinafter) Trusted Lists and non EUMS Trusted Lists.

The present document also defines some specific test assertions for the European Commission (EC hereinafter) List of Lists.

Table 1 shows the prefixes used in the present document associated to the URIs of the corresponding namespaces.

XML Namespace URIPrefixhttp://uri.etsi.org/02231/v2#tslhttp://uri.etsi.org/02231/v2/additionaltypes#tslxhttp://uri.etsi.org/TrstSvc/SvcInfoExt/eSigDir-1999-93-EC-TrustedList/#siehttp://www.w3.org/2000/09/xmldsig#dshttp://uri.etsi.org/01903/v1.3.2#xades

Table 1: Prefixes used

# 5 Testing Trusted Lists

# 5.1 Testing auxiliary types

# 5.1.1 Testing multilingual string types

#### 5.1.1.1 Testing lang attribute

TA id: TL\_EUMS/MLANGSTR/1

Normative source: ETSI TS 119 612 [1], clause 5.1.4. XML Schema defined in

ts\_119612v020201\_201601xsd.xsd.

Target: European Union Member State Trusted List.

Predicate: The value of the lang attribute is one of the values for European languages specified in

IETF RFC 5646 [7] and in clause E.1 of ETSI TS 119 612 [1].

Prescription level: mandatory

Tag: EUMS Trusted List.

#### 5.1.1.2 Testing tsl:NonEmptyString type

TA id: TL\_EUMS/NEMPTYSTR/1

Normative source: ETSI TS 119 612 [1], clause 5.1.4. XML Schema defined in

ts\_119612v020201\_201601xsd.xsd.

Target: European Union Member State Trusted List.

Predicate: The content of one instance of this type is not empty.

Prescription level: mandatory

Tag: EUMS Trusted List.

### 5.1.1.3 Testing tsl:NonEmptyNormalizedString type

For testing contents of instances of tsl:NonEmptyStringType the test assertions defined in clause 5.1.1.2, and the following test assertions shall apply:

TA id: TL\_EUMS/NEMPTYNORMSTR/1
Normative source: ETSI TS 119 612 [1], clause 5.1.4. XML Schema defined in ts\_119612v020201\_201601xsd.xsd.
Target: European Union Member State Trusted List.
Prerequisite: Use of combining characters is needed but it is possible not to use the combining characters listed in ISO/IEC 10646 [8], clause B.1.
Predicate: The content of one instance of this type does not include any of the following whitespace characters: carriage return (#xD), line feed (#A), and tab (#9).
Prescription level: mandatory
Tag: EUMS Trusted List.

### 5.1.1.4 Testing tsl:MultiLangStringType type

Prescription level: preferred
Tag: EUMS Trusted List.

For testing contents of instances of tsl:MultiLangStringType the test assertions defined in clauses 5.1.1.1 and 5.1.1.2, and the following test assertions shall apply:

```
TA id: TL EUMS/MLANGSTR/1
Normative source: ETSI TS 119 612 [1], clause E.2.
Target: European Union Member State Trusted List.
Predicate: The content of one instance of this type is a string of characters from the Universal
Character Set (UCS) as defined by ISO/IEC 10646 [8].
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/MLANGSTR/2
Normative source: ETSI TS 119 612 [1], clause E.2.
Target: European Union Member State Trusted List.
Predicate: The content of one instance of this type is UTF-8 encoded.
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/MLANGSTR/3
Normative source: ETSI TS 119 612 [1], clause E.2.
Target: European Union Member State Trusted List.
Predicate: The content of one instance of this type does not contain any signature to identify the
UCS.
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL EUMS/MLANGSTR/4
Normative source: ETSI TS 119 612 [1], clause E.2.
Target: European Union Member State Trusted List.
Predicate: The content of one instance of this type does not include private-use characters from the
private use zone in the Basic Multilingual Plane and from the private-use Planes OF and 10 in Group
\Omega \Omega
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/MLANGSTR/5
Normative source: ETSI TS 119 612 [1], clause E.2.
Target: European Union Member State Trusted List.
Predicate: The content of one instance of this type does not include tag characters.
Prescription level: mandatory
Tag: EUMS Trusted List
TA id: TL_EUMS/MLANGSTR/6
Normative source: ETSI TS 119 612 [1], clause E.2.
Target: European Union Member State Trusted List.
Predicate: The content of one instance of this type is plain text without any mark-up element or tag
from languages as SGML, HTML, XML, XHTML, RGF, TeX and others.
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/MLANGSTR/7
Normative source: ETSI TS 119 612 [1], clause E.2.
Target: European Union Member State Trusted List.
Predicate: The content of one instance of this type follows the semantic rules defined by the
Unicode Standard for the corresponding characters.
```

```
TA id: TL_EUMS/MLANGSTR/8
Normative source: ETSI TS 119 612 [1], clause E.2.
Target: European Union Member State Trusted List.
Prerequisite: It is possible to express the content of one instance of this type without using
combining characters.
Predicate: The content does not use combining characters.
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/MLANGSTR/9
Normative source: ETSI TS 119 612 [1], clause E.2.
Target: European Union Member State Trusted List.
Prerequisite: Use of combining characters is needed but it is possible not to use the combining
characters listed in ISO/IEC 10646 [8], clause B.1.
Predicate: The content of one instance of this type does not use the combining characters in
ISO/IEC 10646 [8], clause B.1. Prescription level: mandatory
Tag: EUMS Trusted List.
```

#### 5.1.1.5 Testing tsl:MultiLangNormStringType type

For testing contents of instances of tsl:MultiLangNormStringType, the test assertions defined in clauses 5.1.1.3 and 5.1.1.4 shall apply.

### 5.1.2 Testing tsl:InternationalNamesType type

For testing each tsl:Name child element of instances of tsl:InternationalNamesType the test assertions defined in clause 5.1.1.5, and the following test assertions shall apply:

```
TA id: TL_EUMS/INTNAMES/1
Normative source: ETSI TS 119 612 [1], clause 5.1.4.
Target: European Union Member State Trusted List.
Predicate: Instances of this type contain one tsl:Name child element whose attribute lang has the value "en".
Prescription level: mandatory
Tag: EUMS Trusted List.
```

### 5.1.3 Testing tsl:InternationalNamesType type

For testing each tsl: Name child element test assertions defined in clause 5.1.1.5 shall apply.

# 5.1.4 Testing types for managing URIs

#### 5.1.4.1 Testing tsl:NonEmptyURIType type

```
TA id: TL_EUMS/NEMPTYURI/1
Normative source: XML Schema defined in ts_119612v020201_201601xsd.xsd.
Target: European Union Member State Trusted List.
Predicate: The content of one instance of this type is not empty.
Prescription level: mandatory
Tag: EUMS Trusted List.

TA id: TL_EUMS/NEMPTYURI/2
Normative source: XML Schema defined in ts_119612v020201_201601xsd.xsd.
Target: European Union Member State Trusted List.
Predicate: The value of the content of one instance of this type is a valid URI Reference as specified in IETF RFC 3986 [6].
Prescription level: mandatory
Tag: EUMS Trusted List.
```

### 5.1.4.2 Testing tsl:NonEmptyURIListType type

For testing each tsl:URI child element of an instance of tsl:NonEmptyURIListType the test assertions of clause 5.1.4.1 shall apply.

TA id: TL\_EUMS/NEMPTYURI/1

Normative source: XML Schema defined in ts\_119612v020201\_201601xsd.xsd.

Target: European Union Member State Trusted List.

Predicate: The content of one instance of this type is not empty.

Prescription level: mandatory

Tag: EUMS Trusted List.

#### 5.1.4.3 Testing tsl:NonEmptyMultiLangURIType type

For testing contents of instances of tsl:NonEmptyMultiLangURIType, the test assertions defined in clause 5.1.4.1, and the following test assertion shall apply:

TA id: TL\_EUMS/NEMPTYMLANGURI/1

Normative source: ETSI TS 119 612 [1], clause 5.1.4. XML Schema defined in

ts\_119612v020201\_201601xsd.xsd.

Target: European Union Member State Trusted List.

Predicate: The value of the lang attribute is one of the values for European languages specified in

IETF RFC 5646 [7] and in clause E.1 of ETSI TS 119 612 [1].

Prescription level: mandatory

Tag: EUMS Trusted List.

#### 5.1.4.4 Testing tsl:NonEmptyMultiLangURIListType type

For each tsl:URI child element of one instance of this type the test assertions specified in clause 5.1.4.3 shall apply.

### 5.1.5 Testing Country Codes

# 5.1.5.1 Test assertions common to Trusted Lists from EUMS, from non EUMS, and the List of Lists from European Commission

TA id: TL\_COMM/CC/1

Normative source: ETSI TS 119 612 [1], clause 5.1.5.

Target: European Union Member State Trusted List.

Predicate: The characters of a country code are capital letters.

Prescription level: mandatory

Tag: EUMS Trusted List.

TA id: TL\_COMM/CC/2

Normative source: ETSI TS 119 612 [1], clause 5.1.5.

Target: European Union Member State Trusted List.

Prerequisite: The value of the country code corresponds to a country

Predicate: Valid country code values are as specified in ISO 3166-1 with exceptions as specified in

test assertions  ${\tt TL\_EUMS\_CC/1}$  and  ${\tt TL\_EUMS\_CC\_2}$ .

Prescription level: mandatory

Tag: EUMS Trusted List.

#### 5.1.5.2 Test assertions for non EUMS Trusted Lists

TA id: TL\_NO\_EUMS/CC/1

Normative source: ETSI TS 119 612 [1], clause 5.1.5.

Target: non European Union Member State Trusted List.

Prerequisite: The country code value is neither one of the codes corresponding to European Union

Member States, nor "EU".

Predicate: The following are valid exceptional Country code values: commonly used extensions with

regional scope, and another identifier recognised for identifying multi-state grouping.

Prescription level: mandatory

Tag: Country code value exception.

#### 5.1.5.3 Test assertions for exceptions within EUMS Trusted Lists

TA id: TL\_EUMS/CC/1
Normative source: ETSI TS 119 612 [1], clause 5.1.5.
Target: European Union Member State Trusted List.
Prerequisite: The country identified by the country code is United Kingdom Predicate: The country code value is "UK".
Prescription level: mandatory
Tag: Country Code value exception.

TA id: TL\_EUMS/CC/2
Normative source: ETSI TS 119 612 [1], clause 5.1.5.
Target: European Union Member State Trusted List.
Prerequisite: The country identified by the country code is Greece
Predicate: The country code value is "EL".
Prescription level: mandatory
Tag: Country Code value exception.

### 5.1.6 Testing tsl:AddressType type

#### 5.1.6.1 Introduction

One instance of tsl:AddressType type is a sequence of two elements, namely tsl:PostalAddresses (instance of tsl:PostalAddressListType), and tsl:ElectronicAddress (instance of tsl:ElectronicAddressType type).

For testing one instance of AddressType type the test assertions defined in clauses 5.1.6.2 and 5.1.6.3 shall apply.

#### 5.1.6.2 Testing tsl:PostalAddressListType type

One instance of tsl:PostalAddressListType type contains one or more tsl:PostalAddress children elements.

For testing each of the present tsl:StreetAddress, tsl:Locality, tsl:StateOrProvince, tsl:PostalCode, and tsl:CountryName children elements, the test assertions defined in clause 5.1.1.2 shall apply.

For testing the lang attribute the test assertions defined in clause 5.1.1.1 shall apply.

#### 5.1.6.3 Testing tsl:ElectronicAddressType type

One instance of tsl:ElectronicAddressType type contains one or more tsl:URI children elements.

For testing each tsl:URI child element of instances of tsl:ElectronicAddressType the test assertions defined in clause 5.1.4.3 shall apply.

Furthermore the following test assertions shall apply for testing the rest of the contents of instances of tsl:ElectronicAddressType:

```
TA id: TL_EUMS/TSL/EADDR/1
Normative source: ETSI TS 119 612 [1], clause 5.3.5.2.
Target: European Union Member State Trusted List.
Predicate: One instance of tsl:ElectronicAddressType contains one tsl:URI child element containing a
URI Reference identifying an e-mail address compliant with the URI scheme defined in IETF RFC 2368
[4] AND whose lang attribute has the value that identifies English as language.
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/EADDR/2
Normative source: ETSI TS 119 612 [1], clause 5.3.5.2.
Target: European Union Member State Trusted List.
Predicate: One instance of tsl:ElectronicAddressType contains one or more tsl:URI child element
containing a URI Reference identifying an e-mail address compliant with the URI scheme defined in
IETF RFC 2368 [4] AND whose lang attribute has a value identifying a language different to English.
Prescription level: permitted
Tag: EUMS Trusted List.
```

```
TA id: TL_EUMS/TSL/EADDR/2
Normative source: ETSI TS 119 612 [1], clause 5.3.5.2.
Target: European Union Member State Trusted List.
Predicate: One instance of tsl:ElectronicAddressType contains one tsl:URI child element containing a
URI Reference identifying the address of a web-site (with a scheme value equal to "http" or to
"https") AND whose lang attribute has the value that identifies English as language.
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/EADDR/2
Normative source: ETSI TS 119 612 [1], clause 5.3.5.2.
Target: European Union Member State Trusted List.
Predicate: One instance of tsl:ElectronicAddressType contains one or more tsl:URI child element
containing a URI Reference identifying the address of a web-site (with a scheme value equal to
"http" or to "https") AND whose lang attribute has a value identifying a language different to
English.
Prescription level: mandatory
Tag: EUMS Trusted List.
```

# 5.2 Testing the elements of the XML representation of the Trusted List

#### 5.2.1 Introduction

This clause defines the test assertions that apply for testing the contents of the XML representation of the Trusted List, except the test assertions directly derived from the XML Schema definitions.

Each subclause defines test assertions for a certain attribute or child element of tsl:TrustServiceStatusList, the root element of the XML representation of the Trusted List.

The clauses defining test assertions for children elements may contain sub-clauses defining test assertions for their descendants.

### 5.2.2 Testing TSLTag attribute

```
TA id: TL_EUMS/TSL/TAG/1
Normative source: ETSI TS 119 612 [1], clause 5.2.1.
Target: European Union Member State Trusted List.
Predicate: The value of the TSLTag attribute of tsl:TrustServiceStatusList element is 'http://uri.etsi.org/19612/TSLTag'.
Prescription level: mandatory
Tag: EUMS Trusted List.
```

# 5.2.3 Testing tsl:SchemeInformation element

#### 5.2.3.1 Testing tsl:TSLVersionIdentifier element

```
TA id: TL_EUMS/TSL/VI/1
Normative source: ETSI TS 119 612 [1], clause 5.3.1.
Target: European Union Member State Trusted List.
Predicate: The value of the content of the tsl:TSLVersionIdentifier child element of tsl:SchemeInformation element is '5'.
Prescription level: mandatory
Tag: EUMS Trusted List.
```

#### 5.2.3.2 Testing tsl:TSLSequenceNumber element

```
TA id: TL_EUMS/TSL/SN/1
Normative source: ETSI TS 119 612 [1], clause 5.3.2.
Target: European Union Member State Trusted List.
Predicate: The value of the content of the tsl:TSLSequenceNumber child element of tsl:SchemeInformation element is not lower than '1'.
Prescription level: mandatory
Tag: EUMS Trusted List.
```

TA id: TL\_EUMS/TSL/SN/2

Normative source: ETSI TS 119 612 [1], clause 5.3.1.

Target: European Union Member State Trusted List.

Prerequisite: The value of the content of the tsl:TSLSequenceNumber child element of

tsl:SchemeInformation element is greater than '1'.

Predicate: The value of the content of the tsl:TSLSequenceNumber child element of

tsl:SchemeInformation element is not re-cycled to '1'.

Prescription level: mandatory

Tag: EUMS Trusted List.

