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Electronic Signatures and Trust Infrastructures (ESI); Certificate Profiles; Part 1: Overview and common data structures

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Foreword

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

The present document is part 1 of a multi-part deliverable covering the Certificate Profiles, as identified below:

Part 1: "Overview and common data structures";

- Part 2: "Certificate profile for certificates issued to natural persons";
- Part 3: "Certificate profile for certificates issued to legal persons";
- Part 4: "Certificate profile for web site certificates";
- Part 5: "QCStatements";
- Part 6: "Certificate profile requirements for PID, Wallet, EAA, QEAA, and PSBEAA providers".

The present document was previously published as ETSI TS 119 412-1 [i.14].

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

Modal verbs terminology

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

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Introduction

ITU and ISO issued standards for certification of public keys in Recommendation ITU-T X.509 | ISO/IEC 9594-8 [i.3] which are used for the security of communications and data for a wide range of electronic applications.

Regulation (EU) No 910/2014 [i.9] of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC defines requirements on specific types of certificates named "qualified certificates". Implementation of Directive 1999/93/EC [i.1], superseded by Regulation (EU) No 910/2014 [i.9], and deployment of certificate infrastructures throughout Europe as well as in countries outside of Europe, have resulted in a variety of certificate implementations for use in public and closed environments, where some are declared as qualified certificates while others are not.

Applications need support from standardized and interoperable identity certificate profiles, in particular when applications are used for electronic signatures, authentication and secure electronic exchange in open environments and international trust scenarios, but also when certificates are used in local application contexts.

This multi-part deliverable aims to maximize the interoperability of systems issuing and using certificates both in the European context under Regulation (EU) No 910/2014 [i.9] and in the wider international environment.

1 Scope

The present document provides an overview of the Recommendation ITU-T X.509 | ISO/IEC 9594-8 [i.3] based certificate profiles and the statements for EU Qualified Certificates specified in other parts of ETSI EN 319 412 ([i.4] to [i.7]). It specifies common data structures that are referenced from other parts of ETSI EN 319 412 ([i.4] to [i.7]).

The profiles specified in this multi-part deliverable aim to support both Regulation (EU) No 910/2014 [i.9] and the use of certificates in a wider international context. Within the European context, it aims to support both EU Qualified Certificates and other forms of certificate.

2 References

2.1 Normative references

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

Referenced documents which are not found to be publicly available in the expected location might be found in the [ETSI docbox](#).

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

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

- [1] [IETF RFC 3739](#): "Internet X.509 Public Key Infrastructure: Qualified Certificates Profile".
- [2] [ISO 3166-1](#): "Codes for the representation of names of countries and their subdivisions — Part 1: Country code".
- [3] [ETSI TS 119 495](#): "Electronic Signatures and Trust Infrastructures (ESI); Sector Specific Requirements; Certificate Profiles and TSP Policy Requirements for Open Banking".
- [4] [ISO 17442](#): "Financial services — Legal Entity Identifier (LEI)".
- [5] eIDAS: "[SAML Attribute Profile](#)", v1.2, 31 August 2019.
- [6] [IETF RFC 5912](#): "New ASN.1 Modules for the Public Key Infrastructure Using X.509 (PKIX)".
- [7] [ISO 3166-2](#): "Codes for the representation of names of countries and their subdivisions — Part 2: Country subdivision code".
- [8] EUID CIR: "[Commission Implementing Regulation \(EU\) 2021/1042](#) of 18 June 2021 laying down rules for the application of Directive (EU) 2017/1132 of the European Parliament and of the Council as regards technical specifications and procedures for the system of interconnection of registers and repealing Commission Implementing Regulation (EU) 2020/2244 (EUID)".

2.2 Informative references

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The following referenced documents may be useful in implementing an ETSI deliverable or add to the reader's understanding, but are not required for conformance to the present document.

