

Digitaliseringsstyrelsen

Nemlog-in

Nemlog-in STS

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1 Introduction

The purpose of this document is to describe how service providers and web service consumers can test the integration to the Security Token Service from here on named STS in the Nemlog-in integration test environment.

The audience is it-technicians who is going to perform the technical integration and testing and it is assumed that the reader already have knowledge about OIO Identity-based Web Services.

OIO Identity-based Web Services description and detailed information about the different usage scenarios are documented on digitaliser.dk [OIOIDWS].

Comments are used throughout the document and intended as a guide for the reader.

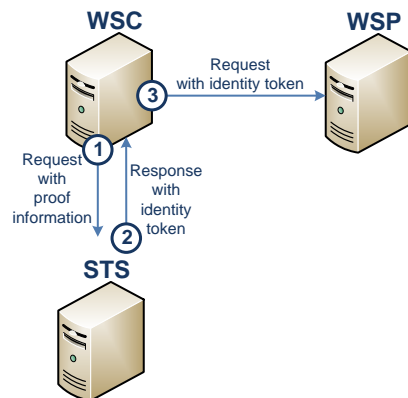
The document consists of the following sections:

- Section 2 describes the service and service methods
- Section 3 contains the configuration needed to call the STS service in the integration test environment
- Section 4 describes the test data available for the STS service

2 Service description

The Nemlog-in2 STS Service exposes a method for exchanging security tokens that can be used access specific web services.

The figure below illustrates the basic processing model:



Processing model and usage scenarios are described in detail in [STS-RULES] sections 2.1 and 2.2.

2.1 IssueToken

The IssueToken method is used to exchange a security token to an identity token usable with a specific web service provider. As of March 2015 the term "identity token" includes the variants for "System User" and "Local IDP" [STS-RULES].

Syntax:

IssueToken(stsRequest1 request)

- stsRequest1 message is described in detail in [STS-RULES] section 2.3

Returns:

stsResponse

- a security token containing the identity token for usage with the specified web service provider. The format is described in detail in [STS-RULES] section 2.5

Fault:

The STS returns WSTrust faultcodes.

Fault code	Fault string	Description
wst:InvalidRequest	The request was invalid or malformed	Validation of message failed with missing/illegal elements, attributes or values.
Wst:FailedAuthentication	Authentication failed	Sessionid, signature, cvr or certificatetype errors
wst:RequestFailed	The specified request failed	STS service failures frontend/backend
wst:InvalidSecurityToken	Security token has been revoked	Not used
wst:BadRequest	The specified RequestSecurityToken is not understood.	Message does not conform to general wstrust schema
wst:ExpiredData	The request data is out-of-date	<p>If Envelope/Header/Security/Timestamp/Expires value is understood but not accepted this error will be returned</p> <p>Or</p> <p>If the NotOnOrAfter-attribute is understood but exceeded on either Envelope/RequestSecurityToken/ActAs/Assertion/Subject/SubjectConfirmationData or Envelope/RequestSecurityToken/ActAs/Assertion/Conditions</p>
wst:InvalidTimeRange	The requested time range is invalid or unsupported	<p>If unsupported or invalid values in Envelope/Body/RequestSecurityToken/LifeTime will return this error.</p> <p>(Requested lifetime will be overridden with default sts lifetime policy)</p>

3 Configuration

3.1 Creating a WSC service for Integration test environment

To execute a STS call the proper registration of your service according to the test scenario must be configured and migrated to integration test in the CSS – "Tilslutning and administration" system.

Please refer to the user manual [CSS – USERMANUAL] for a more detailed description on how to accomplish this.

For the three scenarios there are different requirements for the WSC service configuration:

- Bootstrap token scenario
In this scenario your service must be configured to have the [urn:liberty:disco:2006-08:DiscoveryEPR](#) attribute asserted, which will contain the bootstrap token from Nemlogin used for subsequent STS calls.
- Local token scenario
In this scenario the user identity is proofed by a bootstrap token that is obtained from WSC's local STS hosted by the WSC organization itself. The local STS must be trusted by Nemlog-in STS. The local STS must be registered as WSC in Nemlog-in CSS and enter terms and conditions with Digitaliseringsstyrelsen.
As of march 2015 there is a local IDP variant to the Local token scenario: it is determined by the registration in CSS which variant (local STS or local IDP) is in use for the WSC.
- Signature scenario
In this scenario the user identity is proofed by the user signing the request to Nemlog-in STS. The scenario contains no bootstrap tokens. The WSC constitutes in this scenario any application hosted by any organization and no trust is established directly between WSC and Nemlog-in STS.
As of March 2015 there is a new variant "System User" to the Signature scenario allowing a "system" to sign the request (rather than a user). The System User variant and it's different versions is configured for the WSP in CSS.