#### Testing tsl:TSLType element 5.2.3.3

#### 5.2.3.3.1 Test assertions for EUMS Trusted Lists

TA id: TL\_EUMS/TSL/TYPE/1

Normative source: ETSI TS 119 612 [1], clause 5.3.3. Target: European Union Member State Trusted List.

Prerequisite: The Trusted List is issued by an EU Member State.

Predicate: The value of the content of the tsl:TSLType child element of tsl:SchemeInformation

element is "http://uri.etsi.org/TrstSvc/TrustedList/TSLType/EUgeneric".

Prescription level: mandatory

Tag: EUMS Trusted List.

#### Test assertions for EC List of Lists 5.2.3.3.2

TA id: LOL\_EU/TSL/TYPE/1

Normative source: ETSI TS 119 612 [1], clause 5.3.3.

Target: European Commission List of Lists.

Prerequisite: The Trusted List is a List of pointers to EUMS Trusted Lists, issued by EC. Predicate: The value of the content of the tsl:TSLType child element of tsl:SchemeInformation

element is "http://uri.etsi.org/TrstSvc/TrustedList/TSLType/EUlistofthelists".

Prescription level: mandatory

Tag: LOL EU.

#### Test assertions for non EUMS Trusted Lists 5.2.3.3.3

TA id: TL\_NO\_EUMS/TSL/TYPE/1

Normative source: ETSI TS 119 612 [1], clause 5.3.3.

Target: non-European Union Member State Trusted List.

Prerequisite: The Trusted List is issued neither by an EUMS nor the EC.

Predicate: The value of the content of the tsl:TSLType child element of tsl:SchemeInformation element follows the pattern "http://uri.etsi.org/TrstSvc/TrustedList/TSLType/[CC]list", OR is a

value starting by "http://uri.etsi/org/".

Prescription level: mandatory Tag: non-EUMS Trusted List.

TA id: TL\_NO\_EUMS/TSL/TYPE/2

Normative source: ETSI TS 119 612 [1], clause 5.3.3.

Target: non-European Union Member State Trusted List.

Prerequisite: The Trusted List is issued neither by an EUMS nor the EC, AND the value of the content

of the tsl:TSLType child element of tsl:SchemeInformation element follows the pattern

"http://uri.etsi.org/TrstSvc/TrustedList/TSLType/[CC]list".

Predicate: [CC] is a country code for a non-EU Member State, a commonly used extension with regional

scope, or another identifier recognized for identifying multi-state grouping.

Prescription level: mandatory Tag: non-EUMS Trusted List.

TA id: LOL\_NO\_EUMS/TSL/TYPE/1

Normative source: ETSI TS 119 612 [1], clause 5.3.3.

Target: non-European List of Lists.

Prerequisite: The Trusted List is issued by an non-EU Member State and is a list of pointers to

other trusted lists.

Predicate: The value of the content of the tsl:TSLType child element of tsl:SchemeInformation

element follows the pattern "http://uri.etsi.org/TrstSvc/TrustedList/TSLType/[CC]listofthelists", OR is a value starting by "http://uri.etsi/org/".

Prescription level: mandatory

Tag: non-EUMS Trusted List.

```
TA id: LOL_NO_EUMS/TSL/TYPE/2
```

Normative source: ETSI TS 119 612 [1], clause 5.3.3.

Target: non-European List of Lists.

Prerequisite: The Trusted List is issued neither by an EUMS nor the EC, AND value of the content of the tsl:TSLType child element of tsl:SchemeInformation element follows the pattern

"http://uri.etsi.org/TrstSvc/TrustedList/TSLType/[CC]listofthelists".

Predicate: [CC] is a country code for a non-EU Member State, a commonly used extension with regional

scope, or another identifier recognized for identifying multi-state grouping.

Prescription level: mandatory

Tag: non-EUMS LOL.

#### 5.2.3.4 Testing tsl:SchemeOperatorName element

For testing this element the testing assertions defined in clause 5.1.2 shall apply.

#### 5.2.3.5 Testing tsl:SchemeOperatorAddress element

This element is an instance of tsl:AddressType type. For testing this element the testing assertions defined in clause 5.1.6 shall apply.

#### 5.2.3.6 Testing tsl:SchemeName element

This element is an instance of tsl:InternationalNamesType type. For testing this element the test assertions defined in clause 5.1.2 shall apply. Additionally, the test assertions defined below for each tsl: Name child element shall also apply.

```
TA id: TL_EUMS/TSL/SCHN/1
```

Normative source: ETSI TS 119 612 [1], clause 5.3.6.

Target: European Union Member State Trusted List.

Prerequisite: The lang attribute of the tsl:Name child element has a value indicating English language.

Predicate: The value of the tsl:Name child matches the following pattern: CC:EN\_name\_value being EN\_name\_value an English name

Prescription level: mandatory

Tag: EUMS Trusted List.

#### TA id: TL\_EUMS/TSL/SCHN/2

Normative source: ETSI TS 119 612 [1], clause 5.3.6.

Target: European Union Member State Trusted List.

Prerequisite: The lang attribute of the tsl:Name child element has a value indicating a language different than English language.

Predicate: The value of the tsl:Name child matches the following pattern: CC: name\_value being name\_value the official translation of EN\_name\_value in TL\_EUMS/TSL/SCHN/1 to the language indicated in lang attribute.

Prescription level: mandatory

Tag: EUMS Trusted List.

#### TA id: TL\_EUMS/TSL/SCHN/3

Normative source: ETSI TS 119 612 [1], clause 5.3.6.

Target: European Union Member State Trusted List.

Predicate: The string CC before the ":" separator in the value of the tsl:Name child element is the same as the value of tsl:SchemeTerritory child element of tsl:TSLSchemeInformationType.

Prescription level: mandatory

Tag: EUMS Trusted List.

#### 5.2.3.7 Testing tsl:SchemeInformationURI element

For testing this element test assertions defined in clause 5.1.4.4 shall apply. In addition, for each tsl:URI child element the test assertion defined below shall also apply.

```
TA id: TL_EUMS/TSL/SCHINURI/1
```

Normative source: ETSI TS 119 612 [1], clause 5.3.7.

Target: European Union Member State Trusted List.

Predicate: The value of the tsl:URI is a valid URI Reference that is the address of a site that can be remotely contacted.

Prescription level: mandatory

Tag: EUMS Trusted List.

### 5.2.3.8 Testing tsl:StatusDeterminationApproach element

#### 5.2.3.8.1 Testing tsl:StatusDeterminationApproach for EUMS Trusted Lists

For testing this element test assertions defined in clause 5.1.4.1 shall apply.

In addition to the test assertions defined in clause 5.1.4.1, the assertion defined below shall also apply.

```
TA id: TL_EUMS/TSL/STATDA/1

Normative source: ETSI TS 119 612 [1], clause 5.3.8.

Target: European Union Member State Trusted List.

Prerequisite: The Trusted List is generated by a Scheme Operator from an EU Member State.

Predicate: The value of the tsl:StatusDeterminationApproach is 
"http://uri.etsi.org/TrstSvc/TrustedList/StatusDetn/EUappropriate".

Prescription level: mandatory

Tag: EUMS Trusted List.
```

#### 5.2.3.8.2 Testing tsl:StatusDeterminationApproach for non-EUMS Trusted Lists

For testing this element test assertions defined in clause 5.1.4.1 shall apply.

In addition to the test assertions defined in clause 5.1.4.1, the assertion defined below shall also apply.

```
TA id: TL_NO_EUMS/TSL/STATDA/1
Normative source: ETSI TS 119 612 [1], clause 5.3.8.
Target: European Union Member State Trusted List.
Prerequisite: The Trusted List is generated by a Scheme Operator from an non-EU Member State.
Predicate: The value of the tsl:StatusDeterminationApproach follows the pattern
"http://uri.etsi.org/TrstSvc/TrustedList/StatusDetn/CCdetermination".
Prescription level: permitted
Tag: EUMS Trusted List.
TA id: TL_NO_EUMS/TSL/STATDA/2
Normative source: ETSI TS 119 612 [1], clauses 5.3.8 and D.3.
Target: European Union Member State Trusted List.
Prerequisite: The Trusted List is generated by a Scheme Operator from an non-EU Member State.
Predicate: The value of the content of the tsl:StatusDeterminationApproach element is a value
starting by "http://uri.etsi/org/".
Prescription level: permitted
Tag: EUMS Trusted List.
TA id: TL_NO_EUMS/TSL/STATDA/3
Normative source: ETSI TS 119 612 [1], clause 5.3.8.
Target: European Union Member State Trusted List.
Prerequisite: The Trusted List is generated by a Scheme Operator from an non-EU Member State and the
value of tsl:StatusDeterminationApproach follows the pattern
"http://uri.etsi.org/TrstSvc/TrustedList/StatusDetn/CCdetermination".
Predicate: The string CC before 'determination' in the value of the tsl:StatusDeterminationApproach
child element is the same as the value of tsl:SchemeTerritory child element of
tsl:TSLSchemeInformationType.
Prescription level: permitted
Tag: EUMS Trusted List.
```

#### 5.2.3.9 Testing tsl:SchemeTypeCommunityRules element

### 5.2.3.9.1 Introduction

For testing the tsl:SchemeTypeCommunityRules element in a EUMS Trusted List, the test assertions defined in clauses 5.1.4.4 and 5.2.3.9.2 shall apply.

For testing the tsl:SchemeTypeCommunityRules element in a non EUMS Trusted List, the test assertions defined in clauses 5.1.4.4 and 5.2.3.9.4 shall apply.

#### 5.2.3.9.2 Test assertions specific to EUMS Trusted Lists

```
TA id: TL_EUMS/TSL/SCHTCOMRUL/1
Normative source: ETSI TS 119 612 [1], clause 5.3.9.
Target: European Union Member State Trusted List.
Prerequisite: The Trusted List is generated by a Scheme Operator from an EU Member State.
Predicate: One of the URIs is "http://uri.etsi.org/TrstSvc/TrustedList/schemerules/EUcommon".
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL EUMS/TSL/SCHTCOMRUL/2
Normative source: ETSI TS 119 612 [1], clause 5.3.9.
Target: European Union Member State Trusted List.
Prerequisite: The Trusted List is generated by a Scheme Operator from an EU Member State.
Predicate: One of the URIs follows the pattern
http://uri.etsi.org/TrstSvc/TrustedList/schemerules/CC, where CC is the value of tsl:SchemeTerritory
element.
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SCHTCOMRUL/3
Normative source: ETSI TS 119 612 [1], clause 5.3.9.
Target: European Union Member State Trusted List.
Prerequisite: The Trusted List is generated by a Scheme Operator from an EU Member State.
Predicate: One or more than one URIs are present under the URI that follows the pattern
http://uri.etsi.org/TrstSvc/TrustedList/schemerules/CC, where CC is the value of tsl:SchemeTerritory
element.
Prescription level: mandatory
Tag: EUMS Trusted List.
```

#### 5.2.3.9.3 Test assertions specific to EC List of Trusted Lists

```
TA id: LOL_EU/TSL/SCHTCOMRUL/1
Normative source: ETSI TS 119 612 [1], clause D.53.
Target: European Union Member State Trusted List.
Prerequisite: The list is the EU list of Trusted Lists (the TSL Type is "http://uri.etsi.org/TrstSvc/TrustedList/TSLType/EUlistofthelists").
Predicate: The URI is set to "http://uri.etsi.org/TrstSvc/TrustedList/schemerules/EUlistofthelists".
Prescription level: mandatory
Tag: EUMS Trusted List.
```

#### 5.2.3.9.4 Test assertions specific to no EUMS Trusted Lists

```
TA id: TL_NO_EUMS/TSL/SCHTCOMRUL/1
Normative source: ETSI TS 119 612 [1], clause 5.3.9.

Target: European Union Member State Trusted List.

Prerequisite: The Trusted List is not generated by a Scheme Operator from an EU Member State.

Predicate: The URI is defined on purpose or registered under ETSI Identified Organization Domain.

Prescription level: mandatory

Tag: non-EUMS Trusted List.
```

#### 5.2.3.10 Testing tsl:SchemeTerritory element

For testing the tsl:SchemeTerritory element in a EUMS Trusted List, the test assertions defined in clause 5.1.5 shall apply.

#### 5.2.3.11 Testing tsl:PolicyOrLegalNotice element

For testing tsl:TSLPolicy children elements the test assertions defined in clause 5.1.4.4 shall apply.

For testing tsl:TSLLegalNotice children elements the test assertions defined in clause 5.1.1.4 shall apply.

#### 5.2.3.12 Testing HistoricalInformationPeriod element

```
TA id: TL_EUMS/TSL/HISTINFOP/1
Normative source: ETSI TS 119 612 [1], clause 5.3.12.
Target: European Union Member State Trusted List.
Predicate: The value for this element is 65535.
Prescription level: mandatory
Tag: EUMS Trusted List.
```

#### 5.2.3.13 Testing tsl:PointersToOtherTSL element

For testing the tsl:ServiceDigitalIdentities child element the test assertions defined in clause 5.4.3 shall apply.

For testing the tsl:TSLLocation child element the test assertions defined in clause 5.1.4.1 shall apply.

For testing tsl:ServiceDigitalIdentitieschildren elements the test assertions defined in clause 5.4.3 shall apply.

Below follows the test assertions that shall apply for testing the content of tsl:AdditionalInformation:

- 1) For testing tsl:TSLType content the test assertions defined in clause 5.2.3.3 shall apply.
- 2) For testing tsl:SchemeOperatorName content the test assertions defined in clause 5.2.3.4 shall apply.
- 3) For testing tsl:SchemeTypeCommunityRulescontent the test assertions defined in clause 5.2.3.9 shall apply.
- 4) For testing tsl:SchemeTerritory content the test assertions defined in clause 5.2.3.10 shall apply.

#### 5.2.3.14 Testing tsl:ListIssueDateTime element

```
TA id: TL_EUMS/TSL/LISTISSDATETIME/1
Normative source: ETSI TS 119 612 [1], clause 5.3.14.
Target: European Union Member State Trusted List.
Predicate: This element contains a Coordinated Universal Time (UTC) value.
Prescription level: mandatory
Tag: EUMS Trusted List.
```

#### 5.2.3.15 Testing tsl:NextUpdate element

```
TA id: TL_EUMS/TSL/NEXTUP/1
Normative source: ETSI TS 119 612 [1], clause 5.3.15.
Target: European Union Member State Trusted List.
Prerequisite: The Scheme Operator does not ceases its operations.
Predicate: This element contains a Coordinated Universal Time (UTC) value.
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/NEXTUP/2
Normative source: ETSI TS 119 612 [1], clause 5.3.15.
Target: European Union Member State Trusted List.
Prerequisite: The Scheme Operator ceases its operations.
Predicate: This element has an empty value (neither text nodes nor element nodes).
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/NEXTUP/3
Normative source: ETSI TS 119 612 [1], clause 5.3.15.
Target: European Union Member State Trusted List.
Prerequisite: This element contains a Coordinated Universal Time (UTC) value.
Predicate: The difference between the value of this element and the value of tsl:ListIssueDateTime
does not exceeds 6 months.
Prescription level: mandatory
Tag: EUMS Trusted List.
```

#### 5.2.3.16 Testing tsl:DistributionPoints element

For testing the tsl:DistributionPoints element the test assertions defined in clause 5.1.4.2 and the following test assertions shall apply.

```
TA id: TL_EUMS/TSL/DISTPTS/1
Normative source: ETSI TS 119 612 [1], clause 5.3.16.
Target: European Union Member State Trusted List.
Predicate: All the tsl:URI children point to the identical copies of the current Trusted List or its updated version.
Prescription level: mandatory
Tag: EUMS Trusted List.
```

#### 5.2.3.17 Testing tsl:SchemeExtensions element

#### 5.2.3.17.1 Test assertions for EUMS Trusted Lists

TA id: TL\_EUMS/TSL/SCHEXT/1
Normative source: ETSI TS 119 612 [1], clause 5.3.17.