- [i.1] [Directive 1999/93/EC](#) of the European Parliament and of the Council of 13 December 1999 on a Community framework for electronic signatures.
- [i.2] ETSI EN 319 401: "Electronic Signatures and Trust Infrastructures (ESI); General Policy Requirements for Trust Service Providers".
- [i.3] Recommendation ITU-T X.509 | ISO/IEC 9594-8: "Information technology - Open Systems Interconnection - The Directory: Public-key and attribute certificate frameworks".
- [i.4] ETSI EN 319 412-2: "Electronic Signatures and Trust Infrastructures (ESI); Certificate Profiles; Part 2: Certificate Profile for certificates issued to natural persons".
- [i.5] ETSI EN 319 412-3: "Electronic Signatures and Infrastructures (ESI); Certificate Profiles; Part 3: Certificate Profile for certificates issued to legal persons".
- [i.6] ETSI EN 319 412-4: "Electronic Signatures and Trust Infrastructures (ESI); Certificate Profiles; Part 4: Certificate Profile for web site certificates".
- [i.7] ETSI EN 319 412-5: "Electronic Signatures and Trust Infrastructures (ESI); Certificate Profiles; Part 5: QCStatements".
- [i.8] IETF RFC 5246: "The Transport Layer Security (TLS) Protocol Version 1.2".
- [i.9] [Regulation \(EU\) No 910/2014](#) of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC.
- [i.10] Recommendation ITU-T X.520 (10/2012): "Information technology - Open Systems Interconnection - The Directory: Selected attribute types".
- [i.11] IETF RFC 5280: "Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile".
- [i.12] [Council Directive 2006/112/EC](#) of 28 November 2006 on the common system of value added tax.
- [i.13] [Directive \(EU\) 2015/2366](#) of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No 1093/2010, and repealing Directive 2007/64/EC.
- [i.14] ETSI TS 119 412-1: "Electronic Signatures and Infrastructures (ESI); Certificate Profiles; Part 1: Overview and common data structures".
- [i.15] EPREL CIR: "[Commission Implementing Regulation \(EU\) 2024/994](#) of 2 April 2024 laying down operational details of the product database established under Regulation (EU) 2017/1369 of the European Parliament and of the Council".
- [i.16] [Council Directive 2020/1756](#) of 20 November 2020 amending Directive 2006/112/EC on the common system of value added tax as regards the identification of taxable persons in Northern Ireland.
- [i.17] ETSI EN 319 411-1: "Electronic Signatures and Trust Infrastructures (ESI); Policy and security requirements for Trust Service Providers issuing certificates; Part 1: General requirements".
- [i.18] [Commission Implementing Regulation \(EU\) No 1352/2013](#) of 4 December 2013 establishing the forms provided for in Regulation (EU) No 608/2013 of the European Parliament and of the Council concerning customs enforcement of intellectual property rights.
- [i.19] [Council Regulation \(EU\) No 389/2012](#) of 2 May 2012 on administrative cooperation in the field of excise duties and repealing Regulation (EC) No 2073/2004.

- [i.20] [Commission Implementing Regulation \(EU\) 2022/1860](#) of 10 June 2022 laying down implementing technical standards for the application of Regulation (EU) No 648/2012 of the European Parliament and of the Council with regard to the standards, formats, frequency and methods and arrangements for reporting.
-

3 Definition of terms, symbols, abbreviations and notations

3.1 Terms

For the purposes of the present document, the terms given in ETSI EN 319 401 [i.2] and the following apply:

EU Qualified Certificate: qualified certificate that is stated to be in accordance with Annex I, III or IV of Regulation (EU) No 910/2014 [i.9] or Annex I of Directive 1999/93/EC [i.1] whichever is in force at the time of issuance

short-term certificate: certificate whose validity period, i.e. the period of time from notBefore through notAfter, inclusive, is shorter than the maximum time to process a revocation request as specified in the certificate practice statement

3.2 Symbols

Void.

3.3 Abbreviations

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

ASN.1	Abstract Syntax Notation 1
CA	Certification Authority
CIR	Commission Implementing Regulation
CRL	Certificate Revocation List
eID	electronic IDentity

NOTE: In line with eIDAS SAML Attribute Profile [5].

eIDAS	electronic IDentification, Authentication and trust Services
EORI	Economic Operators Registration and Identification
EPREL	European Product Registry for Energy Labelling

NOTE: See Commission Implementing Regulation (EU) 2024/994 [i.15].