3.2 Binding

Connection to the web services is only allowed via SSL.

URL to the STS web service in integration test environment:

<https://SecureTokenService.test-nemlog-in.dk/SecurityTokenService.svc>

URL to STS web service in Production:

<https://SecureTokenService.nemlog-in.dk/SecurityTokenService.svc>

The STS used SOAP version 1.1 [SOAP11]. Hence the STS expects the following http headers and values when requesting a token:

SOAPAction: <http://docs.oasis-open.org/ws-sx/ws-trust/200512/RST/Issue>

Content-Type: text/xml;charset=utf-8

3.3 Nemlogin STS signing certificates

STS signs the response messages. The certificates used to validate the signature can be found on the testportal site.

Integration test certificate

[IntegrationTestSigning.cer]

Production certificate

[ProductionSigning.cer]

4 Test data

This section describes the available test data and documents a test call with response for each of the three usage scenarios. It is not possible to run the test calls directly against the sts test service as they will have expired time instant values.

4.1 WSP test certificate

In integration test a test web service provider WSP has been configured with the entityid <https://saml.nnit001.dmz.inttest>. This entity can be used as the test WSP if you do not create one for your system using the Nemlogin administration site.

The response assertion for the WSP entity <https://saml.nnit001.dmz.inttest> is encrypted with the public key of the DanID Voces testcertificate. Included in this document is a link to the certificate including the private key which can be used for decrypting the response for that WSP.

[DanIDVocesGyldig.p12]

4.2 WSP test endpoint

Integration test also has an "ECHO" identity based web service, which can be called with the token issued by STS. The web service simply echoes the request.

Connection to the echo web service is only allowed via SSL.

URL to the STS "ECHO" web service in integration test environment:

<https://securetokenwsp.test-nemlog-in.dk/SecurityTokenServiceMessageEcho.svc>

4.3 Bootstrap token scenario

In this scenario your service is configured to receive urn:liberty:disco:2006-08:DiscoveryEPR attributes from NemLogin when a user login. The value of this attribute is used to request an identity token for the test WSP <https://saml.nnit001.dmz.inttest> in the below example request against sts.

Request and response messages are described in detail in [STS-RULES].


```

    <Transforms>
      <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
    </Transforms>
    <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256" />
    <DigestValue>gC0rvFzqTwR4HgCX51iQ6AnQuriSEQw9PUZ1HDD9nn0=</DigestValue>
  </Reference>
  <Reference URI="#body">
    <Transforms>
      <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
    </Transforms>
    <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256" />
    <DigestValue>uGMGz3+ryLv0UqCRYI2vxbHZLtwjwMpAFvf2g691is8=</DigestValue>
  </Reference>
</SignedInfo>

```

```

<SignatureValue>UpsGHBJS1L1BiaBwvGS7cz4G0vuJCRCXQrXg54Wm1rDJ/XjFQ1bRgvoyLdFFa9pnWmLt10y
bxGMw+v98x0L0hyBDzrQIQp/TjWjwapWxvz4yoexN0u/C3htCD0INofwTWyRhgfPjCRS7jc4XJdtlvQr2npjq4
Hy8mdL1jAI87DAUKpiu4Gv62Xj+1v0C/FvnXaGfpmMMD5NWdbsghnFOu3ZNwKKKT2fPD1mIsbgFLvYH7iP2Dd
0TKJ30pH+8rgkGcXbaTwJSWjNycJFjpK51GbJiA/DOVykiAyGcZJUMA026kYZn1vSWUNOAAaCtJTDC+6SQ6wA1
YwPUMUnkJ3oig=</SignatureValue>