Target: European Union Member State Trusted List.

Prerequisite: The Trusted List is generated by a Scheme Operator from an EU Member State.

Predicate: This element is not present.

Prescription level: mandatory
Tag: EUMS Trusted List.

It is out of the scope of the present document to define additional test assertions for testing contents of tsl:SchemeExtensions/Extension elements.

#### 5.2.3.17.2 Test assertions for non EUMS Trusted Lists

```
TA id: TL_NO_EUMS/TSL/SCHEXT/1
Normative source: ETSI TS 119 612 [1], clause 5.3.17.
Target: European Union Member State Trusted List.
Prerequisite: The Trusted List is generated by a Scheme Operator from outside EU.
Predicate: This element is present.
Prescription level: permitted
Tag: Non EUMS Trusted List.
```

It is out of the scope of the present document to define additional test assertions for testing contents of tsl:SchemeExtensions/Extension elements.

## 5.3 Testing tsl:TSPInformation element

### 5.3.1 Testing tsl:TSPName element

For testing each tsl:Name child element of the tsl:TSPName element the test assertions defined in clause 5.1.2 shall apply.

### 5.3.2 Testing tsl:TSPTradeName element

For testing each tsl:Name child element of the tsl:TSPTradeName element the test assertions defined in clause 5.1.2 and the following test assertions shall apply:

```
TA id: TL_EUMS/TSL/TSPTRNAME/1
Normative source: ETSI TS 119 612 [1], clause 5.4.2.
Target: European Union Member State Trusted List.
Prerequisite: The TSP is a legal person.
Predicate: The value of one of the tsl:Name children elements follows the pattern XXXCC-[ID] where
XXX are either "VAT" or "NTR", CC are two characters corresponding to the country code (exceptions
for these values as in test assertions TL_EUMS/CC/1 and TL_EUMS/CC/2 in clause 5.1.5.3 apply), and
[ID] is an identifier according to the country and identity type reference.
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/TSPTRNAME/2
Normative source: ETSI TS 119 612 [1], clause 5.4.2.
Target: European Union Member State Trusted List.
Prerequisite: The TSP is a natural person.
Predicate: The value of one of the tsl:Name children elements follows the pattern XXXCC-[ID] where
XXX are either "PAS" or "IDC", or "PNO", or "TIN", YY are two characters corresponding to the
country code (exceptions for these values as in test assertions TL_EUMS/CC/1 and TL_EUMS/CC/2 in
clause 5.1.5.3 apply), and [ID] is an identifier according to the country and identity type
reference.
Prescription level: mandatory
Tag: EUMS Trusted List.
```

### 5.3.3 Testing tsl:TSPAddress element

For testing the tsl:TSPAddress element the test assertions defined in clause 5.1.6 and the following test assertions shall apply.

```
TA id: TL_EUMS/TSL/TSPADDR/1
Normative source: ETSI TS 119 612 [1], clause 5.4.3.
Target: European Union Member State Trusted List.
Prerequisite: The entire set of services provided by the TSP are terminated or ceased.
Predicate: The value of this element is the address that the Scheme Operator uses for enquiries about the terminated services.
Prescription level: mandatory
Tag: EUMS Trusted List.
```

### 5.3.4 Testing tsl:TSPInformationURI element

For testing the tsl:TSPInformationURI element the test assertions defined in clause 5.1.4.4 and the following test assertions shall apply:

```
TA id: TL_EUMS/TSL/TSPURIINFO/1
Normative source: ETSI TS 119 612 [1], clause 5.4.4.
Target: European Union Member State Trusted List.
Prerequisite: The entire set of services provided by the TSP are terminated or ceased.
Predicate: The value of this element is the URI that the Scheme Operator uses for providing information about the terminated services.
Prescription level: mandatory
Tag: EUMS Trusted List.
```

### 5.3.5 Testing tsl:TSPInformationExtensions element

#### 5.3.5.1 Test assertions for EUMS Trusted Lists

```
TA id: TL_EUMS/TSL/TSPEXT/1

Normative source: ETSI TS 119 612 [1], clause 5.4.5.

Target: European Union Member State Trusted List.

Prerequisite: The Trusted List is generated by a Scheme Operator from an EU Member State.

Predicate: The Critical attribute of each tsl:TSPInformationExtensions/Extension is set to value "false".

Prescription level: mandatory

Tag: EUMS Trusted List.
```

It is out of the scope of the present document to define additional test assertions for testing contents of tsl:TSPInformationExtensions/Extension elements.

# 5.4 Testing ServiceInformation element

# 5.4.1 Testing tsl:ServiceTypeIdentifier element

For testing the tsl:ServiceTypeIdentifier element the test assertions defined in clause 5.1.4.1 and the following test assertions shall apply:

```
TA id: TL_EUMS/TSL/SVCTYPE/1

Normative source: ETSI TS 119 612 [1], clause 5.5.1.

Target: European Union Member State Trusted List.

Predicate: The value of this element is one of the following values:
"http://uri.etsi.org/TrstSvc/Svctype/CA/QC"
"http://uri.etsi.org/TrstSvc/Svctype/Certstatus/OCSP/QC"
"http://uri.etsi.org/TrstSvc/Svctype/Certstatus/CRL/QC"
"http://uri.etsi.org/TrstSvc/Svctype/TSA/QTST"
"http://uri.etsi.org/TrstSvc/Svctype/EDS/Q"
"http://uri.etsi.org/TrstSvc/Svctype/EDS/Q"
"http://uri.etsi.org/TrstSvc/Svctype/PSES/Q"
"http://uri.etsi.org/TrstSvc/Svctype/QESValidation/Q"
"http://uri.etsi.org/TrstSvc/Svctype/RemoteQSCDManagement/Q"
Prescription level: permitted
Tag: EUMS Trusted List.
```

```
TA id: TL_EUMS/TSL/SVCTYPE/2
Normative source: ETSI TS 119 612 [1], clause 5.5.1.
Target: European Union Member State Trusted List.
Predicate: The value of this element is one of the following values:
"http://uri.etsi.org/TrstSvc/Svctype/CA/PKC"
"http://uri.etsi.org/TrstSvc/Svctype/Certstatus/OCSP"
"http://uri.etsi.org/TrstSvc/Svctype/Certstatus/CRL"
"http://uri.etsi.org/TrstSvc/Svctype/TSA"
"http://uri.etsi.org/TrstSvc/Svctype/TSA/TSS-QC"
"http://uri.etsi.org/TrstSvc/Svctype/TSA/TSS-AdESQCandQES"
"http://uri.etsi.org/TrstSvc/Svctype/EDS'
"http://uri.etsi.org/TrstSvc/Svctype/EDS/REM"
"http://uri.etsi.org/TrstSvc/Svctype/PSES"
"http://uri.etsi.org/TrstSvc/Svctype/AdESValidation"
"http://uri.etsi.org/TrstSvc/Svctype/AdESGeneration"
Prescription level: permitted
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SVCTYPE/3
Normative source: ETSI TS 119 612 [1], clause 5.5.1.
Target: European Union Member State Trusted List.
Predicate: The value of this element is one of the following values:
http://uri.etsi.org/TrstSvc/Svctype/RA
http://uri.etsi.org/TrstSvc/Svctype/RA/nothavingPKIid
http://uri.etsi.org/TrstSvc/Svctype/ACA
http://uri.etsi.org/TrstSvc/Svctype/SignaturePolicyAuthority
http://uri.etsi.org/TrstSvc/Svctype/Archiv
http://uri.etsi.org/TrstSvc/Svctype/Archiv/nothavingPKIid
http://uri.etsi.org/TrstSvc/Svctype/IdV
http://uri.etsi.org/TrstSvc/Svctype/IdV/nothavingPKIid
http://uri.etsi.org/TrstSvc/Svctype/KEscrow
http://uri.etsi.org/TrstSvc/Svctype/KEscrow/nothavingPKIid
http://uri.etsi.org/TrstSvc/Svctype/PPwd
http://uri.etsi.org/TrstSvc/Svctype/PPwd/nothavingPKIid
http://uri.etsi.org/TrstSvc/Svctype/TLIssuer
http://uri.etsi.org/TrstSvc/Svctype/NationalRootCA-QC
http://uri.etsi.org/TrstSvc/Svctype/unspecified
Prescription level: permitted
Tag: EUMS Trusted List.
```

### 5.4.2 Testing tsl:ServiceName element

For testing the tsl:ServiceName element the test assertions defined in clause 5.1.2 shall apply.

# 5.4.3 Testing tsl:ServiceDigitalIdentity element

#### 5.4.3.1 Test assertions common to any tsl:ServiceDigitalIdentity element

```
Ta id: TL_EUMS/TSL/SVCDIGID/COMM/1
Normative source: ETSI TS 119 612 [1], clause 5.5.3.

Target: European Union Member State Trusted List.
Prerequisite: No PKI technology is used.
Predicate: There is only one tsl:DigitalId child element.
Prescription level: mandatory
Tag: EUMS Trusted List.

TA id: TL_EUMS/TSL/SVCDIGID/COMM/2
Normative source: ETSI TS 119 612 [1], clause 5.5.3.

Target: European Union Member State Trusted List.
Prerequisite: No PKI technology is used.
Predicate: The content of the tsl:Digital child element is a tsl:Other child whose value is a valid URI Reference.
Prescription level: mandatory
Tag: EUMS Trusted List.
```

NOTE: It is out of the scope of the present document to define test assertions for other possible values of tsl:Other element.

TA id: TL\_EUMS/TSL/SVCDIGID/COMM/3

Normative source: ETSI TS 119 612 [1], clause 5.5.3. Target: European Union Member State Trusted List.

Prerequisite: PKI technology is used.

Predicate: The tsl:ServiceDigitalIdentity element contains one and only one tsl:DigitalId/ds:KeyInfo/ds:KeyValue element as specified in XMLDSIG [3].

Prescription level: permitted

Tag: EUMS Trusted List.

#### Test assertions specific to tsl:ServiceDigitalIdentity child element of 5.4.3.2 tsl:ServiceInformation element

TA id: TL\_EUMS/TSL/SVCINFO/SVCDIGID/1

Normative source: ETSI TS 119 612 [1], clause 5.5.3. Target: European Union Member State Trusted List.

Prerequisite: PKI technology is used.

Predicate: The tsl:ServiceDigitalIdentity element contains one or more tsl:DigitalId children

elements, each one with one tsl:X509Certificate child element (one or more

tsl:DigitalId/tsl:X509Certificate elements), whose value is the base-64 encoding of one X509 DER-

encoded certificate.

Prescription level: mandatory

Tag: EUMS Trusted List.

TA id: TL\_EUMS/TSL/SVCINFO/SVCDIGID/2

Normative source: ETSI TS 119 612 [1], clause 5.5.3.

Target: European Union Member State Trusted List.

Prerequisite: PKI technology is used AND the tsl:ServiceDigitalIdentity element contains more than one tsl:DigitalId/tsl:X509Certificate elements.

Predicate: All the X509 certificates within the tsl:DigitalId/tsl:X509Certificate elements certify

the same public key.

Prescription level: mandatory

Tag: EUMS Trusted List.

TA id: TL\_EUMS/TSL/SVCINFO/SVCDIGID/3

Normative source: ETSI TS 119 612 [1], clause 5.5.3. Target: European Union Member State Trusted List.

Prerequisite: PKI technology is used AND the tsl:ServiceDigitalIdentity element contains more than one tsl:DigitalId/tsl:X509Certificate elements.

Predicate: All the X509 certificates within the tsl:DigitalId/tsl:X509Certificate elements have the same subject names.

Prescription level: mandatory

Tag: EUMS Trusted List.

TA id: TL\_EUMS/TSL/SVCINFO/SVCDIGID/4

Normative source: ETSI TS 119 612 [1], clause 5.5.3.

Target: European Union Member State Trusted List.

Prerequisite: PKI technology is used AND there are one or more than one X509 certificates whose subject name fields satisfy the condition that their Organization attributes strictly match the value of the tsl:TSPName of the provider of the service.

 $\textbf{Predicate} : \textbf{The tsl:} Service \textbf{DigitalIdentity contains one or more tsl:} \textbf{DigitalId/tsl:} \textbf{X059Certificate} : \textbf{X059Certific$ each one encapsulating one of the certificates mentioned in the prerequisite.

Prescription level: mandatory

Tag: EUMS Trusted List.

TA id: TL\_EUMS/TSL/SVCINFO/SVCDIGID/5

Normative source: ETSI TS 119 612 [1], clause 5.5.3.

Target: European Union Member State Trusted List.

Prerequisite: PKI technology is used AND there is not any X509 certificate whose subject name field satisfies the condition that its Organization attributes strictly match the value of the tsl:TSPName of the provider of the service.

Predicate: The tsl:ServiceDigitalIdentity contains one or more tsl:DigitalId/tsl:X059Certificate each one encapsulating one certificate that does not satisfy the second condition of the predicate.

Prescription level: permitted

Tag: EUMS Trusted List.

TA id: TL\_EUMS/TSL/SVCINFO/SVCDIGID/6

Normative source: ETSI TS 119 612 [1], clause 5.5.3.

Target: European Union Member State Trusted List.

Prerequisite: PKI technology is used AND there is not any X509 certificate whose subject name field satisfies the condition that its Organization attributes strictly match the value of the tsl:TSPName of the provider of the service.

Predicate: The Organization attribute of each certificate encapsulated within

tsl:DigitalId/tsl:X059Certificate elements is listed within the tsl:TSPTradeName element of the provider of the service.

Prescription level: mandatory

Tag: EUMS Trusted List.

```
TA id: TL_EUMS/TSL/SVCINFO/SVCDIGID/7
```

Normative source: ETSI TS 119 612 [1], clause 5.5.3.

Target: European Union Member State Trusted List.

Prerequisite: PKI technology is used.

Predicate: The tsl:ServiceDigitalIdentity element contains one and only one

tsl:DigitalId/tsl:X509SubjectName element whose value is a string representation of an X509

certificate subject name as specified in XMLDSIG [3], clauses 4.5.4 and 4.5.4.1.

Prescription level: preferred

Tag: EUMS Trusted List.

#### TA id: TL\_EUMS/TSL/SVCINFO/SVCDIGID/8

Normative source: ETSI TS 119 612 [1], clause 5.5.3.

Target: European Union Member State Trusted List.

Prerequisite: PKI technology is used AND the tsl:ServiceDigitalIdentity element contains one tsl:DigitalId/tsl:X509SubjectName element.

Predicate: The value of tsl:X509SubjectName child element is the string representation of the  $\verb|subject| name of all the X509 certificates present within the tsl:DigitalId/tsl:X509Certificate | Subject| | Subject|$ elements, computed as specified in XMLDSIG [3], clauses 4.5.4 and 4.5.4.1.

Prescription level: mandatory

Tag: EUMS Trusted List.

#### TA id: TL\_EUMS/TSL/SVCINFO/SVCDIGID/9

Normative source: ETSI TS 119 612 [1], clause 5.5.3.

Target: European Union Member State Trusted List.

Prerequisite: PKI technology is used AND the tsl:ServiceDigitalIdentity element contains one tsl:DigitalId/ds:KeyInfo/ds:KeyValue element.

Predicate: The value of the tsl:DigitalId/ds:KeyInfo/ds:KeyValue element represents the public key certified by all the X509 certificates present within the tsl:DigitalId/tsl:X509Certificate elements.

#### Prescription level: mandatory

Tag: EUMS Trusted List.

