

Registry for identifiers assigned by the Swedish e- identification board

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1 Background

The implementation of a Swedish infrastructure for electronic identification and electronic signature requires various types of identifiers to represent objects in protocols and data structures.

This document defines the structure for identifiers assigned by the Swedish e-identification board and provides a registry for assigned identifiers.

The following types of identifiers are assigned in this document:

- URI (Uniform Resource Identifier)
- OID (Object Identifier)

This registry is limited to registering assigned identifiers. Identifiers in this registry are typically defined within the context of a separate specification, which defines the semantic meaning of the identifier within the context of a particular protocol and/or data structure. Where applicable, this registry provides references to the documents where the exact meaning of each identifier is defined.

2 Structure

The basic structure of identifiers assigned by the Swedish e-identification board is based on the following components

Grundstruktur för E-legitimationsnämndens identifierare bygger på följande grundläggande parametrar:

Parameter	Description
Prefix	The leading portion of the identifier which associates the identifier with this registry and identifies the Swedish e-identification board as the assigner of the identifier.
Category	A code for the category of an identifier. Each category is a defined context for a collection of identifiers within the scope of a protocol, service or object type.
Version (optional)	An indicator of the version of the object represented by this identifier. The exact semantic of the version indicator, if present, is defined within each category.
Identifier	A sequence of characters or numbers (according to the syntax of the identifier type), which distinguish this identifier among all other identifiers within a particular prefix, category and version.

2.1 URI identifiers

All URI identifiers in this registry are of URL type (Uniform Resource Locator), assigned under the prefix “http://id.elegnamnden.se”.

These URL identifiers are defined using the following structure:

http://id.elegnamnden.se/{category}[/]{version}[/]{identifier}

2.2 OID identifiers

An object identifier consists of a node in a hierarchically-assigned namespace, formally defined using the ITU-T's ASN.1 standard, X.690. Successive numbers of the nodes, starting at the root of the tree, identify each node in the tree. Designers set up new nodes by registering them under the node's registration authority. The root of the tree contains the following three arcs:

- 0: ITU-T
- 1: ISO
- 2: joint-iso-itu-t

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171 94 SOLNA

Besöksadress
Korta gatan 10

Telefon växel
010-574 21 00

E-postadress
kansliet@elegnamnden.se

Object identifiers are in this document represented as a string containing a sequence of integers separated by a dot (“.”), e.g. 2.3.4.25, where each integer represents a node in the hierarchy.

The node assigned to the Swedish e-identification board is:

1.2.752.201

This represents a hierarchical structure of nodes in the following sequence:

- 1 = ISO
- 2 = ISO member body
- 752 = The Swedish Standardization Institute (SIS-ITS)
- 201 = Swedish e-identification board

This node is used as the Prefix (root node) for all OID identifiers in this registry, using the following structure:

1.2.752.201.{category}.{identifier}

OID identifiers according to this structure assign a node for each category and an identifier node under this category node. No node in this structure is assigned as version node. Version is handled, when necessary, within the identifier portion of the OID, typically by assigning a new identifier.

3 Assigned Identifiers

3.1 URL identifiers

The following category codes are defined:

Code	Category
loa	Level of Assurance. Identifiers representing level of assurance for federated identity (Tillitsnivå)
ec	Entity Category. Generic service type declarations for service matching.
sprop	Service Property. Specific entity category identifiers for specific service property.
st	Service Type. Specific entity category identifiers for defined types of services in the federation.
csig	Central Signing Service – Identifiers used by the central signing service infrastructure
auth-cont	Authentication context information schema
sig-status	Sign response status codes
ns	XML Schema namespaces

3.1.1 Level of Assurance (Tillitsnivå)

Assurance levels (Tillitsnivåer) according to the assurance framework for the Swedish eID framework (Tillitsramverket för svensk e-legitimation).

URL	Object	Reference
http://id.elegnamnden.se/loa/1.0/loa1	Assurance level 1	[TillitRamv]
http://id.elegnamnden.se/loa/1.0/loa2	Assurance level 2	[TillitRamv]
http://id.elegnamnden.se/loa/1.0/loa3	Assurance level 3	[TillitRamv]
http://id.elegnamnden.se/loa/1.0/loa4	Assurance level 4	[TillitRamv]

3.1.2 Entity category identifiers

Identifiers for categories of service entities, specified as an EntityAttribute in the federation metadata.

3.1.2.1 Service Entity Categories

Identifiers for entity categories representing alternative sets of requirements.

URL	Object	Reference
http://id.elegnamnden.se/ec/1.0/loa2-pnr	Service consuming/providing assertions based on assurance level 2, implementing the attribute profile "ELN-AP-Pnr-01".	[EntityCat]
http://id.elegnamnden.se/ec/1.0/loa3-pnr	Service consuming/providing assertions based on assurance level 3, implementing the attribute profile "ELN-AP-Pnr-01".	[EntityCat]
http://id.elegnamnden.se/ec/1.0/loa4-pnr	Service consuming/providing assertions based on assurance level 4, implementing the attribute profile "ELN-AP-Pnr-01".	[EntityCat]

3.1.2.2 Entity Categories for Service Properties

Identifiers for defined service properties.