```

```

  <KeyInfo>
    <o:SecurityTokenReference xmlns:o="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <o:Reference URI="#sec-binsectoken" />
    </o:SecurityTokenReference>
  </KeyInfo>
</Signature>
</wsse:Security>
</S11:Header>
<S11:Body wsu:Id="body">
  <wst:RequestSecurityToken Context="urn:uuid:9cefa774-2922-4a49-afbe-d7d81fb11d79">
    <wst:RequestType>http://docs.oasis-open.org/ws-sx/ws-
trust/200512/Issue</wst:RequestType>
    <wst14:ActAs>
      <saml2:Assertion ID="984be972-3e03-4002-afb5-906d56fea0ca" IssueInstant="2015-
03-19T09:06:04.2Z" Version="2.0">
        <saml2:Issuer>https://saml.nemlog-in.dk</saml2:Issuer>
        <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
          <SignedInfo>
            <CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-
c14n#" />
            <SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#rsa-
sha256" />
            <Reference URI="#984be972-3e03-4002-afb5-906d56fea0ca">
              <Transforms>
                <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature" />
              </Transforms>
              <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256" />

```



```
<saml2:Conditions NotBefore="2015-03-19T09:06:04.2Z" NotOnOrAfter="2015-03-19T17:06:04.2Z">
  <saml2:AudienceRestriction>
    <saml2:Audience>https://bootstrap.sts.nemlog-in.dk/</saml2:Audience>
  </saml2:AudienceRestriction>
</saml2:Conditions>
<saml2:AttributeStatement>
  <saml2:Attribute NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" Name="dk:nemlogin:saml:attribute:IdPSessionIndex">
    <saml2:AttributeValue xsi:type="xs:string">58-31-13-5C-12-02-45-D0-57-35-33-3E-B9-D9-D7-8D-FE-70-D4-27</saml2:AttributeValue>
  </saml2:Attribute>
  <saml2:Attribute NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" Name="dk:nemlogin:saml:attribute:SpEntityId">
    <saml2:AttributeValue xsi:type="xs:string">https://sp1.dev-nemlog-in.dk/saml2:AttributeValue
  </saml2:Attribute>
  <saml2:Attribute FriendlyName="SpecVer"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
Name="dk:gov:saml:attribute:SpecVer">
    <saml2:AttributeValue xsi:type="xs:string"></saml2:AttributeValue>
  </saml2:Attribute>
  <saml2:Attribute FriendlyName="AssuranceLevel"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
Name="dk:gov:saml:attribute:AssuranceLevel">
    <saml2:AttributeValue xsi:type="xs:string">True</saml2:AttributeValue>
  </saml2:Attribute>
  <saml2:Attribute FriendlyName="Surname"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" Name="urn:oid:2.5.4.4">
    <saml2:AttributeValue xsi:type="xs:string"></saml2:AttributeValue>
  </saml2:Attribute>
  <saml2:Attribute FriendlyName="CommonName"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" Name="urn:oid:2.5.4.3">
    <saml2:AttributeValue xsi:type="xs:string"></saml2:AttributeValue>
  </saml2:Attribute>
  <saml2:Attribute FriendlyName="Uid"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
Name="urn:oid:0.9.2342.19200300.100.1.1">
    <saml2:AttributeValue xsi:type="xs:string"></saml2:AttributeValue>
  </saml2:Attribute>
  <saml2:Attribute FriendlyName="Mail"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
Name="urn:oid:0.9.2342.19200300.100.1.3">
    <saml2:AttributeValue xsi:type="xs:string"></saml2:AttributeValue>
  </saml2:Attribute>
  <saml2:Attribute FriendlyName="serialNumber"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" Name="urn:oid:2.5.4.5">
    <saml2:AttributeValue xsi:type="xs:string"></saml2:AttributeValue>
  </saml2:Attribute>
```

```
<saml2:Attribute FriendlyName="userCertificate"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
Name="urn:oid:1.3.6.1.4.1.1466.115.121.1.8">
  <saml2:AttributeValue xsi:type="xs:string"></saml2:AttributeValue>
</saml2:Attribute>
<saml2:Attribute FriendlyName="Certificate issuer attribute"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
Name="urn:oid:2.5.29.29">
  <saml2:AttributeValue xsi:type="xs:string"></saml2:AttributeValue>
</saml2:Attribute>
<saml2:Attribute FriendlyName="CprNumberIdentifier"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
Name="dk:gov:saml:attribute:CprNumberIdentifier">
  <saml2:AttributeValue xsi:type="xs:string"></saml2:AttributeValue>
</saml2:Attribute>
<saml2:Attribute FriendlyName="UniqueAccountKey"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
Name="dk:gov:saml:attribute:UniqueAccountKey">
  <saml2:AttributeValue xsi:type="xs:string"></saml2:AttributeValue>
</saml2:Attribute>
<saml2:Attribute FriendlyName="Privileges"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
Name="dk:gov:saml:attribute:Privileges_intermediate">
  <saml2:AttributeValue
xsi:type="xs:string">PD94bWwgdmVyc2l1bWVj0iMS4wIiB1bmNvZGluZz0iVVRGLTgiPz48YnBw01ByaXZpc3Qg
GVnZUxpc3Qg
eG1sbnM6eHNpPSJodHRwOi8vd3d3LnczLm9yZy8yMDAxL1hNTFNjaGVtYS1pbnN0YW5jZSIgeG1s
bnM6YnBwPSJodHRwOi8vaXRzdC5kay9vaW9zYW1sL2Jhc2ljX3ByaXZpbG9wcm9maWw1Ij48
UHJpdmlsZWd1R3JvdXAgU2NvcGU9InVybWVj0iMS4wIiB1bmNvZGluZz0iVVRGLTgiPz48YnBw01ByaXZpc3Qg
cm12aWw1Z2VHcm91cD48L2JwcDQcm12aWw1Z2VMaXN0Pg=</saml2:AttributeValue>
  </saml2:Attribute>
<saml2:Attribute FriendlyName="IsYouthCert"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
Name="dk:gov:saml:attribute:IsYouthCert">
  <saml2:AttributeValue xsi:type="xs:string"></saml2:AttributeValue>
</saml2:Attribute>
<saml2:Attribute FriendlyName="PidNumberIdentifier"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
Name="dk:gov:saml:attribute:PidNumberIdentifier">
  <saml2:AttributeValue xsi:type="xs:string"></saml2:AttributeValue>
</saml2:Attribute>
<saml2:Attribute FriendlyName="Postal address"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
Name="urn:oid:2.5.4.16">
  <saml2:AttributeValue xsi:type="xs:string"></saml2:AttributeValue>
</saml2:Attribute>
<saml2:Attribute FriendlyName="Title"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
Name="urn:oid:2.5.4.12">
```

```

        <saml2:AttributeValue xsi:type="xs:string"></saml2:AttributeValue>
      </saml2:Attribute>
      <saml2:Attribute FriendlyName="Organization unit"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
Name="urn:oid:2.5.4.11">
        <saml2:AttributeValue xsi:type="xs:string"></saml2:AttributeValue>
      </saml2:Attribute>
    </saml2:AttributeStatement>
  </saml2:Assertion>
</wst14:ActAs>
<wsp:AppliesTo>
  <wsa:EndpointReference>
    <wsa:Address>https://saml.WSPSUA11.env/wsa:Address>
    </wsa:EndpointReference>
  </wsp:AppliesTo>
</wst:RequestSecurityToken>
</S11:Body>
</S11:Envelope>