EUID	European Unique IDentifier
------	----------------------------

NOTE: See Implementing Regulation (EU) 2021/1042 [8].

LEI	Legal Entity Identifier
OCSP	Online Certificate Status Protocol
OID	Object IDentifier
SAML	Security Assertion Markup Language
TLS	Transport Layer Security protocol

NOTE: As specified in IETF RFC 5246 [i.8].

TSP	Trust Service Provider
UN	United Nations

3.4 Notations

The requirements identified in the present document are preceded by a 3-letter prefix to denote the applicability to specific profiles as covered by the present multi-part deliverable.

Each requirement is identified as follows:

<3 letters profile> - <the clause number> - <2 digit number - incremental>.

The profile is identified as follows:

- **GEN:** Requirements generally applicable to certificate profiles.
- **NAT:** Requirements specifically applicable to profiles for certificates issued to natural persons.
- **LEG:** Requirements specifically applicable to profiles for certificates issued to legal persons.
- **WEB:** Requirements specifically applicable to profiles for certificates issued for specifically for website authentication.

NOTE: Such requirements can override requirements for the above classes of profiles.

- **QCS:** Requirements specifically applicable to profiles for certificates using qualified certificates statements and EU Qualified Certificates.

The management of the requirement identifiers for subsequent editions of the present document is as follows:

- When a requirement is inserted at the end of a clause, the 2 digit number above is incremented to the next available digit.
- When a requirement is inserted between two existing requirements, capital letters appended to the previous requirement identifier are used to distinguish new requirements.
- The requirement identifier for a deleted requirement is left and completed with "Void".
- The requirement identifier for a modified requirement is left void and the modified requirement is identified by capital letter(s) appended to the initial requirement number.

4 ETSI EN 319 412 certificate profiles

4.1 General approach

All the certificate profiles specified in ETSI EN 319 412 (parts 2 [i.4], 3 [i.5], 4 [i.6], 5 [i.7] and the present document) are based upon IETF RFC 5280 [i.11] for generic profiling of Recommendation ITU-T X.509 | ISO/IEC 9594-8 [i.3]. The certificate profiles specify profiles for both EU Qualified Certificates and non-qualified certificates as relevant. Reference is made to ETSI EN 319 412-5 [i.7] for requirements relating to QCstatements.

4.2 Overview of other parts of ETSI EN 319 412

4.2.1 ETSI EN 319 412-2

Electronic Signatures and Trust Infrastructures (ESI); Certificate Profiles; Part 2: Certificate profile for certificates issued to natural persons.

Scope: This part specifies the requirements on certificate content for TSPs issuing certificates to natural persons. It provides a certificate profile, which facilitates interoperability of certificates issued to natural persons for the purposes of supporting digital signatures, peer entity authentication, data authentication as well as data confidentiality. It specifies a profile for both EU Qualified Certificates as specified in Regulation (EU) No 910/2014 [i.9], and non-qualified certificates. When certificates for natural persons are issued as EU Qualified Certificates, it makes reference to ETSI EN 319 412-5 [i.7] for requirements relating to QCStatements.

4.2.2 ETSI EN 319 412-3

Electronic Signatures and Infrastructures (ESI); Certificate Profiles; Part 3: Certificate profile for certificates issued to legal persons.

Scope: This part specifies the requirements on certificate content for TSPs issuing certificates to legal persons. It provides a certificate profile, which facilitates interoperability of certificates issued to legal persons for the purposes of supporting digital signatures, peer entity authentication, data authentication as well as data confidentiality. It specifies a profile for both EU Qualified Certificates and non-qualified certificates. When certificates for legal persons are issued as EU Qualified Certificates, it makes reference to ETSI EN 319 412-5 [i.7] for requirements relating to QCStatements.