#### TA id: TL\_EUMS/TSL/SVCINFO/SVCDIGID/10

Normative source: ETSI TS 119 612 [1], clause 5.5.3.

Target: European Union Member State Trusted List.

Prerequisite: PKI technology is used.

Predicate: The tsl:ServiceDigitalIdentity element contains one and only one

tsl:DigitalId/tsl:X509SKI child element whose value is a X.509 certificate subject identifier extension.

#### Prescription level: permitted

Tag: EUMS Trusted List.

#### TA id: TL\_EUMS/TSL/SVCINFO/SVCDIGID/11

Normative source: ETSI TS 119 612 [1], clause 5.5.3.

Target: European Union Member State Trusted List.

Prerequisite: PKI technology is used AND the tsl:ServiceDigitalIdentity element contains one tsl:DigitalId/ds:KeyInfo/tsl:X509SKI element.

Predicate: The value of the tsl:DigitalId/ds:KeyInfo/tsl:X509SKI element represents the public key certified by all the X509 certificates present within the tsl:DigitalId/tsl:X509Certificate

#### Prescription level: mandatory

Tag: EUMS Trusted List.

#### TA id: TL\_EUMS/TSL/SVCDIGID/12

Normative source: ETSI TS 119 612 [1], clause 5.5.3.

Target: European Union Member State Trusted List.

Prerequisite: PKI technology is used AND two or more services have different values within their corresponding tsl:ServiceTypeIdentifier elements for which different supervision/accreditation systems apply.

Predicate: The same public key identifies the two or more services mentioned in the prerequisite.

#### Prescription level: permitted

Tag: EUMS Trusted List.

#### TA id: TL\_EUMS/TSL/SVCDIGID/13

Normative source: ETSI TS 119 612 [1], clause 5.5.3.

Target: European Union Member State Trusted List.

Prerequisite: PKI technology is used AND it is not true that there are two or more services that have different values within their corresponding tsl:ServiceTypeIdentifier elements for which different supervision/accreditation systems apply.

Predicate: The same public key appears within the tsl:ServiceInformation/tsl:ServiceDigitalIdentity elements corresponding to the two or more services mentioned in the prerequisite.

#### Prescription level: mandatory

Tag: EUMS Trusted List.

```
TA id: TL_EUMS/TSL/SVCDIGID/14

Normative source: ETSI TS 119 612 [1], clause 5.5.3.

Target: European Union Member State Trusted List.

Prerequisite: PKI technology is used AND it is not true that there are two or more services that have different values within their corresponding tsl:ServiceTypeIdentifier elements for which different supervision/accreditation systems apply.

Predicate: The same public key appears within one and only tsl:ServiceInformation/tsl:ServiceDigitalIdentity element within the Trusted List.

Prescription level: mandatory

Tag: EUMS Trusted List.
```

### 5.4.4 Testing tsl:ServiceStatus element

#### 5.4.4.1 Introduction

For testing the tsl:ServiceStatus element the test assertions defined in clauses 5.1.4.1, 5.4.4.2 and 5.4.4.3 shall apply.

#### 5.4.4.2 Test assertions common to any tsl:ServiceStatus element

This clause defines test assertions that, apart from the ones defined in clause 5.1.4.1, are common to any tsl:ServiceStatus element present within the Trusted List.

```
TA id: TL_EUMS/TSL/SVCSTAT/1
Normative source: ETSI TS 119 612 [1], clause 5.5.4.
Target: European Union Member State Trusted List.
Prerequisite: The value of the tsl:ServiceType element is one of the values permitted in test
assertion TL EUMS/TSL/SVCTYPE/1
Predicate: The value of this element is either
"http://uri.etsi.org/TrstSvc/TrustedList/Svcstatus/granted" or
"http://uri.etsi.org/TrstSvc/TrustedList/Svcstatus/withdrawn'
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SVCSTAT/2
Normative source: ETSI TS 119 612 [1], clause 5.5.4.
Target: European Union Member State Trusted List.
Prerequisite: The value of the tsl:ServiceType element is one of the values permitted in test
assertions {\tt TL\_EUMS/TSL/SVCTYPE/2} and {\tt TL\_EUMS/TSL/SVCTYPE/3}
Predicate: The value of this element is either
"http://uri.etsi.org/TrstSvc/TrustedList/Svcstatus/recognisedatnationallevel" or
"http://uri.etsi.org/TrstSvc/TrustedList/Svcstatus/deprecatedatnationallevel"
Prescription level: mandatory
Tag: EUMS Trusted List.
```

### 5.4.4.3 Test assertions specific to tsl:ServiceStatus child element of tsl:TSPService

This clause defines test assertions that are specific only to tsl:ServiceStatus elements that are children of tsl:TSPService elements.

```
TA id: TL_EUMS/TSL/SVCSTAT/3

Normative source: ETSI TS 119 612 [1], clause 5.5.4.

Target: European Union Member State Trusted List.

Prerequisite: There exists the non empty tsl:ServiceHistory element.

Predicate: The transition from the value of the tsl:ServiceStatus child element of the first tsl:ServiceHistoryInstance child element of tsl:ServiceHistory element, is one of the permitted in ETSI TS 119 612 1 clause 5.5.1

Prescription level: mandatory

Tag: EUMS Trusted List.
```

# 5.4.5 Testing tsl:StatusStartingTime element

#### 5.4.5.1 Test assertions common to any tsl:StatusStartingTime element

```
TA id: TL_EUMS/TSL/SVCSTARTTIME/1
Normative source: ETSI TS 119 612 [1], clause 5.5.5.
Target: European Union Member State Trusted List.
Predicate: This element contains a Coordinated Universal Time (UTC) value.
Prescription level: mandatory
```

Tag: EUMS Trusted List.

# 5.4.5.2 Test assertions specific tsl:StatusStartingTime child element of tsl:TSPService

```
TA id: TL_EUMS/TSL/SVCSTARTTIME/2
Normative source: ETSI TS 119 612 [1], clause 5.5.5.
Target: European Union Member State Trusted List.
Prerequisite: There exists the non empty tsl:ServiceHistory element.
Predicate: The value of this element is posterior than the value of the tsl:StatusStartingTime child element of the first tsl:ServiceHistoryInstance child of tsl:ServiceHistory element.
Prescription level: mandatory
Tag: EUMS Trusted List.
```

### 5.4.6 Testing tsl:SchemeServiceDefinitionURI element

For testing the tsl:SchemeServiceDefinitionURI element the test assertions defined in clause 5.1.4.4 shall apply.

### 5.4.7 Testing tsl:ServiceSupplyPoints element

For each tsl:ServiceSupplyPoint child element of tsl:ServiceSupplyPoints element, the test assertions defined in clause 5.1.4.1 and the following test assertions shall apply:

```
TA id: TL_EUMS/TSL/SVCSUPPT/1
Normative source: ETSI TS 119 612 [1], clause 5.5.7.

Target: European Union Member State Trusted List.

Predicate: The value of the attribute type is one of the values specified in test assertions
TL_EUMS/TSL/SVCTYPE/1, TL_EUMS/TSL/SVCTYPE/2, and TL_EUMS/TSL/SVCTYPE/3.

Prescription level: mandatory
Tag: EUMS Trusted List.
```

### 5.4.8 Testing tsl:TSPServiceDefinitionURI element

For testing the tsl:TSPServiceDefinitionURI element the test assertions defined in clause 5.1.4.4 and the following test assertions shall apply:

```
TA id: TL_EUMS/TSL/SVCDEFURI/1
Normative source: ETSI TS 119 612 [1], clause 5.5.8.
Target: European Union Member State Trusted List.
Prerequisite: The value of tsl:ServiceType element is
http://uri.etsi.org/TrstSvc/Svctype/NationalRootCA-QC.
Predicate: This element is present.
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SVCDEFURI/2
Normative source: ETSI TS 119 612 [1], clause 5.5.8.
Target: European Union Member State Trusted List.
Prerequisite: The value of tsl:ServiceType element is not
http://uri.etsi.org/TrstSvc/Svctype/NationalRootCA-QC.
Predicate: This element is present.
Prescription level: permitted
Tag: EUMS Trusted List.
```

# 5.4.9 Testing tsl:ServiceInformationExtensions element

### 5.4.9.1 Testing tsl:ExpiredCertsRevocationInfo element

For testing the tsl: ExpiredCertsRevocationInfo element the following test assertions shall apply:

```
TA id: TL_EUMS/TSL/SIE/EXPCERTSREVINFO/1
Normative source: ETSI TS 119 612 [1], clause 5.5.9.1.
Target: European Union Member State Trusted List.
Prerequisite: The value of the tsl:ServiceType qualified by this extension is one of the following:
"http://uri.etsi.org/TrstSvc/Svctype/CA/PKC"
"http://uri.etsi.org/TrstSvc/Svctype/CA/QC"
"http://uri.etsi.org/TrstSvc/Svctype/NationalRootCA-QC"
```

```
"http://uri.etsi.org/TrstSvc/Svctype/Certstatus/OCSP"
"http://uri.etsi.org/TrstSvc/Svctype/Certstatus/OCSP/QC"
"http://uri.etsi.org/TrstSvc/Svctype/Certstatus/CRL"
"http://uri.etsi.org/TrstSvc/Svctype/Certstatus/CRL/QC"
Predicate: The tsl:ExpiredCertsRevocationInfo extension is present.
Prescription level: permitted
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SIE/EXPCERTSREVINFO/2
Normative source: ETSI TS 119 612 [1], clause 5.5.9.1.
Target: European Union Member State Trusted List.
Prerequisite: The value of the tsl:ServiceType qualified by this extension is one defined under an
scheme (different than the one defined within ETSI TS 119 612 [1]) created by an organization,
identifying a suitable service
Predicate: The tsl:ExpiredCertsRevocationInfo extension is present.
Prescription level: permitted
Tag: EUMS Trusted List.
```

NOTE: It is out of the scope of the present document identifying values for tsl:ServiceType elements mentioned in the prerequisite of test assertion TL\_EUMS/TSL/SIE/EXPCERTSREVINFO/2.

```
TA id: TL_EUMS/TSL/SIE/EXPCERTSREVINFO/3
Normative source: ETSI TS 119 612 [1], clause 5.5.9.1.
Target: European Union Member State Trusted List.
Predicate: Its Critical attribute is set to "false".
Prescription level: permitted
Tag: EUMS Trusted List.
```

### 5.4.9.2 Testing sie:Qualifications element

```
TA id: TL_EUMS/TSL/SIE/QUALS/1
Normative source: ETSI TS 119 612 [1], clause 5.5.9.2.
Target: European Union Member State Trusted List.
Prerequisite: The sie:Qualifications element is an extension of a service whose type is "CA/QC"
Predicate: The value of each sie:Qualifications/Qualifiers/Qualifier is one of the following:
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCWithSSCD"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCNoSSCD"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCSSCDStatusAsInCert"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCWithQSCD"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCNoQSCD"
\verb|"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCQSCDStatusAsInCert"|
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCQSCDManagedOnBehalf"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCForLegalPerson"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCForESig"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCForESeal"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCForWSA"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/NotQualified"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCStatement"
Prescription level: permitted
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SIE/QUALS/2
Normative source: ETSI TS 119 612 [1], clause 5.5.9.2.3.
Target: European Union Member State Trusted List.
Prerequisite: The sie:Qualifications element IS NOT an extension of a service whose type is "CA/QC"
Predicate: The value of each sie:Qualifications/Qualifiers/Qualifier is none of the following:
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCWithSSCD"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCNoSSCD"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCSSCDStatusAsInCert"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCWithQSCD"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCNoQSCD"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCQSCDStatusAsInCert"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCQSCDManagedOnBehalf"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCForLegalPerson"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCForESig"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCForESeal"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCForWSA"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/NotQualified"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/QCStatement"
Prescription level: mandatory
Tag: EUMS Trusted List.
```

#### For testing any

sie:Qualifications/sie:CriteriaList/sie:PolicySet/sie:PolicyIdentifier element, the test assertions defined in clause A.4 of the present document and the following test assertions shall apply.

TA id: TL\_EUMS/TSL/SIE/POLSet/1
Normative source: [2] - clause 7.1.2.
Target: European Union Member State Trusted List.
Prerequisite: The policy is identified with an OID
Predicate: The value of the attribute Qualifier of the xades:Identifier child element of
sie:PolicyIdentifier is "OIDASURN".
Prescription level: mandatory
Tag: EUMS Trusted List.

TA id: TL\_EUMS/TSL/SIE/POLSet/2
Normative source: [2] - clause 7.1.2.
Target: European Union Member State Trusted List.
Prerequisite: The value of the attribute Qualifier of the xades:Identifier child element of
sie:PolicyIdentifier is "OIDASURN"
Predicate: The value of the xades:Identifier child element is an

OID encoded within an URN as specified in IETF RFC 3061 [5]. Prescription level: mandatory

Tag: EUMS Trusted List.

#### For testing any

sie:Qualifications/sie:CriteriaList/sie:otherCriteriaList/tslx:CertSubjectDNAttribute/tslx:AttributeOID element, the test assertions defined in clause A.4 of the present document and the following test assertions shall apply.

```
TA id: TL_EUMS/TSL/SIE/CERTSUBDN/1
Normative source: [2] - clause 7.1.2.
Target: European Union Member State Trusted List.
Prerequisite: The policy is identified with an OID
Predicate: The value of the attribute Qualifier of the xades: Identifier child element of
tslx:AttributeOID is "OIDAsURN".
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SIE/CERTSUBDN/2
Normative source: [2] - clause 7.1.2.
Target: European Union Member State Trusted List.
Prerequisite: The value of the attribute Qualifier of the xades: Identifier child element of
tslx:AttributeOID is "OIDAsURN"
Predicate: The value of the xades: Identifier child element of the tslx: AttributeOID element is an
OID encoded within an URN as specified in IETF RFC 3061 [5].
Prescription level: mandatory
Tag: EUMS Trusted List
```

#### 5.4.9.3 Testing tslx:TakenOverBy element

For testing the tslx: TakenOverBy/URI element the test assertions defined in clause 5.1.4.3 and the following test assertion shall apply:

```
TA id: TL_EUMS/TSL/SIE/TKNOVER/1
Normative source: ETSI TS 119 612 [1], clause 5.5.9.3.

Target: European Union Member State Trusted List.

Predicate: The scheme and authority parts of the URI child are equal to the scheme and authority parts of one of the following URIs:
the URI within the Electronic Address of the taking over TSP
the TSP information URI of the taking over TSP
the Scheme information URI of the Trusted List Scheme Operator

Prescription level: preferred
Tag: EUMS Trusted List.
```

For testing the tslx: TakenOverBy/TSPName element the test assertions defined in clause 5.3.1 and the following test assertion shall apply:

```
TA id: TL_EUMS/TSL/SIE/TKNOVER/2
Normative source: ETSI TS 119 612 [1], clause 5.5.9.3.
Target: European Union Member State Trusted List.
Predicate: The English name of the TSPName child is equal to the English name of one of the Trusted Service Providers within the Trusted List.
Prescription level: mandatory
Tag: EUMS Trusted List.
```

For testing the tslx: TakenOverBy/SchemeOperatorName element the test assertions defined in clause 5.2.3.4 and the following test assertion shall apply:

```
TA id: TL_EUMS/TSL/SIE/TKNOVER/3
Normative source: ETSI TS 119 612 [1], clause 5.5.9.3.
Target: European Union Member State Trusted List.
Predicate: The English name of the SchemeOperatorName child is equal to the English name of the Scheme Operator Name in the Scheme Information section of the Trusted List.
Prescription level: mandatory
Tag: EUMS Trusted List.
```

For testing the tslx: TakenOverBy/sie: SchemeTerritory element the test assertions defined in clause 5.2.3.10 and the following test assertion shall apply:

```
TA id: TL_EUMS/TSL/SIE/TKNOVER/4

Normative source: ETSI TS 119 612 [1], clause 5.5.9.3.

Target: European Union Member State Trusted List.

Predicate: The value of the SchemeTerritory child is equal to the value of the SchemeTerritory element in the Scheme Information section of the Trusted List.

Prescription level: mandatory

Tag: EUMS Trusted List.
```

#### 5.4.9.4 Testing tsl:AdditionalServiceInformation element

For testing the tsl:AdditionalServiceInformation/URI element the test assertions defined in clause 5.1.4.3 and the following test assertion shall apply:

```
TA id: TL_EUMS/TSL/SIE/ADDSIEINFO/1
Normative source: ETSI TS 119 612 [1], clause 5.5.9.4.
Target: European Union Member State Trusted List.
Predicate: The value of the URI child is equal to one of the following:
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/ForeSignatures'
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/ForeSeals"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/ForWebSiteAuthentication"
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/RootCA-QC'
Prescription level: permitted
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SIE/ADDSIEINFO/2
Normative source: ETSI TS 119 612 [1], clause D.4.
Target: European Union Member State Trusted List.
Prerrequisite: The service type is not "http://uri.etsi.org/TrstSvc/TrustedList/Svctype/CA/QC"
Predicate: The value of the URI child is not
"http://uri.etsi.org/TrstSvc/TrustedList/SvcInfoExt/RootCA-QC".
Prescription level: permitted
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SIE/ADDSIEINFO/3
Normative source: ETSI TS 119 612 [1], clause 5.5.9.4.
Target: European Union Member State Trusted List.
Predicate: The value of the URI child is equal to a registered URI to further qualify a Service type
identifier, in order to further specify the service as being a component service of a trust service
provider issuing QC.
Prescription level: permitted
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SIE/ADDSIEINFO/4
Normative source: ETSI TS 119 612 [1], clause 5.5.9.4.
Target: European Union Member State Trusted List.
Predicate: The value of the URI child is equal to a URI indicating some nationally defined specific
qualification for a supervised/accredited Trust Service Token provisioning service
Prescription level: permitted
Tag: EUMS Trusted List.
```

# 5.5 Testing tsl:ServiceHistory element

# 5.5.1 Testing tsl:ServiceTypeIdentifier element

For testing the tsl:ServiceTypeIdentifier child element of tsl:ServiceHistory element, the test assertions defined in clause 5.4.1 shall apply.