```

Commented [A4]: Base64 decoded bootstrap token issued by Nemlogin. Can be sent encoded as received by Nemlogin and is only decoded here to illustrate contents

Commented [A5]: Entityid of the WSP to get an identity token for

4.3.2 Response envelope example (decrypted)

```

<S11:Envelope xmlns:S11="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:wsa="http://www.w3.org/2005/08/addressing" xmlns:wsu="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd"
xmlns:wssse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-
1.0.xsd">
  <S11:Header>
    <wsa:Action wsu:Id="action">http://docs.oasis-open.org/ws-sx/ws-
trust/200512/RST/Issue/wsa:Action>
    <wsa:MessageID wsu:Id="messageid">uuid:ee4e62b5-e930-4b09-9777-
67bb5308c45c</wsa:MessageID>
    <wsa:RelatesTo wsu:Id="relatesto">uuid:40ffa8d6-c575-4f38-8204-
8a5d541d5e59</wsa:RelatesTo>
    <wsse:Security S11:mustUnderstand="1">
      <wsu:Timestamp wsu:Id="sec_timestamp">
        <wsu:Created>2015-03-19T09:06:17.580Z</wsu:Created>
        <wsu:Expires>2015-03-19T17:06:17.580Z</wsu:Expires>
      </wsu:Timestamp>
      <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
        <SignedInfo>
          <CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-
c14n#"></CanonicalizationMethod>
          <SignatureMethod Algorithm="http://www.w3.org/2000/09/xmldsig#rsa-
sha1"></SignatureMethod>
          <Reference URI="#action">
            <Transforms>
              <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
            </Transforms>