4.2.3 ETSI EN 319 412-4

Electronic Signatures and Trust Infrastructures (ESI); Certificate Profiles; Part 4: Certificate profile for web site certificates.

Scope: This part specifies the requirements on certificate content for TSPs issuing website certificates for sites that are accessed via the TLS protocol as specified in IETF RFC 5246 [i.8]. It provides a certificate profile, which enables interoperability of website certificates issued to legal or natural persons. It specifies a profile for both EU Qualified Certificates and non-qualified certificates. When certificates for web site authentication are issued as EU Qualified Certificates, it makes reference to ETSI EN 319 412-5 [i.7] for requirements relating to QCStatements.

4.2.4 ETSI EN 319 412-5

Electronic Signatures and Trust Infrastructures (ESI); Certificate Profiles; Part 5: QCStatements.

Scope: This part specifies the requirements on the QCStatements as required for qualified certificates as specified in parts 2 to 4 [i.4], [i.5] and [i.6] of ETSI EN 319 412.

The QCStatements defined in clause 4.3 of ETSI EN 319 412-5 [i.7] can be applied to regulatory environments outside the EU. Other requirements specified in clause 4 of [i.7] are specific to Regulation (EU) No 910/2014 [i.9] but may be adapted for other regulatory environments.

5 Common data structures

5.1 Semantics identifiers

5.1.1 General

Subject and issuer names (Recommendation ITU-T X.509 | ISO/IEC 9594-8 [i.3]) can include attributes that do not disclose the semantics of its information content. `serialNumber` (Recommendation ITU-T X.509 | ISO/IEC 9594-8 [i.3]) and `organizationIdentifier` (Recommendation ITU-T X.520 [i.10]) are examples of such attributes. The `serialNumber` attribute can contain a national identification number, passport number or any type of locally defined identifier such as random or pseudo-random generated identifier. The `organizationIdentifier` attribute can contain several types of organizational identifiers.

IETF RFC 3739 [1], clause 3.2.6.1 defines the predefined statement "qcStatement-2" identified by the OID id-qcs-pkixQCSyntax-v2 with the `SemanticsInformation` syntax.

The `SemanticsInformation` type, when present, provides information about the semantics of data stored in attributes and/or names in the certificate.

The semantics identifiers in the following clauses use 2 character ISO 3166-1 [2] country codes (Alpha-2) to specify the country where the identifier is registered.

GEN-5.1.1-01: Trans-national country codes as specified in ISO 3166-1 [2] may be used when relevant such as EU (European Union) and UN (United Nations).

GEN-5.1.1-02: User-defined country code 'XG' may be used for identifiers allocated under a global scheme.

GEN-5.1.1-03: Identifiers using user-defined country codes shall be interpreted under the context of the certificate issuer as there is no guarantee that such identifier is unique across all issuers. Unassigned codes should not be used.

NOTE: The semantics identifiers in the following clauses define semantics information for attributes stored in the subject field. No corresponding mechanism is defined in the present document for specifying semantics information for attributes in the issuer field. IETF RFC 5280 [i.11] path validation requires the issuer field to be consistent with the subject field of the CA certificate assigned to the issuing CA. Name attributes of the issuing CA can be constructed according the semantics identifier defined in the following clauses and stored in the subject field of the CA certificate. In such case, the appropriate place to include semantics identifiers for these attributes is in the CA certificate. Consequently, a relying party will have to consult information in the issuing CA certificate to obtain semantics information about attributes in the issuer field of a certificate.

5.1.2 ASN.1 module

This clause defines semantics identifiers for inclusion in qcStatement-2.