URL	Object	Reference
http://id.elegnamnden.se/sprop/1.0/mobile-auth	Service adapted to require/provide user authentication based on mobile devices.	[EntityCat]

3.1.2.3 Entity Categories for Service Type

Identifiers for defined service types.

URL	Object	Reference
http://id.elegnamnden.se/st/1.0/sigservice	Electronic signature service	[EntityCat]

3.1.3 Central Signing

Identifiers used in the protocol for requesting services from a central signing service.

URL	Object	Reference
http://id.elegnamnden.se/csig/1.0/dss-ext/ns	XML schema name space for the Eid2 protocol extensions to the OASIS DSS protocol.	[CSignProt]
http://id.elegnamnden.se/csig/1.0/dss-ext/profile	Implementation profile identifier for the Eid2 protocol extensions to the OASIS DSS protocol.	[CSignProf]

3.1.4 Authentication context

Identifiers associated with the Authentication Context X.509 extension

URL	Object	Reference
http://id.elegnamnden.se/auth-cont/1.0/saci	XML schema name space for SAML Authentication Context Information in the Authentication Context X.509 certificate extension	[AuthContExt]

3.1.5 Sign Response Status Codes

Status code identifiers for the Eid2 DSS Extension for SAML based Central Signing service. The following identifiers provide defined status codes for inclusion in a <ResultMinor> element of the <Result> element of a sign response message according to the OASIS standard “Digital Signature Service Core Protocols, Elements, and Bindings Version 1.0”.

URL	Object	Reference
http://id.elegnamnden.se/sig-status/1.0/req-expired	The time window for the signature request has expired.	[OASIS-DSS]
http://id.elegnamnden.se/sig-status/1.0/user-mismatch	The authenticated user does not match the signer identity attributes in the request.	[OASIS-DSS]
http://id.elegnamnden.se/sig-status/1.0/unsupported-loa	The requested level of assurance for user authentication is not supported.	[OASIS-DSS]

3.1.6 XML Schema namespaces

URI identifiers for XML Schema namespaces.

URL	Object	Reference
http://id.elegnamnden.se/ns/1.0/loa-context-params	Parameter structure for Level of Assurance context class declarations.	[AuthContClass]

3.2 OID identifiers

Defined categories:

Code	Category
0	ASN.1 modules
1	Test identifiers
2	Policy identifiers
3	Attribute identifiers
4	"Qualified Certificate" Statement identifiers (RFC 3739)
5	X.509 certificate extension identifiers

The following OIDs are defined in the ASN.1 declarations in 3.2.1:

OID	Object	Reference
1.2.752.201.5.1	Authentication Context extension	[AuthContExt]
1.2.752.201.3.1	Organization Affiliation Attribute	[AttrProf]

3.2.1 ASN.1 declarations

```
-- Object Identifier Registry for the Swedish E-identification board
id-eleg OBJECT IDENTIFIER ::= { iso(1) member-body(2) se(752) e-legitimationsnamnden(201) }

-- E-legnamnden arcs
id-mod   OBJECT IDENTIFIER ::= { id-eleg 0 } -- ASN.1 modules
id-test  OBJECT IDENTIFIER ::= { id-eleg 1 } -- OIDs for test
id-pol   OBJECT IDENTIFIER ::= { id-eleg 2 } -- Policy
id-attr  OBJECT IDENTIFIER ::= { id-eleg 3 } -- Attributes
id-qcs   OBJECT IDENTIFIER ::= { id-eleg 4 } -- QC Statement
id-ce    OBJECT IDENTIFIER ::= { id-eleg 5 } -- Cert Extensions

-- E-legnamnden modules
id-mod-qcAuthContext OBJECT IDENTIFIER ::= { id-mod 1 }

-- E-legnamnden OIDs for test

-- E-legnamnden Policy

-- E-legnamnden Attributes
id-attr-org-affiliation OBJECT IDENTIFIER ::= { id-attr 1 }

-- E-legnamnden QC Statement extension
id-qcs-sid      OBJECT IDENTIFIER ::= { id-qcs 1 } -- Semantics Identifiers
id-qcs-statement OBJECT IDENTIFIER ::= { id-qcs 2 } -- QC statements

-- E-legnamnden Certificate Extensions
id-ce-authContext OBJECT IDENTIFIER ::= { id-ce 1 }
```

4 References

[OASIS-DSS]

[Digital Signature Service Core Protocols, Elements, and Bindings Version 1.0.](#)

[TillitRamv]

[Tillitsramverk för Svensk e-legitimation](#)

[AuthContExt]

[Authentication Context Certificate Extension Draft 04, March 11, 2013](#)

[EntityCat]

[Entity Categories for the Swedish eID Framework](#)

[CSignProt]

[Eid2 DSS Extension for SAML based Central Signing Service](#)

[CSignProf]

[Implementation Profile for Using OASIS DSS in Central Signing Services](#)

[AttrProf]

[Attribute Specification for the Swedish eID Framework](#)

[AuthContClass]

[Authentication Context Classes for Levels of Assurance for the Swedish eID Framework](#)

5 Changes between versions

Changes between version 1.0 and version 1.1:

- In chapter 3.1.2.1, “Service Entity Categories”, service entity categories for Level of Assurance 2 and 4 were introduced.
- Chapter 3.1.6, “XML Schema namespaces”, was added.
- Typos were fixed.