```

```
<DigestMethod
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
  <DigestValue>1hj8fpM7T5rcOsNRpPx3A3p3AkM=</DigestValue>
</Reference>
<Reference URI="#messageid">
  <Transforms>
    <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
  </Transforms>
</DigestMethod>
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
  <DigestValue>bBLo2guR70AN36ap5Qk8k6qIxfI=</DigestValue>
</Reference>
<Reference URI="#relatesto">
  <Transforms>
    <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
  </Transforms>
</DigestMethod>
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
  <DigestValue>xxCvtfcbPZPULgiIXGPx82yQ+Bw=</DigestValue>
</Reference>
<Reference URI="#sec_timestamp">
  <Transforms>
    <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
  </Transforms>
</DigestMethod>
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
  <DigestValue>05bwXa4Lh6tQJAQtJKGx2G71584=</DigestValue>
</Reference>
<Reference URI="#body">
  <Transforms>
    <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
  </Transforms>
</DigestMethod>
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
  <DigestValue>SvowhgBcd4P+ttLJ/ov01v7ZjIc=</DigestValue>
</Reference>
</SignedInfo>
<SignatureValue>hJYbPDB3Xz/TVtSQ61Py30itonNYhmKk/FQLkHKA4oim1mFPgg8k2SnfUnMYXrn3qb0TyT
bU0aocNviqXog7t4qWN/Gx6CAxfeeFCwbnwMigtXI+5ZuM496EhDoFEpZgEKnqkh7CJkvs261a7y+RwKHuswYx
rw/16kqw1BkXmBTjvU00DW4gjX6kSLkIpmmqPpb3bC6PMU05Dy1eKRXRy92gtg1p8MzX/V3PHVUX0mn77M+yP
3+WUai0ZUK0+50ncsF3mdBo7a/Ge/CRdHiNw30oGESEZusFMn/R8HVd6HOSA+dm+D7YZBVnyT2m9vZVx/S/KQM
I+oQsk70mUlijQ=</SignatureValue>
  </Signature>
</wsse:Security>
</S11:Header>
<S11:Body wsu:Id="body">
```



```

<RequestSecurityTokenResponseCollection xmlns="http://docs.oasis-open.org/ws-
sx/ws-trust/200512">
  <RequestSecurityTokenResponse Context="urn:uuid:9cefa774-2922-4a49-afbe-
d7d81fb11d79">
    <TokenType />
    <AppliesTo xmlns="http://schemas.xmlsoap.org/ws/2002/12/policy">
      <EndpointReference xmlns="http://www.w3.org/2005/08/addressing">
        <Address>https://saml.WSPSUAll.env</Address>
      </EndpointReference>
    </AppliesTo>
    <RequestedSecurityToken>
      <Assertion ID="_2b439124-f8c0-448a-bc77-ca7968824aec" IssueInstant="2015-03-
19T09:06:17.580Z" Version="2.0" xmlns="urn:oasis:names:tc:SAML:2.0:assertion">
        <Issuer Format="urn:oasis:names:tc:SAML:2.0:nameid-
format:entity">https://bootstrap.sts.nemlog-in.dk/</Issuer>
        <ds:Signature xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
          <ds:SignedInfo>
            <ds:CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-
exc-c14n#" />
            <ds:SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-
more#rsa-sha256" />
            <ds:Reference URI="#_2b439124-f8c0-448a-bc77-ca7968824aec">
              <ds:Transforms>
                <ds:Transform
Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature" />
                <ds:Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#"
/>
              </ds:Transforms>
            <ds:DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256"
/>
            <ds:DigestValue>80eHENpWgGid8PQSGuWSPAEORd1+DwGqIF/uD9E4LBs=</ds:DigestValue>
          </ds:Reference>
          </ds:SignedInfo>
          <ds:SignatureValue>o7+u61xbH5x9J6UaH/qyTcL+GvhgoSXLxGcW/qXuJy0h1Cv0+XHEce6gDFIngR/w/CG
Riv7EjZSsG18o9cU3JNSEm0D04GtfoCyuCPw2fXMOKFODcfGf8AwnVhPJuG9E/LgBJQNZsbME4YyA3Rk1Vcs4
+R3J51PrRiWkojntEGlX3fSH/3vfhdTX3wvDuf+rVM2vX2Kx89bQRNyEEPuOemidrZ1CTciGRA3m1W12eN3MB
o7sDPKsK9od+w/mnnb+AEJwQ5/JhRNA/pJp2XfaFrDcubF1WM3mcdhu9j2Y8vAwffQuKnZLMBw4LCAXYgm7ofv
bnNrrTvndwC/G3/bQ==</ds:SignatureValue>
          <KeyInfo xmlns="http://www.w3.org/2000/09/xmldsig#">
            <X509Data>
              <X509Certificate>MIIGFTCCB2gAwIBAgIETBI9xjANBgkqhkiG9w0BAQsFADBIMQswCQYDVQQGEWJESzESM
BAGA1UECgwJVfJVU1QyNDAA4MSUwIWIYDVQQDBXU1VTVDI0MDggU3lzdGVtdGVzdCBWSU1JIEENBMBA4XDTE0MDE
zMDUwMjAzN1oXDTE3MDUwMDEwMjUwYzUyY2VudG1maWthdCkwggEiMA0GCSqGSIb3DQEBAQUAA4IBDwAwggEKAoIBAQcPu
3eSu0HkpTrawmmtaeBezZL7NnNo/L4fIWXawXUcIfcnqSp5ZKpjBm4mzeRRwqkY10n0WfR0eqMgOCXRnNnRd
+I2aWWSWIMPYVGvZqT2/MQPo2UvDZ2Z/j4xyQDUx7L+16e1sq7IDGfSvzwrE/QU98Zr3bm3HvbUTK5F4ZE2w4R
eB2UU2QJowDUrdMNM0Q57Bx7U0obqw1Nb3VYVwYwdgoJwQik+Jonm8/i4mNeKnGstYTZuEJTO1LG0T3QOrqJM
Y8COYvIuTy14nC+cZAcSV4nWCnZ3MzTX6CohkzBG87W3B1PH9BDnrjoGyilwhCorjgoFMkuIWgzgv2MDMjAgMBA