GEN-5.1.2-01: The syntax for the natural person semantics identifier and legal person semantics identifier shall be as defined by the following ASN.1 module:

```
ETSISemanticsIdentifierMod { itu-t(0) identified-organization(4) etsi(0) id-cert-profile(194121)
id-mod(0) id-mod-semantics-identifier(0) v2(1)}
```

```
DEFINITIONS EXPLICIT TAGS:=

BEGIN

-- EXPORTS All -

-- Semantics identifiers

id-etsi-qcs-semantics-identifiers      OBJECT IDENTIFIER ::= { itu-t(0) identified-organization(4)
etsi(0) id-cert-profile(194121) 1 }

-- Semantics identifier for natural person identifier
```

```

id-etsi-qcs-semanticsId-Natural      OBJECT IDENTIFIER ::= { id-etsi-qcs-semantics-identifiers 1 }
-- Semantics identifier for legal person identifier
id-etsi-qcs-SemanticsId-Legal      OBJECT IDENTIFIER ::= { id-etsi-qcs-semantics-identifiers 2 }
-- Semantics identifier for eIDAS natural person identifier
id-etsi-qcs-semanticsId-eIDASNatural OBJECT IDENTIFIER ::= { id-etsi-qcs-semantics-identifiers 3 }
-- Semantics identifier for legal person identifier
id-etsi-qcs-SemanticsId-eIDASLegal  OBJECT IDENTIFIER ::= { id-etsi-qcs-semantics-identifiers 4 }

END

```

The following clauses provide the semantics definitions of the natural person and legal person semantics identifiers.

5.1.3 Natural person semantics identifier

NAT-5.1.3-01: The semantics of `id-etsi-qcs-SemanticsId-Natural` shall be as follows.

NAT-5.1.3-02: When the natural person semantics identifier is included, any present `serialNumber` attribute in the subject field shall contain information using the following structure in the presented order:

- 3 character natural person identity type reference;
- 2 character ISO 3166-1 [2] country code, except as allowed by NAT-5.1.3-03 (5);
- hyphen-minus "-" (0x2D (ASCII), U+002D (UTF-8)); and
- identifier (according to country and identity type reference).

NAT-5.1.3-03: The three initial characters shall have one of the following defined values:

- 1) "PAS" for identification based on passport number.
- 2) "IDC" for identification based on national identity card number.
- 3) "PNO" for identification based on (national) personal number (national civic registration number).
- 4) "TAX" for identification based on a personal tax reference number issued by a national tax authority.
- 5) "TIN" Tax Identification Number according to the European Commission - Tax and Customs Union (https://ec.europa.eu/taxation_customs/tin/tinByCountry.html).

NOTE: This means for Greece, the "EL" can be used instead of "GR".

- 6) "EID" for identification based on electronic identification means (e.g. national eID).
- 7) Two characters according to local definition within the specified country and name registration authority, identifying a national scheme that is considered appropriate for national and European level, followed by the character ":" (colon).

Other initial character sequences are reserved for future amendments of the present document.

EXAMPLE: "PASSK-P3000180", "IDCBE-590082394654", "TINEL-123456789" and "EI:SE-200007292386".

NAT-5.1.3-04: The value "TAX" is **deprecated**. The value "TIN" should be used instead.

NAT-5.1.3-05: When a locally defined identity type reference is provided (two characters followed by ":"), the `nameRegistrationAuthorities` element of `SemanticsInformation` (IETF RFC 3739 [1]) shall be present.

NAT-5.1.3-06: The `nameRegistrationAuthorities` element of `SemanticsInformation` (IETF RFC 3739 [1]) shall contain at least a `uniformResourceIdentifier generalName`.

NAT-5.1.3-07: The two-letter identity type reference preceding the ":" character shall be unique within the context of the specified `uniformResourceIdentifier`.

5.1.4 Legal person semantics identifier

LEG-5.1.4-01: The semantics of `id-etsi-qcs-SemanticsId-Legal` shall be as follows.

LEG-5.1.4-02: When the legal person semantics identifier is included, any present `organizationIdentifier` attribute in the subject field shall contain information using the following structure in the presented order:

- 3 character legal person identity type reference;
- 2 character ISO 3166-1 [2] country code, except as allowed by LEG-5.1.4-04;
- hyphen-minus "-" (0x2D (ASCII), U+002D (UTF-8)); and
- identifier (according to country and identity type reference).