### 5.5.2 Testing tsl:ServiceName element

For testing the tsl:ServiceName child element of tsl:ServiceHistory element, the test assertions defined in clause 5.4.2 shall apply.

### 5.5.3 Testing tsl:ServiceDigitalIdentity element

For testing the tsl:ServiceDigitalIdentity child element of tsl:ServiceHistory element, the test assertions defined in clause 5.4.3.1 and the following test assertions shall apply:

```
TA id: TL_EUMS/TSL/SVCHIST/SDI/1
Normative source: ETSI TS 119 612 [1], clause 5.6.3.
Target: European Union Member State Trusted List.
Prerequisite: PKI technology is used.
Predicate: The tsl:ServiceDigitalIdentity element does not contain any
tsl:DigitalId/tsl:X509Certificate element
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SVCHIST/SDI/2
Normative source: ETSI TS 119 612 [1], clause 5.6.3.
Target: European Union Member State Trusted List.
Prerequisite: PKI technology is used.
Predicate: The tsl:ServiceDigitalIdentity element contains one and only one
tsl:DigitalId/tsl:X509SKI child element whose value is a X.509 certificate subject identifier
extension
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SVCHIST/SDI/3
Normative source: ETSI TS 119 612 [1], clause 5.6.3.
Target: European Union Member State Trusted List.
Prerequisite: PKI technology is used.
certified by all the X509 certificates present within the
tsl:TSPService/tsl:ServiceInformation/tsl:ServiceDigitalIdentity/tsl:DigitalId/tsl:X509Certificate
elements such as the tsl:TSPService is the element that contains the tsl:ServiceHistory where the
tsl:ServiceDigitalIdentity under test is present.
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL EUMS/TSL/SVCHIST/SDI/4
Normative source: ETSI TS 119 612 [1], clause 5.6.3.
Target: European Union Member State Trusted List.
Prerequisite: PKI technology is used.
Predicate: The tsl:ServiceDigitalIdentity element contains one and only one
tsl:DigitalId/tsl:X509SubjectName element whose value is a string representation of an X509
certificate subject name as specified in XMLDSIG [3], clauses 4.5.4 and 4.5.4.1.
Prescription level: permitted
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SVCHIST/SDI/5
Normative source: ETSI TS 119 612 [1], clause 5.6.3.
Target: European Union Member State Trusted List.
Prerequisite: PKI technology is used AND the tsl:ServiceDigitalIdentity element contains one
tsl:DigitalId/tsl:X509SubjectName element.
Predicate: The value of tsl:X509SubjectName child element is the string representation of the
subject name of all the X509 certificates present within the
tsl:TSPService/tsl:ServiceInformation/tsl:ServiceDigitalIdentity/tsl:DigitalId/tsl:X509Certificate
elements such as the tsl:TSPService is the element that contains the tsl:ServiceHistory where the
tsl:ServiceDigitalIdentity under test is present, computed as specified in XMLDSIG [3],
clauses 4.5.4 and 4.5.4.1.
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SVCHIST/SDI/6
Normative source: ETSI TS 119 612 [1], clause 5.6.3.
Target: European Union Member State Trusted List.
Prerequisite: PKI technology is used AND the tsl:ServiceDigitalIdentity element contains one
tsl:DigitalId/ds:KeyInfo/ds:KeyValue element.
Predicate: The value of the tsl:DigitalId/ds:KeyInfo/ds:KeyValue element represents the public key
certified by all the X509 certificates present within the
\verb|tsl:TSPService|| tsl:ServiceInformation/tsl:ServiceDigitalIdentity/tsl:DigitalId/tsl:X509Certificate|| tsl:TSPService|| t
elements such as the tsl:TSPService is the element that contains the tsl:ServiceHistory where the
```

tsl:ServiceDigitalIdentity under test is present.

Prescription level: mandatory
Tag: EUMS Trusted List.

### 5.5.4 Testing tsl:ServiceStatus element

For testing the tsl:ServiceStatus child element of tsl:ServiceHistory element, the test assertions defined in clause 5.4.4.2 and the following test assertions shall apply:

```
TA id: TL_EUMS/TSL/SVCHIST/SVCSTAT/1
Normative source: ETSI TS 119 612 [1], clause 5.6.4.
Target: European Union Member State Trusted List.
Prerequisite: There exists a previous tsl:ServiceHistoryInstance element to the one that is the
parent of the tsl:ServiceStatus element under test.
Predicate: The transition from the value of the tsl:ServiceStatus child element within the previous
tsl:ServiceHistoryInstance element in the historical section of the service, to the value of this
element is one of the permitted in ETSI TS 119 612 [1], clause 5.5.1.
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SVCHIST/SVCSTAT/2
Normative source: ETSI TS 119 612 [1], clause D.5.6.
Target: European Union Member State Trusted List.
Predicate: The possible values for tsl:ServiceStatus child element previous to any new value
specified in ETSI TS 119 612 [1], clause 5.6.4, is one of the following:
"http://uri.etsi.org/TrstSvc/TrustedList/Svcstatus/undersupervision"
"http://uri.etsi.org/TrstSvc/TrustedList/Svcstatus/supervisionincessation"
"http://uri.etsi.org/TrstSvc/TrustedList/Svcstatus/supervisionceased"
"http://uri.etsi.org/TrstSvc/TrustedList/Svcstatus/supervisionrevoked"
"http://uri.etsi.org/TrstSvc/TrustedList/Svcstatus/accredited"
"http://uri.etsi.org/TrstSvc/TrustedList/Svcstatus/accreditationceased"
"http://uri.etsi.org/TrstSvc/TrustedList/Svcstatus/accreditationrevoked"
"http://uri.etsi.org/TrstSvc/TrustedList/Svcstatus/granted"
"http://uri.etsi.org/TrstSvc/TrustedList/Svcstatus/withdrawn"
"http://uri.etsi.org/TrstSvc/TrustedList/Svcstatus/setbynationallaw"
"http://uri.etsi.org/TrstSvc/TrustedList/Svcstatus/recognisedatnationallevel"
"http://uri.etsi.org/TrstSvc/TrustedList/Svcstatus/deprecatedbynationallaw
"http://uri.etsi.org/TrstSvc/TrustedList/Svcstatus/deprecatedatnationallevel"
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SVCHIST/SVCSTAT/3
Normative source: ETSI TS 119 612 [1], clause D.5.6.
Target: European Union Member State Trusted List.
Prerequisite: The value of the tsl:ServiceType is not http://uri.etsi.org/TrstSvc/Svctype/CA/QC and
"The value of the tsl:ServiceStatus is one of the following:
"http://uri.etsi.org/TrstSvc/TrustedList/Svcstatus/setbynationallaw"
"http://uri.etsi.org/TrstSvc/TrustedList/Svcstatus/deprecatedbynationallaw"
Predicate: The value of this element is neither
"http://uri.etsi.org/TrstSvc/TrustedList/Svcstatus/setbynationallaw" nor
"http://uri.etsi.org/TrstSvc/TrustedList/Svcstatus/deprecatedbynationallaw"
Prescription level: mandatory
Tag: EUMS Trusted List.
```

### 5.5.5 Testing tsl:StatusStartingTime element

For testing the tsl:StatusStartingTime child element of tsl:ServiceHistory element, the test assertions defined in clause 5.4.5.1 and the following test assertions shall apply.

```
TA id: TL_EUMS/TSL/SVCHIST/SVCSTARTTIME/1
Normative source: ETSI TS 119 612 [1], clause 5.5.5.
Target: European Union Member State Trusted List.
Prerequisite: There exists a previous tsl:ServiceHistoryInstance element to the one that is the parent of the tsl:StatusStartingTime element under test.
Predicate: The value of this element is posterior than the value of the tsl:StatusStartingTime child element of the previous tsl:ServiceHistoryInstance child within the tsl:ServiceHistory element.
Prescription level: mandatory
Tag: EUMS Trusted List.
```

### 5.5.6 Testing tsl:ServiceInformationExtensions element

For testing the tsl:ServiceInformationExtensions child element of tsl:ServiceHistory element, the test assertions defined in clause 5.4.9 shall apply.

## 5.6 Testing ds:Signature element

For testing the ds: Signature the following test assertions shall apply.

```
Tag: EUMS Trusted List
TA id: TL_EUMS/TSL/SIG/1
Normative source: ETSI TS 119 612 [1], clause 5.7.1.
Target: European Union Member State Trusted List.
Predicate: The Trusted List signature is a XAdES-BES or a XAdES-EPES signature as specified in ETSI
TS 101 903 [2].
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SIG/2
Normative source: ETSI TS 119 612 [1], clause B.1.0.
Target: European Union Member State Trusted List.
Predicate: The signature of a Trusted List is an enveloped signature.
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SIG/3
Normative source: ETSI TS 119 612 [1], clause B.1.1.
Target: European Union Member State Trusted List.
Predicate: The algorithms for generating the signature of a Trusted List are the following ones: the
algorithms supported by XML Signature W3C Recommendation [3], the Elliptic Curve Digital Signature
Algorithm (ECDSA) as defined in [9], and the SHA-2 algorithm as defined in [10].
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SIG/4
Normative source: ETSI TS 119 612 [1], clause B.1.0.
Target: European Union Member State Trusted List.
\textbf{Predicate:} \ \textbf{The value of the attribute Algorithm of the ds:} \textbf{CanonicalizationMethod child element of the down of the
the ds:SignedInfo element of the Trusted list signature is set to "http://www.w3.org/2001/10/xml-
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SIG/5
Normative source: ETSI TS 119 612 [1], clause B.1.0.
Target: European Union Member State Trusted List.
Predicate: The ds:SignedInfo element of the Trusted list signature contains a ds:Reference element
with the URI attribute set to a value referencing the tsl:TrustServiceStatusList element enveloping
the digital signature itself.
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SIG/6
Normative source: ETSI TS 119 612 [1], clause B.1.0.
Target: European Union Member State Trusted List.
Predicate: The ds:SignedInfo element of the Trusted list signature contains other ds:Reference
elements in addition to the one that references the tsl:TrustServiceStatusList element enveloping
the digital signature itself.
Prescription level: permitted
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SIG/7
Normative source: ETSI TS 119 612 [1], clause B.1.0.
Target: European Union Member State Trusted List.
Predicate: The ds:Reference element with the URI attribute set to a value referencing the
tsl:TrustServiceStatusList element enveloping the digital signature itself contains one
ds:Transforms element.
Prescription level: mandatory
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SIG/8
Normative source: ETSI TS 119 612 [1], clause B.1.0.
Target: European Union Member State Trusted List.
Predicate: The ds:Transforms child element of the ds:Reference element with the URI attribute set to
a value referencing the tsl:TrustServiceStatusList element enveloping the digital signature itself
contains two ds:Transform elements.
Prescription level: mandatory
```

Tag: EUMS Trusted List.

TA id: TL\_EUMS/TSL/SIG/9

Normative source: ETSI TS 119 612 [1], clause B.1.0.

Target: European Union Member State Trusted List.

Predicate: The value of the attribute Algorithm of one of the first ds:Transform child element of the ds:Transforms child element of the ds:Reference element with the URI attribute set to a value referencing the tsl:TrustServiceStatusList element enveloping the digital signature itself is set to "http://www.w3.org/2000/09/xmldsig#enveloped-signature".

Prescription level: mandatory

Tag: EUMS Trusted List.

TA id: TL\_EUMS/TSL/SIG/10

Normative source: ETSI TS 119 612 [1], clause B.1.0.

Target: European Union Member State Trusted List.

Predicate: The value of the attribute Algorithm of the second ds:Transform child element of the ds:Transforms child element of the ds:Reference element with the URI attribute set to a value referencing the tsl:TrustServiceStatusList element enveloping the digital signature itself is set to "http://www.w3.org/2001/10/xml-exc-c14n#".

Prescription level: mandatory

Tag: EUMS Trusted List.

TA id: TL\_EUMS/TSL/SIG/11

Normative source: ETSI TS 119 612 [1], clause 5.7.1.

Target: European Union Member State Trusted List.

Predicate: The issuer of the signing certificate of the Trusted List signature is the Trusted List Scheme Operator or a trusted service provider listed within the Trusted List or within another Trusted List that is part from the same community.

Prescription level: mandatory

Tag: EUMS Trusted List.

TA id: TL\_EUMS/TSL/SIG/12

Normative source: ETSI TS 119 612 [1], clause 5.7.1.

Target: European Union Member State Trusted List.

Predicate: The Country Code attribute of the subject name field of the signing certificate of the Trusted List signature is equal to the value of tsl:SchemeInformation/SchemeTerritory element.

Prescription level: mandatory

Tag: EUMS Trusted List.

TA id: TL\_EUMS/TSL/SIG/13

Normative source: ETSI TS 119 612 [1], clause 5.7.1.

Target: European Union Member State Trusted List.

Predicate: The Organization attribute of the subject name field of the signing certificate of the Trusted List signature is equal to the value of one of the

tsl:SchemeInformation/SchemeOperatorName/Name elements.

Prescription level: mandatory

Tag: EUMS Trusted List.

TA id: TL\_EUMS/TSL/SIG/14

Normative source: ETSI TS 119 612 [1], clause 5.7.1.

Target: European Union Member State Trusted List.

Predicate: The Organization attribute of the subject name field of the signing certificate of the Trusted List signature is equal to the value of the UK English

 $\verb|tsl:SchemeInformation/SchemeOperatorName/Name element.|$ 

Prescription level: preferred

Tag: EUMS Trusted List.