```

Commented [A6]: EntityId of the WSP this identity token is valid for


```

ItB9Lz0RT/zAJBgNVHRMEAjAAMA0GCSqGSIb3DQEBCwUAA4IBAQA0Pd04cFSceKoZgug3x+GBFoYzDgYBZR/dS
JexU3N9+e5wTgwtterC9Ykk3BTv4V1B16NFUjP9TPq0ZaCkqTdWlXruy0wNKvMNGacVZJhS91baTW3ZnNIhAE5x
5gDxvsjuRVc0xZvyAhT7jKp4J62haMoDt+pRsZoDcVCN0KuLWL+Lh5efaB9vSCMSyKUjXf9A/F21nhBiNsECsW
jNXyt2/igbTuYCST12dTcPhs+sDEAnaZ1TJa2B/CMUPo15niVLFu0WCPPyxurUZfB3bK/9qdHT60JvaVezwAAm
CWYEW7CW4AAGKDPMDG1qsRxFga0bB3bd5zCbnJkK/SNhg8/lc</X509Certificate>
  </X509Data>
  </KeyInfo>
</SubjectConfirmationData>
</SubjectConfirmation>
</Subject>
<Conditions NotBefore="2015-03-19T09:06:17.580Z" NotOnOrAfter="2015-03-
19T17:06:17.580Z">
  <AudienceRestriction>
    <Audience>https://saml.WSPSUA11.env/Audience</Audience>
  </AudienceRestriction>
</Conditions>
<AttributeStatement>
  <Attribute Name="dk:gov:saml:attribute:SpecVer"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" FriendlyName="SpecVer">
    <AttributeValue>DK-SAML-2.0</AttributeValue>
  </Attribute>
  <Attribute Name="dk:gov:saml:attribute:AssuranceLevel"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="AssuranceLevel">
    <AttributeValue>2.0</AttributeValue>
  </Attribute>
  <Attribute Name="urn:oid:2.5.4.4"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" FriendlyName="surName">
    <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
  </Attribute>
  <Attribute Name="urn:oid:2.5.4.3"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="CommonName">
    <AttributeValue>Morten Mortensen</AttributeValue>
  </Attribute>
  <Attribute Name="urn:oid:0.9.2342.19200300.100.1.1"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" FriendlyName="uid">
    <AttributeValue>CVR:10213231-RID:93947552</AttributeValue>
  </Attribute>
  <Attribute Name="urn:oid:0.9.2342.19200300.100.1.3"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" FriendlyName="mail">
    <AttributeValue>MortenMortensen@kfobs.dk</AttributeValue>
  </Attribute>
  <Attribute Name="urn:oid:2.5.4.5"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="serialNumber">
    <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
  </Attribute>