LEG-5.1.4-03: The three initial characters shall have one of the following defined values:

- 1) "VAT" for identification based on a national value added tax identification number.
- 2) "NTR" for identification based on an identifier from a national trade register.
- 3) "PSD" for identification based on national authorization number of a payment service provider under Payments Services Directive (EU) 2015/2366 [i.13] or equivalent national or international legislation. This shall use the extended structure as defined in ETSI TS 119 495 [3], clause 5.2.1.
- 4) "LEI" for a global Legal Entity Identifier as specified in ISO 17442 [4] and as referred to in Commission Implementing Regulation (EU) No 2022/18602 [i.20]. The 2 character ISO 3166-1 [2] country code shall be set to 'XG'.
- 5) "EOR" for Economic Operators Registration and Identification (EORI) number as referred to in Commission Implementing Regulation (EU) No 1352/20131 [i.18].
- 6) "EXC" for an excise number as specified in Article 2(12) of Council Regulation (EC) No 389/20123 [i.19].
- 7) Two characters according to local definition within the specified country and name registration authority, identifying a national scheme that is considered appropriate for national and European level, followed by the character ":" (colon).

Other initial character sequences are reserved for future amendments of the present document.

LEG-5.1.4-04: In case "VAT" legal person identity type reference is used , the country prefix described in Council Directive 2006/112/EC [i.12], article 215 as amended by Council Directive 2020/1756 [i.16] may be used instead of the 2 character ISO 3166-1 [2] country code.

EXAMPLE 1: "VATBE-0876866142", "VATEL-123456789", "VATXI-123456789" and "EI:SE-5567971433".

LEG-5.1.4-05: When a locally defined identity type reference is provided (two characters followed by ":"), the `nameRegistrationAuthorities` element of `SemanticsInformation` (IETF RFC 3739 [1]) shall be present and shall contain at least a `uniformResourceIdentifier generalName`.

LEG-5.1.4-06: The two letter identity type reference following the ":" character shall be unique within the context of the specified `uniformResourceIdentifier`.

LEG-5.1.4-07: In the case of the "NTR" legal person identity type reference, if the identifier is unique at the national level, the `organizationIdentifier` attribute in the subject field shall use the structure defined in LEG-5.1.4-02 where the identifier, shall be one of the followings:

- a) the national identifier;
- b) the EUID identifier as available from the Business Registers Interconnection System according to Implementing Regulation (EU) 2021/1042 [8]:
 - i) the Business Register Identifier, for the particular section or office of the public register having attributed the business registration number to the legal person in question;
 - ii) dot-sign '.' (U+002E);

- iii) the Business Registration Number, as attributed to the legal person by the national business register in point (i) above.

EXAMPLE 2: DED2601V.HRB12345 (Amtsgericht München).

NOTE: It is recommended that business whose products relate to the European Product Registry for Energy Labelling (EPREL) [i.15] to use the b) option above because after April 22, 2025 the EPREL system of the EU will not accept a certificate with other identity types than EUID.

LEG-5.1.4-08: In the case of the "NTR" legal person identity type reference, if the identifiers are assigned at the subdivision (state or province) level and are not unique at the national level, the organizationIdentifier attribute in the subject field shall contain information using one the following structure in the presented order:

- a) as defined in LEG-5.1.4-07;
- b) in the following structure:
 - 3 character legal person identity type reference;
 - 2 character ISO 3166-1 [2] country;
 - plus "+" (0x2B (ASCII), U+002B (UTF-8)) followed by an up-to-three character ISO 3166-2 [7] identifier for the subdivision;
 - hyphen-minus "-" (0x2D (ASCII), U+002D (UTF-8)); and
 - identifier (according to country and identity type reference).

EXAMPLE 3: "NTRDE+HE-123456" (Germany, Hessen), "NTRUS+CA-123456" (United States, California).

5.1.5 eIDAS eID Natural person semantics identifier

NAT-5.1.5-01: If using electronic identity attributes as specified in eIDAS SAML attribute profile [5] for a certificate issued to natural persons, the semantics of `id-etsi-qcs-SemanticsId-eIDASNatural` shall be as follows.