Tag: EUMS Trusted List. TA id: TL\_EUMS/TSL/SIG/15

Normative source: ETSI TS 119 612 [1], clause 5.7.1.

Target: European Union Member State Trusted List.

Predicate: The Organization attribute of the subject name field of the signing certificate of the Trusted List signature is equal to the value of a local language (transliterated to Latin script) tsl:SchemeInformation/SchemeOperatorName/Name element.

Prescription level: permitted

Tag: EUMS Trusted List.

Tag: EUMS Trusted List. TA id: TL\_EUMS/TSL/SIG/16

Normative source: ETSI TS 119 612 [1], clause 5.7.1. Target: European Union Member State Trusted List.

Predicate: The signing certificate of the Trusted List signature contains the KeyUsage certificate

extension.

Prescription level: mandatory

Tag: EUMS Trusted List.

```
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SIG/17
Normative source: ETSI TS 119 612 [1], clause 5.7.1.
Target: European Union Member State Trusted List.
Predicate: The KeyUsage extension of the signing certificate of the Trusted List signature is set to
digitalSignature and/or to nonRepudiation value(s).
Prescription level: mandatory
Tag: EUMS Trusted List.
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SIG/18
Normative source: ETSI TS 119 612 [1], clause 5.7.1.
Target: European Union Member State Trusted List.
Predicate: The signing certificate of the Trusted List signature contains the ExtendedKeyUsage
certificate extension.
Prescription level: mandatory
Tag: EUMS Trusted List.
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SIG/19
Normative source: ETSI TS 119 612 [1], clause 5.7.1.
Target: European Union Member State Trusted List.
Predicate: The ExtendedKeyUsage extension of the signing certificate of the Trusted List signature
is set to the following value: id-tsl-kp-tslSigning ({ itu-t(0) identified-organization(4) etsi(0)
tsl-specification (2231) id-tsl kp(3) })
Prescription level: mandatory
Tag: EUMS Trusted List.
Tag: EUMS Trusted List.
TA id: TL_EUMS/TSL/SIG/20
Normative source: ETSI TS 119 612 [1], clause 5.7.1.
Target: European Union Member State Trusted List.
Predicate: The signing certificate of the Trusted List signature contains the SubjectKeyIdentifier
certificate extension.
Prescription level: mandatory
Tag: EUMS Trusted List.
```

# Annex A (normative):

# Test assertions derived from XML Schema

### A.1 Introduction

This annex specifies test assertions focussed on testing the structure of the elements specified by ETSI TS 119 612 [1] according to its XML Schema.

The following notation is used throughout this annex for specifying the inner structure of instances of XML types defined by ETSI TS 119 612 [1] XML Schema:

- Entities specifying the inner structure of instances of XML types may be elements or attributes.
- Elements are identified by the corresponding namespace prefix and name. Attributes are identified by their names if they are not defined within any namespace or by the namespace prefix and name if they are defined within a certain namespace. Example: Id.
- A list of entities separated by ',' characters represent an ordered list.
- (): represents a group of ordered entities. Internally, the entities order is preserved.
- Modifiers: particles that modify certain aspects of the entities or groups they apply to:
  - ?: When applied to one entity means that there may appear 0 or 1 instances of that entity. When applied to a group means that there may appear 0 or 1 instances of that group.
  - +: When applied to one entity means that there shall appear 1 or more instances of that entity. When applied to a group means that there shall appear 1 or more instances of that group.
  - \*: When applied to one entity means that there may appear 0, 1, or more instances of that entity. When applied to a group means that there may appear 0, 1, or more instances of that group.
  - noOrder(): this modifier may only be applied to a group of entities. When this occurs the entities within the group may appear in any order within the specified XML type instance.
  - choice(): this modifier may only be applied to a group of entities. When this occurs only one of the entities of the group may appear.

# A.2 Testing auxiliary types contents

### A.2.1 Introduction

ETSI TS 119 612 [1] defines a number of auxiliary types that its XML Schema reuses for a number of elements of the XML representation of a Trusted List. The present clause defines test assertions directly derived from the XML Schema for these auxiliary types.

# A.2.2 Testing tsl:NonEmptyNormalizedString instances

This clause defines test assertions for any element derived from or containing children instances of tsl:NonEmptyNormalizedString type.

```
TA id: TL_SCH/NEMPTYNSTR/1
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: An instance of tsl:NonEmptyNormalizedString type has a non-empty value
Prescription level: mandatory
```

Tag: Trusted Lists

```
TA id: TL_SCH/NEMPTYNSTR/2

Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: An instance of tsl:NonEmptyNormalizedString type does not have any attribute

Prescription level: mandatory

Tag: Trusted Lists
```

# A.2.3 Testing tsl:NonEmptyString instances

This clause defines test assertions for any element derived from or containing children instances of tsl:NonEmptyStringType type.

```
TA id: TL_SCH/NEMPTYSTR/1
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: An instance of tsl:NonEmptyString type has a non-empty value
Prescription level: mandatory
Tag: Trusted Lists

TA id: TL_SCH/NEMPTYSTR/2
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: An instance of tsl:NonEmptyNormalizedString type does not have any attribute
Prescription level: mandatory
Tag: Trusted Lists
```

# A.2.4 Testing tsl:MultiLangStringType instances

This clause defines test assertions for any element derived from or containing children instances of tsl:MultiLangStringType type.

For testing any instance of tsl:MultiLangStringType type the test assertions defined in clause A.2.3 and the following test assertions shall apply:

```
TA id: TL_SCH/MULTILANGSTR/1
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The set of attributes (leaving apart the attributes declaring namespaces) of one instance of tsl:MultiLangStringType is as follows: lang
Prescription level: mandatory
Tag: Trusted Lists
```

# A.2.5 Testing tsl:MultiLangNormStringType instances

This clause defines test assertions for any element derived from or containing children instances of tsl:MultiLangNormStringType type.

For testing any instance of tsl:MultiLangNormStringType type the test assertions defined in clause A.2.3 and the following test assertions shall apply:

```
TA id: TL_SCH/MULTILANGNORMSTR/1
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The set of attributes (leaving apart the attributes declaring namespaces) of one instance of tsl:MultiLangNormStringType is as follows: lang
Prescription level: mandatory
Tag: Trusted Lists
```

# A.2.6 Testing tsl:InternationalNamesType instances

For testing any instance of tsl:InternationalNamesType type the following test assertions shall apply:

```
TA id: TL_SCH/INTNAMES/1
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The inner structure of an instance of tsl:InternationalNamesType type in terms of its children is as follows: tsl:Name+.
```

```
Prescription level: mandatory
Tag: Trusted Lists

TA id: TL_SCH/INTNAMES/2

Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: An instance of tsl:InternationalNamesType type does not contain any attribute(leaving apart the attributes declaring namespaces)

Prescription level: mandatory
Tag: Trusted Lists
```

For testing any tsl:Name child element of an instance of tsl:InternationalNamesType the test assertions defined in clause A.2.5 shall apply.

## A.2.7 Testing tsl:NonEmptyURIType instances

This clause defines test assertions for any element derived from or containing children instances of tsl:NonEmptyURIType type.

```
TA id: TL_SCH/NEMPTYURI/1
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: An instance of tsl:NonEmptyURIType type has a non-empty value
Prescription level: mandatory
Tag: Trusted Lists
TA id: TL_SCH/NEMPTYURI/2
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The value of the attribute type of an instance of tsl:NonEmptyURIType type is a valid URI
Reference.
Prescription level: mandatory
Tag: Trusted Lists
TA id: TL_SCH/NEMPTYURI/3
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: An instance of tsl:NonEmptyURIType type does not have any attribute
Prescription level: mandatory
Tag: Trusted Lists
```

## A.2.8 Testing tsl:NonEmptyURIListType instances

This clause defines test assertions for any element derived from or containing children instances of tsl:NonEmptyURIListType type.

```
TA id: TL_SCH/NEMPTYURILIST/1
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The inner structure of an instance tsl:NonEmptyURIListType is as follows: tsl:URI+Prescription level: mandatory
Tag: Trusted Lists

TA id: TL_SCH/NEMPTYURILIST/2
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: An instance of tsl:NonEmptyURIListType type does not have any attribute
Prescription level: mandatory
Tag: Trusted Lists
```

Each tsl:URI child is an instance of tsl:NonEmptyURIType type. For testing the structure of each tsl:URI child the test assertions defined in clause A.2.7 shall apply.

## A.2.9 Testing tsl:NonEmptyMultiLangURIType instances

This clause defines test assertions for any element derived from or containing children instances of tsl:NonEmptyMultiLangURIType type. For testing the structure of an instance of tsl:NonEmptyMultiLangURIType type the following test assertions shall apply:

```
TA id: TL_SCH/NEMPTYMULTILANGURI/1
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: An instance of tsl:NonEmptyMultiLangURIType type has a non-empty value
Prescription level: mandatory
Tag: Trusted Lists
TA id: TL_SCH/NEMPTYMULTILANGURI/2
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The value of the attribute type of an instance of tsl:NonEmptyMultiLangURIType type is a
valid URI Reference.
Prescription level: mandatory
Tag: Trusted Lists
TA id: TL_SCH/NEMPTYMULTILANGURI/3
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The set of attributes (leaving apart the attributes declaring namespaces) of one instance
of tsl:NonEmptyMultiLangURIType is as follows: lang
Prescription level: mandatory
Tag: Trusted Lists
```

#### A.2.10 Testing tsl:NonEmptyMultiLangURIListType instances

This clause defines test assertions for any element derived from or containing children instances of tsl:NonEmptyMultiLangURIListType type. For testing the structure of an instance of tsl:NonEmptyMultiLangURIListType type the following test assertions shall apply:

```
TA id: TL_SCH/NEMPTYMULTILANGURILIST/1
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The inner structure of an instance tsl:NonEmptyMultiLangURIListType is as follows:
tsl:URI+
Prescription level: mandatory
Tag: Trusted Lists

TA id: TL_SCH/NEMPTYURILIST/2
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: An instance of tsl:NonEmptyMultiLangURIListType type does not have any attribute
Prescription level: mandatory
Tag: Trusted Lists
```

Each tsl:URI child is an instance of tsl:NonEmptyMultiLangURIType type. For testing the structure of each tsl:URI child the test assertions defined in clause A.2.9 shall apply.

# A.2.11 Testing tsl:AttributedNonEmptyURIType instances

For testing the structure of instances of tsl:AttributedNonEmptyURIType type the following test assertions shall apply:

```
TA id: TL_SCH/ATTNEMPTYURI/1
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: An instance of tsl:AttributedNonEmptyURI type has a non-empty value
Prescription level: mandatory
Tag: Trusted Lists

TA id: TL_SCH/ATTNEMPTYURI/2
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
```

Predicate: The set of attributes (leaving apart the attributes declaring namespaces) of one instance

of tsl:AttributedNonEmptyURI is as follows: type

Prescription level: mandatory

Tag: Trusted Lists

TA id: TL\_SCH/NEMPTYURI/3
Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: The value of an instance of tsl:NonEmptyURIType type is a valid URI Reference.

Prescription level: mandatory

Tag: Trusted Lists

TA id: TL\_SCH/NEMPTYURI/4

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: The value of the attribute type of an instance of tsl:NonEmptyURIType type is a valid URI

Reference.

Prescription level: mandatory

Tag: Trusted Lists

## A.2.12 Testing tsl:AddressType instances

#### A.2.12.1 Testing structure

TA id: TL\_SCH/ADDR/1

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: The inner structure of an instance of tsl:AddressType type in terms of its children is as

follows: tsl:PostalAddresses, tsl:ElectronicAddress.

Prescription level: mandatory

Tag: Trusted Lists

TA id: TL\_SCH/INTNAMES/2

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: An instance of tsl:AddressType type does not contain any attribute(leaving apart the

attributes declaring namespaces)
Prescription level: mandatory

Tag: Trusted Lists

For testing the structure of tsl:PostalAddresses element the test assertions of clause A.2.12.2 shall apply.

For testing the structure of tsl:ElectronicAdress element the test assertions of clause A.2.12.3 shall apply.

## A.2.12.2 Testing tsl: PostalAddressListType instances

#### A.2.12.2.1 Testing tsl:PostalAddressListType instances

TA id: TL\_SCH/POSTADDRLIST/1

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: The inner structure of an instance of tsl:PostalAddressListType in terms of its children

is as follows: tsl:PostalAddress+.
Prescription level: mandatory

Tag: Trusted Lists

TA id: TL\_SCH/POSTADDRLIST/2

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: An instance of tsl:PostalAddressListType does not contain any attribute(leaving apart the

attributes declaring namespaces)
Prescription level: mandatory

Tag: Trusted Lists

For testing the structure of tsl:PostalAddress element the test assertions of clause A.2.12.2.2 shall apply.

#### A.2.12.2.2 Testing tsl:PostalAddressType instances

TA id: TL\_SCH/POSTADDR/1
Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The inner structure of an instance of tsl:PostalAddressType in terms of its children is as follows: tsl:StreetAddress, tsl:Locality, tsl:StateOrProvince?, tsl:PostalCode?, tsl:CountryName.
Prescription level: mandatory
Tag: Trusted Lists

TA id: TL\_SCH/POSTADDR/2
Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The set of attributes (leaving apart the attributes declaring namespaces) of one instance of tsl:PostalAddressType is as follows: lang
Prescription level: mandatory
Tag: Trusted Lists

The elements tsl:StreetAddress, tsl:Locality, tsl:StateOrProvince, tsl:PostalCode, and tsl:CountryName are instances of tsl:NonEmptyString type. For testing the structure of each of them the test assertions defined in clause A.2.3 shall apply.

#### A.2.12.3 Testing tsl: ElectronicAddressType instances

```
TA id: TL_SCH/ELADDR/1
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The inner structure of an instance of tsl:ElectronicAddressType in terms of its children is as follows: tsl:URI+.
Prescription level: mandatory
Tag: Trusted Lists

TA id: TL_SCH/ELADDR/2
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: An instance of tsl:ElectronicAddressType does not contain any attribute(leaving apart the attributes declaring namespaces)
Prescription level: mandatory
Tag: Trusted Lists
```

The tsl:URI children are instances of tsl:NonEmptyMultiLangURIType. For testing the structure of each tsl:URI child the test assertions defined in clause A.2.9 shall apply.

## A.2.13 Testing tsl:ExtensionType instances

```
TA id: TL_SCH/EXT/1
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: An instance of tsl:ExtensionType contains the boolean attribute Critical Prescription level: mandatory
Tag: Trusted Lists
```

The test assertions for testing the structure of the different extensions specified by ETSI TS 119 612 [1] will be defined in the clauses where these extensions are addressed.

## A.2.14 Testing tsl:ExtensionsListType instances

```
TA id: TL_SCH/EXTSLIST/1

Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: The inner structure of an instance of tsl:ExtensionsListType in terms of its children is as follows: tsl:Extension+.

Prescription level: mandatory

Tag: Trusted Lists
```

TA id: TL\_SCH/EXTSLIST/2

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: An instance of tsl:ExtensionsListType does not contain any attribute(leaving apart the

attributes declaring namespaces)
Prescription level: mandatory

Tag: Trusted Lists

# A.3 Testing Trusted List structure

## A.3.1 Testing tsl:TrustServiceStatusList element

TA id: TL\_SCH/TL/1

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: The inner structure of the element tsl:TrustServiceStatusList in terms of its children is

 $\verb| as follows: tsl:SchemeInformation, tsl:TrustServiceProviderList?, ds:Signature?.| \\$ 

Prescription level: mandatory

Tag: Trusted Lists

TA id: TL\_SCH/TL/2

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: The set of attributes (leaving apart the attributes declaring namespaces) of the element

tsl:TrustServiceStatusList is as follows: noOrder(TSLTag, Id?)