```

Commented [A8]: Certificate used to sign the requestmessage as SubjectConfirmation has been set to holder-of-key

```
<Attribute Name="urn:oid:1.3.6.1.4.1.1466.115.121.1.8"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="userCertificate">
  <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
</Attribute>
<Attribute Name="urn:oid:2.5.29.29"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="Certificate issuer attribute">
  <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
</Attribute>
<Attribute Name="dk:gov:saml:attribute:CprNumberIdentifier"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="CprNumberIdentifier">
  <AttributeValue>0711550068</AttributeValue>
</Attribute>
<Attribute Name="dk:gov:saml:attribute:UniqueAccountKey"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="UniqueAccountKey">
  <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
</Attribute>
<Attribute Name="dk:gov:saml:attribute:Privileges_intermediate"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="Privileges">
  <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
</Attribute>
<Attribute Name="dk:gov:saml:attribute:IsYouthCert"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="IsYouthCert">
  <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
</Attribute>
<Attribute Name="dk:gov:saml:attribute:PidNumberIdentifier"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="PidNumberIdentifier">
  <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
</Attribute>
<Attribute Name="urn:oid:2.5.4.10"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="organizationName">
  <AttributeValue>Økonomistyrelsen // CVR:10213231</AttributeValue>
</Attribute>
<Attribute Name="dk:gov:saml:attribute:UserAdministratorIndicator"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="UserAdministratorIndicator">
  <AttributeValue>0</AttributeValue>
```

```

        </Attribute>
        <Attribute Name="dk:gov:saml:attribute:SENumberIdentifier"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="SENumberIdentifier">
        <AttributeValue>66662222</AttributeValue>
        </Attribute>
        <Attribute Name="dk:gov:saml:attribute:CvrNumberIdentifier"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="CVRnumberIdentifier">
        <AttributeValue>10213231</AttributeValue>
        </Attribute>
        <Attribute Name="dk:gov:saml:attribute:RidNumberIdentifier"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="RidNumberIdentifier">
        <AttributeValue>93947552</AttributeValue>
        </Attribute>
        <Attribute Name="urn:oid:2.5.4.65"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" FriendlyName="OCES
Pseudonym">
        <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
        </Attribute>
    </AttributeStatement>
</Assertion>
</RequestedSecurityToken>
<wst:RequestedAttachedReference xmlns:wst="http://docs.oasis-open.org/ws-
sx/ws-trust/200512">
    <wsse:SecurityTokenReference>
        <wsse:Reference URI="#encryptedassertion" />
    </wsse:SecurityTokenReference>
</wst:RequestedAttachedReference>
<wst:RequestedUnattachedReference xmlns:wst="http://docs.oasis-open.org/ws-
sx/ws-trust/200512">
    <wsse:SecurityTokenReference>
        <wsse:Reference URI="#encryptedassertion" />
    </wsse:SecurityTokenReference>
</wst:RequestedUnattachedReference>
<Lifetime>
    <Created xmlns="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-utility-1.0.xsd">2015-03-19T09:06:17.58Z</Created>
    <Expires xmlns="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-utility-1.0.xsd">2015-03-19T17:06:17.58Z</Expires>
</Lifetime>
</RequestSecurityTokenResponse>
</RequestSecurityTokenResponseCollection>
</S11:Body>
</S11:Envelope>

```

Commented [A9]: Asserted attributes

4.4 Local token scenario

In this scenario the user identity is proofed by a bootstrap token that is obtained from WSC's local STS, ie. an STS external to Nemlog-in, hosted by the WSC organization itself (local STS policy) or, if so set up in CSS, another organization (local IDP policy).