NAT-5.1.5-02: If the eIDAS natural person semantics identifier is included, the values of attributes in the subject field shall meet the content requirements of corresponding attributes defined by the eIDAS SAML attribute profile [5] according to the following requirements:

- **NAT-5.1.5-03:** Any `serialNumber` attribute present in the subject field of the certificate shall comply with the content requirement specified for the eIDAS `PersonIdentifier` attribute.
- **NAT-5.1.5-04:** Attributes present in subject field of the certificate are equivalent to defined attributes in accordance with table 5.1.5-1. This means that the present attribute shall hold equivalent information, even if the format used to express that information differs.

Table 5.1.5-1: Attribute equivalence

Certificate attribute	Defined by	Equivalent eIDAS eID attribute (FriendlyName)
<code>serialNumber</code>	Recommendation ITU-T X.520 [i.10]	<code>PersonIdentifier</code>
<code>surname</code>	Recommendation ITU-T X.520 [i.10]	<code>FamilyName</code>
<code>givenName</code>	Recommendation ITU-T X.520 [i.10]	<code>FirstName</code>
<code>dateOfBirth</code>	IETF RFC 3739 [1]	<code>DateOfBirth</code>

5.1.6 eIDAS eID Legal person semantics identifier

LEG-5.1.6-01: If using electronic identity attributes as specified in eIDAS SAML attribute profile [5] for a certificate issued to legal persons, the semantics of `id-etsi-qcs-SemanticsId-eIDASLegal` shall be as follows.

LEG-5.1.6-02: If the eIDAS legal person semantics identifier is included, the values of attributes in the subject field shall meet the content requirements of corresponding attributes defined by the eIDAS SAML attribute profile [5] according to the following requirements:

- **LEG-5.1.6-03:** Any `organizationIdentifier` attribute present in the subject field of the certificate shall comply with the content requirement specified for the eIDAS `LegalPersonIdentifier` attribute.
- **LEG-5.1.6-04:** Attributes present in the subject field of the certificate are equivalent to defined attributes in accordance with table 5.1.6-1. This means that the present attribute shall hold equivalent information, even if the format used to express that information differs.

Table 5.1.6-1: Attribute equivalence

Certificate attribute	Defined by	Equivalent eIDAS attribute (FriendlyName)
<code>organizationIdentifier</code>	Recommendation ITU-T X.520 [i.10]	<code>LegalPersonIdentifier</code>
<code>organizationName</code>	Recommendation ITU-T X.520 [i.10]	<code>LegalName</code>

5.2 Certificate Extensions regarding Validity Assured Certificate

5.2.1 Validity Assured General

The following certificate extensions indicate that the certificate issuer ensures that the validity of the certificate is assured at time of use of the corresponding private key.

NOTE 1: Upon presence of such statement in the certificate, the relying party can decide not to check the certificate revocation status, for example, when validating a digital signature.

NOTE 2: The upper part of the certificate path is not impacted by the presence of the extension in a certain certificate; upper certificates in the chain are to be validated as expressed by the certificate and/or the certificate policy/certificate practice statement (e.g. they can be validated with OCSP or CRL).

NOTE 3: In the present document only one extension is defined.

5.2.2 Validity Assured - Short Term

This extension indicates that the validity of the certificate is assured because the certificate is a "**short-term certificate**". That is, the time as indicated in the certificate attribute from `notBefore` through `notAfter`, inclusive, is shorter than the maximum time to process a revocation request as specified by the certificate practice statement or certificate policy.

NOTE: Due to requirement REV-6.2.4-03A of ETSI EN 319 411-1 [i.17], the validity of a "short-term certificate" is limited to at most 24 hours.