Prescription level: mandatory

Tag: Trusted Lists

## A.3.2 Testing tsl:SchemeInformation element

TA id: TL\_SCH/SCHI/1

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: The inner structure of the element tsl:SchemeInformation in terms of its children is as

follows: tsl:TSLVersionIdentifier, tsl:TSLSequenceNumber, tsl:TSLType, tsl:SchemeOperatorName,

tsl:SchemeOperatorAddress, tsl:SchemeName, tsl:SchemeInformationURI,

 $\verb|ts|:StatusDeterminationApproach|, | ts|:SchemeTypeCommunityRules?|, | ts|:SchemeTerritory?|, | ts|:SchemeTypeCommunityRules?|, | ts|:Schem$ 

tsl:PolicyOrLegalNotice?, tsl:HistoricalInformationPeriod, tsl:PointersToOtherTSL?,

tsl:ListIssueDateTime, tsl:NextUpdate, tsl:DistributionPoints?, tsl:SchemeExtensions?.

Prescription level: mandatory

Tag: Trusted Lists

TA id: TL\_SCH/SCHI/2

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: The element tsl:SchemeInformation does not contain any attribute(leaving apart the

attributes declaring namespaces)
Prescription level: mandatory

Tag: Trusted Lists

The tsl:TSLType child is an instance of tsl:NonEmptyURIType. For testing the structure of each tsl:TSLType child the test assertions defined in clause A.2.7 shall apply.

The tsl:SchemeOperatorName and tsl:SchemeName children are instances of

tsl:InternationalNamesType. For testing the structure of each tsl:SchemeOperatorName or

tsl:SchemeName child the test assertions defined in clause A.2.6 shall apply.

The tsl:SchemeOperatorAddress child is an instance of tsl:AddressType. For testing the structure of each tsl:SchemeOperatorAddress child the test assertions defined in clause A.2.12 shall apply.

The tsl:SchemeInformationURI child is an instance of tsl:NonEmptyMultiLangURIListType. For testing the structure of each tsl:SchemeInformationURI child the test assertions defined in clause A.2.10 shall apply.

The tsl:StatusDeterminationApproach child is an instance of tsl:NonEmptyURIType. For testing the structure of each tsl:StatusDeterminationApproach child the test assertions defined in clause A.2.7 shall apply.

The tsl:SchemeTypeCommunityRules child is an instance of tsl:NonEmptyMultiLangURIListType. For testing the structure of each tsl:SchemeTypeCommunityRules child the test assertions defined in clause A.2.10 shall apply.

The tsl:PolicyOrLegalNotice child is an instance of tsl:PolicyOrLegalNoticeType. For testing the structure of each tsl:PolicyOrLegalNotice child the test assertions defined in clause A.3.3 shall apply.

The tsl:PointersToOtherTSL child is an instance of tsl:OtherTSLPointersType. For testing the structure of each tsl:PointersToOtherTSL child the test assertions defined in clause A.3.4 shall apply

The tsl:DistributionPoints child is an instance of tsl:NonEmptyURIListType. For testing the structure of each tsl:DistributionPoints child the test assertions defined in clause A.2.8 shall apply.

## A.3.3 Testing tsl:PolicyOrLegalNoticeType type

```
TA id: TL_SCH/POLLEGNOT/1
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The inner structure of an instance of tsl:PolicyOrLegalNoticeType type in terms of its children is as follows: tsl:Policy+, tsl:LegalNotice+.
Prescription level: mandatory
Tag: Trusted Lists

TA id: TL_SCH/POLLEGNOT/2
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: An instance of tsl:PolicyOrLegalNoticeType type does not contain any attribute(leaving apart the attributes declaring namespaces)
Prescription level: mandatory
Tag: Trusted Lists
```

The tsl:Policy child is an instance of tsl:NonEmptyMultiLangURIType. For testing the structure of each tsl:Policy child the test assertions defined in clause A.2.9 shall apply.

The tsl:LegalNotice child is an instance of tsl:MultiLangStringType. For testing the structure of each tsl:LegalNotice child the test assertions defined in clause A.2.4 shall apply.

## A.3.4 Testing tsl:OtherTSLPointersType type

```
TA id: TL_SCH/PTR2TLS/1
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The inner structure of an instance of tsl:OtherTSLPointerTypetype in terms of its children is as follows: ServiceDigitalIdentities?, tsl:TSLLocation, tsl:AdditionalInformation?.
Prescription level: mandatory
Tag: Trusted Lists

TA id: TL_SCH/PTR2TLS/2
Normative source: [1]- XMLSchema (file ts_119612v020201_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: An instance of tsl:OtherTSLPointerType type does not contain any attribute(leaving apart the attributes declaring namespaces)
Prescription level: mandatory
Tag: Trusted Lists
```

The tsl:TSLLocation child is an instance of tsl:NonEmptyURIType type. For testing the structure of each tsl:TSLLocation child the test assertions defined in clause A.2.7 shall apply.

```
The tsl:ServiceDigitalIdentities child is an instance of tsl:ServiceDigitalIdentityListType type. For testing the structure of each tsl:ServiceDigitalIdentities child the test assertions defined in clause A.3.5 shall apply.
```

The tsl:AdditionalInformation child is an instance of tsl:AdditionalInformationType type. For testing the structure of each tsl:TSLLocation child the test assertions defined in clause A.3.8 shall apply.

#### A.3.5 Testing tsl:ServiceDigitalIdentityListType type

TA id: TL\_SCH/SVCDIGIDLIST/1

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: The inner structure of an instance of tsl:ServiceDigitalIdentityListType in terms of its

children is as follows: ServiceDigitalIdentity+.

Prescription level: mandatory

Tag: Trusted Lists

TA id: TL\_SCH/SVCDIGIDLIST/2

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: An instance of tsl:ServiceDigitalIdentityListType type does not contain any

attribute(leaving apart the attributes declaring namespaces)

Prescription level: mandatory

Tag: Trusted Lists

The tsl:ServiceDigitalIdentity child is an instance of tsl:DigitalIdentityListType type. For testing the structure of each tsl:ServiceDigitalIdentity child the test assertions defined in clause A.3.6 shall apply.

## A.3.6 Testing tsl:DigitalIdentityListType type

TA id: TL\_SCH/DIGIDLIST/1

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: The inner structure of an instance of tsl:DigitalIdentityListType in terms of its

children is as follows: DigitalId+.
Prescription level: mandatory

Tag: Trusted Lists

TA id: TL\_SCH/DIGIDLIST/2

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: An instance of tsl:DigitalIdentityListType type does not contain any attribute(leaving

apart the attributes declaring namespaces)

Prescription level: mandatory

Tag: Trusted Lists

The tsl:DigitalId child is an instance of tsl:DigitalIdentityType type. For testing the structure of each tsl:DigitalId child the test assertions defined in clause A.3.7 shall apply.

## A.3.7 Testing tsl:DigitalIdentityType type

TA id: TL\_SCH/DIGID/1

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: The inner structure of an instance of tsl:DigitalIdentityType in terms of its children is

as follows: tsl:X509Certificate | tsl:X509SubjectName | ds:KeyValue | tsl:X509SKI | tsl:Other.

Prescription level: mandatory

Tag: Trusted Lists

TA id: TL\_SCH/DIGID/2

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: An instance of tsl:DigitalIdentityType type does not contain any attribute(leaving apart

the attributes declaring namespaces)

Prescription level: mandatory

Tag: Trusted Lists

NOTE: The contents of tsl:Other child have been left open. It is out of the scope of the present document to specify any conformance assertion for this child element.

#### A.3.8 Testing tsl:AdditionalInformationType type

TA id: TL\_SCH/ADDINFO/1

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: The inner structure of an instance of tsl:AdditionalInformationType in terms of its

children is as follows: tsl:TextualInformation, tsl:OtherInformation.

Prescription level: mandatory

Tag: Trusted Lists

TA id: TL\_SCH/ADDINFO/2

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: An instance of tsl:AdditionalInformationType type does not contain any attribute(leaving

apart the attributes declaring namespaces)

Prescription level: mandatory

Tag: Trusted Lists

NOTE: The contents of tsl:OtherInformation child have been left open. It is out of the scope of the present document to specify any conformance assertion for this child element.

## A.3.9 Testing tsl:TrustServiceProviderList

TA id: TL\_SCH/TSPLIST/1

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: The inner structure of the element tsl:TrustServiceProviderList in terms of its children

is as follows: tsl:TrustServiceProvider+.

Prescription level: mandatory

Tag: Trusted Lists

TA id: TL\_SCH/TSPLIST/2

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: The element tsl:TrustServiceProviderList does not contain any attribute(leaving apart the

attributes declaring namespaces)
Prescription level: mandatory

Tag: Trusted Lists

The tsl:TrustServiceProvider child is an instance of tsl:TSPType type. For testing the structure of each tsl:TrustServiceProvider child the test assertions defined in clause A.3.10 shall apply.

## A.3.10 Testing tsl:TSPType type

TA id: TL\_SCH/TSP/1

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: The inner structure of an instance of tsl:TSPType type in terms of its children is as

follows: tsl:TSPInformation, tsl:TSPServices.

Prescription level: mandatory

Tag: Trusted Lists

TA id: TL\_SCH/TSP/2

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: An instance of tsl:TSPType type does not contain any attribute(leaving apart the

attributes declaring namespaces)
Prescription level: mandatory

Tag: Trusted Lists

The tsl:TSPInformation child is an instance of tsl:TSPInformationType type. For testing the structure of each tsl:TSPInformation child the test assertions defined in clause A.3.11 shall apply.

The tsl:TSPServices child is an instance of tsl:TSPServicesListType type. For testing the structure of each tsl:TSPServices child the test assertions defined in clause A.3.12 shall apply.

#### A.3.11 Testing tsl:TSPInformationType

TA id: TL\_SCH/TSPINFO/1

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: The inner structure of an instance of tsl:TSPInformationType type in terms of its children is as follows: tsl:TSPName, tsl:TSPIradeName, tsl:TSPAddress, tsl:TSPInformationURI,

tsl:TSPInformationExtensions.
Prescription level: mandatory

Tag: Trusted Lists

TA id: TL\_SCH/TSPINFO/2

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: An instance of tsl:TSPInformationType type does not contain any attribute(leaving apart

the attributes declaring namespaces)

Prescription level: mandatory

Tag: Trusted Lists

The tsl:TSPName and tsl:TSPTradeName children are instances of tsl:InternationalNamesType. For testing the structure of each tsl:TSPName or tsl:TSPTradeName child the test assertions defined in clause A.2.6 shall apply.

The tsl:TSPAddress child is an instance of tsl:AddressType. For testing the structure of each tsl:TSPAddress child the test assertions defined in clause A.2.12 shall apply.

The tsl:TSPInformationURI child is an instance of tsl:NonEmptyMultiLangURIListType. For testing the structure of each tsl:TSPInformationURI child the test assertions defined in clause A.2.10 shall apply.

## A.3.12 Testing tsl:TSPServicesListType

TA id: TL\_SCH/SVCSLIST/1

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

 $\textbf{Predicate:} \ \textbf{The inner structure of an instance of tsl:} \textbf{TSPServicesListType type in terms of its}$ 

children is as follows: tsl:TSPService+.

Prescription level: mandatory

Tag: Trusted Lists

TA id: TL\_SCH/SVCSLIST/2

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: An instance of tsl:TSPServicesListType type does not contain any attribute(leaving apart

the attributes declaring namespaces)
Prescription level: mandatory

Tag: Trusted Lists

The tsl:TSPService child is an instance of tsl:TSPServiceType. For testing the structure of each tsl:TSPService child the test assertions defined in clause A.3.13 shall apply.

## A.3.13 Testing tsl:TSPServiceType

TA id: TL\_SCH/SVC/1

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: The inner structure of an instance of tsl:TSPServiceType type in terms of its children is

as follows: tsl:ServiceInformation, tsl:ServiceHistory?
Prescription level: mandatory

Tag: Trusted Lists

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TA id: TL\_SCH/SVC/2
Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: An instance of tsl:TSPServiceType type does not contain any attribute(leaving apart the

attributes declaring namespaces)
Prescription level: mandatory

Tag: Trusted Lists

The tsl:ServiceInformation child is an instance of tsl:TSPServiceInformationType type. For testing the structure of each tsl:ServiceInformation child the test assertions defined in clause A.3.14 shall apply.

The tsl:ServiceHistory child is an instance of tsl:ServiceHistoryType type. For testing the structure of each tsl:ServiceHistory child the test assertions defined in clause A.3.16 shall apply.

## A.3.14 Testing tsl:TSPServiceInformationType

TA id: TL\_SCH/SVCINFO/1 Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd) Target: Trusted Lists as specified in ETSI TS 119 612 [1] Predicate: The inner structure of an instance of tsl:TSPServiceInformationType type in terms of its children is as follows: tsl:ServiceTypeIdentifier, tsl:ServiceName, tsl:ServiceDigitalIdentity, tsl:ServiceStatus, tsl:StatusStartingTime, tsl:SchemeServiceDefinitionURI?, tsl:ServiceSupplyPoints?, TSPSServiceDefinitionURI?, tsl:ServiceInformationExtensions? Prescription level: mandatory Tag: Trusted Lists TA id: TL\_SCH/SVCINFO/2 Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd) Target: Trusted Lists as specified in ETSI TS 119 612 [1] Predicate: An instance of tsl:TSPServiceInformationType type does not contain any attribute(leaving apart the attributes declaring namespaces) Prescription level: mandatory Tag: Trusted Lists

The tsl:ServiceTypeIdentifier child is an instance of tsl:NonEmptyURIType. For testing the structure of each tsl:ServiceTypeIdentifier child the test assertions defined in clause A.2.7 shall apply.

The tsl:ServiceName child is an instance of tsl:InternationalNamesType. For testing the structure of each tsl:ServiceName child the test assertions defined in clause A.2.6 shall apply.

The tsl:ServiceDigitalIdentity child is an instance of tsl: DigitalIdentityListType type. For testing the structure of each tsl:ServiceDigitalIdentity child the test assertions defined in clause A.3.6 shall apply.

The tsl:ServiceStatus child is an instance of tsl:NonEmptyURIType. For testing the structure of each tsl:ServiceStatus child the test assertions defined in clause A.2.7 shall apply.

The tsl:SchemeServiceDefinitionURI child is an instance of tsl:NonEmptyMultiLangURIListType. For testing the structure of each tsl:SchemeServiceDefinitionURI child the test assertions defined in clause A.2.10 shall apply.

The tsl:ServiceSupplyPoints child is an instance of tsl:ServiceSupplyPointsType type. For testing the structure of each tsl:ServiceSupplyPoints child the test assertions defined in clause A.2.10 shall apply.

The tsl:TSPServiceDefinitionURI child is an instance of tsl:NonEmptyMultiLangURIListType. For testing the structure of each tsl:TSPServiceDefinitionURI child the test assertions defined in clause A.3.15 shall apply.

# A.3.15 Testing tsl:ServiceSupplyPointsType

TA id: TL\_SCH/SVCSUPPTS/1
Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The inner structure of an instance of tsl:ServiceSupplyPointsType type in terms of its children is as follows: tsl:ServiceSupplyPoint+
Prescription level: mandatory
Tag: Trusted Lists

TA id: TL\_SCH/SVCSUPPTS/2
Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: An instance of tsl:ServiceSupplyPointsType type does not contain any attribute(leaving apart the attributes declaring namespaces)
Prescription level: mandatory

Tag: Trusted Lists

The tsl:ServiceSupplyPoint child is an instance of tsl:AttributedNonEmptyURIType. For testing the structure of each tsl:ServiceSupplyPoint child the test assertions defined in clause A.2.11 shall apply.