5.2.3 ASN.1 Module

GEN-5.2.3-01: The ASN.1 module defined in the present clause shall import the types and structures from IETF RFC 5912 [6] as written in the import part of the module.

```

ETSIValAssuredCertMod
{ itu-t(0) identified-organization(4) etsi(0) id-cert-profile(194121) id-mod(0)
  id-mod-validity-assured(1) v1(0) }

DEFINITIONS ::= BEGIN
-- EXPORTS All -
IMPORTS

EXTENSION
FROM PKIX-CommonTypes-2009
{ iso(1) identified-organization(3) dod(6) internet(1) security(5) mechanisms(5) pkix(7)
}

```

```
    id-mod(0) id-mod-pkixCommon-02(57) }  
;  
-- Extensions  
  
id-etsi-ext      OBJECT IDENTIFIER ::= { itu-t(0) identified-organization(4) etsi(0)  
                                         id-cert-profile(194121) 2 }  
  
-- Extension for short-term certificate  
  
id-etsi-ext-valassured-ST-certs      OBJECT IDENTIFIER ::= { id-etsi-ext 1 }  
  
ext-etsi-valassured-ST-certs      EXTENSION ::= { SYNTAX NULL IDENTIFIED BY  
                                         id-etsi-ext-valassured-ST-certs }  
  
END
```

Annex A (informative): Change history

Date	Version	Information about changes
February 2016	V1.1.1	Publication as ETSI EN 319 412-1.
March 2018	V1.1.2	1. Clause 5.1.4 Legal person semantics identifier add to list of initial characters. 3) "PSD" for identification based on national authorization number of a payment service provider under Payment Services Directive (EU) 2015/2366. This uses the extended structure as defined in ETSI TS 119 495 [3], clause 5.2.1. 2. Clause 5.1.4 change numbering of current item 3) to item 4). 3. Add to 2.1 Normative references: ETSI TS 119 495 Electronic Signatures and Trust Infrastructures (ESI); Sector Specific Requirements; Qualified Certificate Profiles and TSP Policy Requirements under the payment services Directive 2015/2366/EU.
May 2018	V1.2.1	Publication as ETSI TS 119 412-1 (same technical content as v1.1.2).
July 2019	V1.2.2	Integration of CR ESI(18)64_017 to include LEIs.
August 2019	V1.3.1	Publication as ETSI TS 119 412-1 [i.14].
December 2019	V1.3.2	Aligning EN with TS text and integrating CR on eID representation in ESI(17)59_061 & CR on validity assured certificates in ESI(19)68_073r4.
January 2020	V1.3.3	CR on country codes in ESI(20)69_007r1.
March 2020	V1.3.4	Editorial corrections and update of reference [5]. Version approved by TC ESI for submission to EN Approval Procedure.
March 2021	V1.4.2	Publication as ETSI EN 319 412-1 same technical content as ETSI TS 119 412-1.
April 2023	V1.4.5	Updated to allocate reference number to each requirement in line with ETSI EN 319 411-1 [i.17].
February 2025	V1.7.0	ASN.1 corrections in clause 5.2.3 (CR#1). Addition of "EID" to clause 5.1.3 NAT-5.1.3-03 (CR#2). Addition of LEG-5.1.4-07 and LEG-5.1.4-08 to handle the subdivision in NTR (CR#3). Modification of the definition of PSD in clause 5.1.4 LEG 5.1.4-03 3) to cover financial institutions outside of the EU (CR#4). Correction of VAT and TIN types in clauses 5.1.3 and 5.1.4 (CR#5). Addition of a note to clause 5.2.2 (CR#6).

History

Version	Date	Status
V1.0.1	July 2015	Publication as ETSI TS 119 412-1 (withdrawn)
V1.1.1	February 2016	Publication
V1.2.1	May 2018	Publication as ETSI TS 119 412-1
V1.3.1	August 2019	Publication as ETSI TS 119 412-1
V1.4.0	April 2020	Publication as ETSI TS 119 412-1
V1.4.1	June 2020	Publication
V1.4.1	July 2020	Publication as ETSI TS 119 412-1
V1.4.4	May 2021	Publication
V1.5.1	September 2023	Publication
V1.6.1	June 2025	Publication
V1.7.0	February 2026	ENAP process AP 20260504: 2026-02-03 to 2026-05-04