# A.3.16 Testing tsl:ServiceHistoryType

TA id: TL\_SCH/SVCHIST/1

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: The inner structure of an instance of tsl:ServiceHistoryType type in terms of its

children is as follows: tsl:ServiceHistoryInstance+

Prescription level: mandatory

Tag: Trusted Lists

TA id: TL\_SCH/SVCHIST/2

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: An instance of tsl:ServiceHistoryType type does not contain any attribute(leaving apart

the attributes declaring namespaces)

Prescription level: mandatory

Tag: Trusted Lists

The tsl:ServiceHistoryInstance child is an instance of tsl:ServiceHistoryInstanceType type. For testing the structure of each tsl:ServiceHistoryInstance child the test assertions defined in clause A.3.17 shall apply.

## A.3.17 Testing tsl:ServiceHistoryInstanceType

TA id: TL\_SCH/SVCHISTINST/1

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

**Predicate**: The inner structure of an instance of tsl:ServiceHistoryInstanceType type in terms of its children is as follows: tsl:ServiceTypeIdentifier, tsl:ServiceName, tsl:ServiceDigitalIdentity,

tsl:ServiceStatus, tsl:StatusStartingTime, tsl:ServiceInformationExtensions?

Prescription level: mandatory

Tag: Trusted Lists

TA id: TL\_SCH/HISTINST/2

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: An instance of tsl:ServiceHistoryInstanceType type does not contain any attribute(leaving

apart the attributes declaring namespaces)

Prescription level: mandatory

Tag: Trusted Lists

The tsl:ServiceTypeIdentifier child is an instance of tsl:NonEmptyURIType. For testing the structure of each tsl:ServiceTypeIdentifier child the test assertions defined in clause A.2.7 shall apply.

The tsl:ServiceName child is an instance of tsl:InternationalNamesType. For testing the structure of each tsl:ServiceName child the test assertions defined in clause A.2.6 shall apply.

The tsl:ServiceDigitalIdentity child is an instance of tsl: DigitalIdentityListType type. For testing the structure of each tsl:ServiceDigitalIdentity child the test assertions defined in clause A.3.6 shall apply.

The tsl:ServiceStatus child is an instance of tsl:NonEmptyURIType. For testing the structure of each tsl:ServiceStatus child the test assertions defined in clause A.2.7 shall apply.

## A.3.18 Testing Extensions

#### A.3.18.1 Testing tsl:AdditionalServiceInformationType type

TA id: TL\_SCH/EXT/ADDSIE/1

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: The inner structure of an instance of tsl:AdditionalServiceInformationType type in terms

of its children is as follows: tsl:URI, tsl:InformationValue?, tsl:OtherInformation?

Prescription level: mandatory

Tag: Trusted Lists

TA id: TL\_SCH/EXT/ADDSIE/2

Normative source: [1]- XMLSchema (file ts\_119612v020201\_201601xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: An instance of tsl:ServiceHistoryInstanceType type does not contain any attribute(leaving

apart the attributes declaring namespaces)

Prescription level: mandatory

Tag: Trusted Lists

The tsl:URI child is an instance of tsl:NonEmptyMultiLangURIType. For testing the structure of each tsl:URI child the test assertions defined in clause A.2.9 shall apply.

NOTE: The contents of tsl:OtherInformation child have been left open. It is out of the scope of the present document to specify any conformance assertion for this child element.

#### A.3.18.2 Testing sie:QualificationsType type

#### A.2.18.2.1 Testing sie:QualificationsType

TA id: TL\_SCH/EXT/QUALS/1

Normative source: [1]- XMLSchema (file ts\_119612v020101\_sie\_xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: The inner structure of an instance of sie:QualificationsType type in terms of its

children is as follows: sie:QualificationElement+

Prescription level: mandatory

Tag: Trusted Lists

TA id: TL\_SCH/EXT/QUALS/2

Normative source: [1]- XMLSchema (file ts\_119612v020101\_sie\_xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: An instance of sie:QualificationsType type does not contain any attribute(leaving apart

the attributes declaring namespaces)
Prescription level: mandatory

Tag: Trusted Lists

#### A.3.18.2.2 Testing sie:QualificationElement element

TA id: TL\_SCH/EXT/QUALEL/1

Normative source: [1]- XMLSchema (file ts\_119612v020101\_sie\_xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: The inner structure of the element sie:QualificationElement in terms of its children is

as follows: sie:Qualifiers, sie:CriteriaList

Prescription level: mandatory

Tag: Trusted Lists

TA id: TL\_SCH/EXT/QUALEL/2

Normative source: [1]- XMLSchema (file ts\_119612v020101\_sie\_xsd.xsd)

Target: Trusted Lists as specified in ETSI TS 119 612 [1]

Predicate: The element sie:QualificationElement does not contain any attribute(leaving apart the

attributes declaring namespaces)
Prescription level: mandatory

Tag: Trusted Lists

#### A.3.18.2.3 Testing sie:Qualifiers element

TA id: TL\_SCH/EXT/QUALIFIERS/1 Normative source: [1]- XMLSchema (file ts\_119612v020101\_sie\_xsd.xsd) Target: Trusted Lists as specified in ETSI TS 119 612 [1] Predicate: The inner structure of the element sie:Qualifiers in terms of its children is as follows: sie:Qualifier+ Prescription level: mandatory Tag: Trusted Lists TA id: TL\_SCH/EXT/QUALIFIERS/2 Normative source: [1]- XMLSchema (file ts\_119612v020101\_sie\_xsd.xsd) Target: Trusted Lists as specified in ETSI TS 119 612 [1] Predicate: The element sie:Qualifiers does not contain any attribute(leaving apart the attributes declaring namespaces) Prescription level: mandatory Tag: Trusted Lists TA id: TL\_SCH/EXT/QUALIFIERS/3 Normative source: [1]- XMLSchema (file ts\_119612v020101\_sie\_xsd.xsd) Target: Trusted Lists as specified in ETSI TS 119 612 [1] Predicate: The value of each child element sie:Qualifier of sie:Qualifiers is a valid URI Reference Prescription level: mandatory Tag: Trusted Lists

#### A.3.18.2.4 Testing sie:CriteriaListType type

TA id: TL\_SCH/EXT/CRITLIST/1
Normative source: [1]- XMLSchema (file ts\_119612v020101\_sie\_xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The inner structure of an instance of sie:CriteriaListType type in terms of its children is as follows: sie:KeyUsage\*, sie:PolicySet\*, sie:CriteriaList\*, sie:Description?, sie:OtherCriteriaList?
Prescription level: mandatory
Tag: Trusted Lists

TA id: TL\_SCH/EXT/CRITLIST/2
Normative source: [1]- XMLSchema (file ts\_119612v020101\_sie\_xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The set of attributes (leaving apart the attributes declaring namespaces) of an instance of sie:CriteriaListType as follows: assert
Prescription level: mandatory
Tag: Trusted Lists

Each sie: CriteriaList child is an instance of sie: CriteriaListType. For testing the structure of each sie: CriteriaList child the test assertions defined in the present clause shall apply.

Below follow the test assertions that shall apply for checking the inner structure of sie: KeyUsage child element.

```
TA id: TL_SCH/EXT/KEYUS/1
Normative source: [1]- XMLSchema (file ts_119612v020101_sie_xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The inner structure of the element sie: KeyUsage in terms of its children is as follows:
sie:KeyUsageBit(1..9)
Prescription level: mandatory
Tag: Trusted Lists
TA id: TL_SCH/EXT/KEYUS/2
Normative source: [1]- XMLSchema (file ts_119612v020101_sie_xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The element sie: Key Usage does not contain any attribute (leaving apart the attributes
declaring namespaces)
Prescription level: mandatory
Tag: Trusted Lists
TA id: TL_SCH/EXT/KEYUS/3
Normative source: [1]- XMLSchema (file ts_119612v020101_sie_xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The set of attributes (leaving apart the attributes declaring namespaces) of the element
sie:KeyUsageBit is as follows: name
Prescription level: mandatory
Tag: Trusted Lists
```

Below follow the test assertions that shall apply for checking the inner structure of sie:PolicySet child element.

```
TA id: TL_SCH/EXT/POLSET/1
Normative source: [1]- XMLSchema (file ts_119612v020101_sie_xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The inner structure of the element sie:PolicySet in terms of its children is as follows:
sie:PolicyIdentifier+
Prescription level: mandatory
Tag: Trusted Lists

TA id: TL_SCH/EXT/POLSET/2
Normative source: [1]- XMLSchema (file ts_119612v020101_sie_xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The element sie:PolicySet does not contain any attribute(leaving apart the attributes declaring namespaces)
Prescription level: mandatory
Tag: Trusted Lists
```

The child sie:PolicyIdentifier is an instance of xades:ObjectIdentifier. For testing the structure of the sie:PolicyIdentifier child the test assertions specified in clause A.4 of the present document shall apply.

#### A.3.18.3 Testing tslx:ExtendedKeyUsageType type

```
TA id: TL_SCH/EXT/EXTKUS/1
Normative source: [1]- XMLSchema (file ts_119612v020101_additionaltypes_xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The inner structure of an instance of tslx:ExtendedKeyUsageType type in terms of its children is as follows: tslx:KeyPurposeId+
Prescription level: mandatory
Tag: Trusted Lists

TA id: TL_SCH/EXT/EXTKUS/2
Normative source: [1]- XMLSchema (file ts_119612v020101_additionaltypes_xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: An instance of tslx:ExtendedKeyUsageType type does not contain any attribute(leaving apart the attributes declaring namespaces)
Prescription level: mandatory
Tag: Trusted Lists
```

Each child tslx: KeyPurposeId is an instance of xades: ObjectIdentifier. For testing the structure of each tslx: KeyPurposeId child the test assertions specified in clause A.4 of the present document shall apply.

#### A.3.18.4 Testing tslx:TakenOverByType type

```
TA id: TL_SCH/EXT/TKOVER/1
Normative source: [1]- XMLSchema (file ts_119612v020101_additionaltypes_xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The inner structure of an instance of tslx:TakenOverByType type in terms of its children is as follows: tslx:URI, tslx:TSPName, tsl:SchemeOperatorName, tsl:SchemeTerritory, tslx:OtherQualifier*
Prescription level: mandatory
Tag: Trusted Lists

TA id: TL_SCH/EXT/TKOVER/2
Normative source: [1]- XMLSchema (file ts_119612v020101_additionaltypes_xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: An instance of tslx:TakenOverByType type does not contain any attribute(leaving apart the attributes declaring namespaces)
Prescription level: mandatory
Tag: Trusted Lists
```

The tslx:URI child is an instance of tsl:NonEmptyMultiLangURIType type. For testing the structure of the tslx:URI child the test assertions defined in clause A.2.9 shall apply.

The tslx:TSPName child is instance of tsl:InternationalNamesType. For testing the structure of the tslx:TSPName child the test assertions defined in clause A.2.6 shall apply.

The tsl:SchemeOperatorName and tsl:SchemeName children are instances of tsl:InternationalNamesType. For testing the structure of each tsl:SchemeOperatorName or tsl:SchemeName child the test assertions defined in clause A.2.6 shall apply.

#### A.3.18.5 Testing tslx:CertSubjectDNAttribute

```
TA id: TL_SCH/EXT/CSDNA/1
Normative source: [1]- XMLSchema (file ts_119612v020101_additionaltypes_xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The inner structure of an instance of tslx:CertSubjectDNAttribute element in terms of its children is as follows: tslx:AttributeOID+
Prescription level: mandatory
Tag: Trusted Lists

TA id: TL_SCH/EXT/CSDNA/2
Normative source: [1]- XMLSchema (file ts_119612v020101_additionaltypes_xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The element tslx:CertSubjectDNAttribute does not contain any attribute(leaving apart the attributes declaring namespaces)
Prescription level: mandatory
Tag: Trusted Lists
```

The tslx:AttributeOID child is an instance of xades:ObjectIdentifierType type. For testing the structure of the tslx:AttributeOID child the test assertions defined in clause A.4 shall apply.

#### A.3.18.6 Testing tslx:MimeType

```
TA id: TL_SCH/EXT/CSDNA/1
Normative source: [1]- XMLSchema (file ts_119612v020101_additionaltypes_xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The tslx:MimeType element does not contain any XML element
Prescription level: mandatory
Tag: Trusted Lists

TA id: TL_SCH/EXT/CSDNA/2
Normative source: [1]- XMLSchema (file ts_119612v020101_additionaltypes_xsd.xsd)
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The element tslx:MimeType does not contain any attribute(leaving apart the attributes declaring namespaces)
Prescription level: mandatory
Tag: Trusted Lists
```

# A.4 Test assertions for xades:ObjectIdentifierType

This clause defines test assertions for any element derived from or containing children instances of xades:ObjectIdentifierType type as defined in ETSI TS 101 903 [2].

```
TA id: TSL_SCH/OID/1
Normative source: [2] - clause 7.1.2
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The inner structure of an instance of xades:ObjectIdentifierType type in terms of its
children is as follows: xades:Identifier, xades:Description?, xades:DocumentationReferences?.
Prescription level: mandatory
Tag: Trusted Lists
TA id: TSL_SCH/OID/2
Normative source: [2] - clause 7.1.2
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: An instance of xades:ObjectIdentifierType type does not contain any attribute (leaving
apart the attributes declaring namespaces).
Prescription level: mandatory
Tag: Trusted Lists
TA id: TSL_SCH/OID/ID/1
Normative source: [2] - clause 7.1.2
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: An instance of xades: Identifier Type type does not contain any children.
Prescription level: mandatory
Tag: Trusted Lists
```

```
TA id: TSL_SCH/OID/ID/2
Normative source: [2] - clause 7.1.2
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: An instance of xades: Identifier Type type has a valid URI Reference as value.
Prescription level: mandatory
Tag: Trusted Lists
TA id: TSL_SCH/OID/ID/3
Normative source: [2] - clause 7.1.2
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The set of attributes (leaving apart the attributes declaring namespaces) of one instance
of xades:IdentifierType is as follows: Qualifier?.
Prescription level: mandatory
Tag: Trusted Lists
TA id: TSL_SCH/OID/ID/4
Normative source: [2] - clause 7.1.2
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The Qualifier attribute of an instance of xades: Identifier Type has one of the following
values: "OIDAsURI" or "OIDAsURN".
Prescription level: mandatory
Tag: Trusted Lists
TA id: TSL_SCH/OID/DOCREFS/1
Normative source: [1]- clause 5.1.2
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: The inner structure of an instance of xades:DocumentationReferencesType type in terms of
its children is as follows: xades:DocumentationReference+.
Prescription level: mandatory
Tag: Trusted Lists
TA id: TSL_SCH/OID/DOCREFS/2
Normative source: [2] - clause 7.1.2
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: An instance of xades:DocumentationReferencesType type does not have any attribute.
Prescription level: mandatory
Tag: Trusted Lists
TA id: TSL_SCH/OID/DOCREFS/DOCREF/1
Normative source: [2] - clause 7.1.2
Target: XAdES signature generator claiming conformance to XAdES signatures either as specified in
[1] or in [2]
Predicate: Element xades:DocumentationReference does not have any children.
Prescription level: mandatory
Tag: Trusted Lists
TA id: TSL_SCH/OID/DOCREFS/DOCREF/2
Normative source: [2] - clause 7.1.2
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: Element xades:DocumentationReference has a valid URI Reference as value.
Prescription level: mandatory
Tag: Trusted Lists
TA id: TSL_SCH/OID/DOCREFS/DOCREF/3
Normative source: [2] - clause 7.1.2
Target: Trusted Lists as specified in ETSI TS 119 612 [1]
Predicate: Element xades:DocumentationReference does not have any attribute.
Prescription level: mandatory
Tag: Trusted Lists
```

# History

Document history		
V1.1.1	June 2016	Publication