Request and response messages are described in detail in [STS-RULES].

4.4.1 Request example local STS

In the request example below <https://sts.wsc1.dkdev> is used as an issuer to create the message and <https://saml.nnit001.dmz.inttest> as the WSP to issue an identity token for. The issuer must be created specifically for your organization should you need to test this scenario.

```
POST https://securetokenservice.nemlog-in.dk/SecurityTokenService.svc HTTP/1.1
SOAPAction: http://docs.oasis-open.org/ws-sx/ws-trust/200512/RST/Issue
Content-Type: text/xml; charset=utf-8
Host: securetokenservice.nemlog-in.dk
Content-Length: [length]
```

```
<S11:Envelope xmlns:S11="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:wsa="http://www.w3.org/2005/08/addressing"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:wsse="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd"
xmlns:wsu="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-
1.0.xsd" xmlns:ds="http://www.w3.org/2000/09/xmldsig#" xmlns:wst="http://docs.oasis-
open.org/ws-sx/ws-trust/200512" xmlns:wst14="http://docs.oasis-open.org/ws-sx/ws-
trust/200802" xmlns:saml2="urn:oasis:names:tc:SAML:2.0:assertion"
xmlns:wsp="http://schemas.xmlsoap.org/ws/2002/12/policy">
  <S11:Header>
    <wsa:Action wsu:Id="action">http://docs.oasis-open.org/ws-sx/ws-
trust/200512/RST/Issue</wsa:Action>
    <wsa:MessageID wsu:Id="msgid">uuid:af73276c-3ad2-4182-88e3-
4dad50c76305</wsa:MessageID>
    <wsa:To wsu:Id="to">https://local.sts.nemlog-in.dk/</wsa:To>
    <wsse:Security S11:mustUnderstand="1">
      <wsu:Timestamp wsu:Id="sec-ts">
        <wsu:Created>2015-03-20T08:56:39Z</wsu:Created>
        <wsu:Expires>2015-03-30T08:56:39Z</wsu:Expires>
      </wsu:Timestamp>
      <wsse:BinarySecurityToken wsu:Id="sec-binsectoken" ValueType="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-x509-token-profile-1.0#X509v3"
EncodingType="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-soap-message-
security-
1.0#Base64Binary">MIIGFDCBPgAwIBAgIETBGSTDANBgkqhkiG9w0BAQsFADBIMQswCQYDVQQGEWJESzES
MBAGA1UECgwJVJFU1QyNDA4MSUwIwYDVQQDDDBxUU1VTVDI0MDggU31zdGVtdGVzdCBWSU1JIENBMB4XDTEzMT
AwOTE5MTMzM1oXDTE2MTAwOTE5MTIzOwogYmxCzAJBgNVBAYTAkRMLSEwHwYDVQQKDBh0tk1UIEEvUyAvLyBD
V1I6MjEwOTMxMDYxUTAgBgNVBAUTGUNWUjoyMTA5MzEwNi1GSUQ6NDkxOTY0MzEwLQYDVQQDDCZ0Tk1UIEZPQ0
VTIGNlcnQyIChmdw5rdGlvbnNjZXJ0aWZpa2F0KTCCASIwDQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBAM/Z
nSGcUTb5QEgNoYbRo9ivhyhvhWh0Wpqjxd034T5J6q2sGyRhmj+t/U0ED0fvqMSPYR01ovaeLpT++1Nz08EG0ZP
7mek5eUeyQ1BZseAe8ZUKFSUXfNvYvo/x/inVxePCTBwPvYVUP1ap/V4dRcz/Y1e5+qjrweWuZJ1Yct1KqW2sG
XFZTEBFdsiTVLxAiLwcM9KVthV+rUB3dqtu1FvV0TQQJLxzD7eP60bF1gRGG14kG0fknrKcPvq350yF1uvIED
```

Commented [A10]: Local token scenario

```

7cykHfedVeAZP3DY3dgrsWaK18zt1IUHH5avIq5hKm6JCcYzrB6LaX6aG0GMFMZ9R/Mw9a1UxTvak//K0CAwEA
Aa0CAsgwggLEMA4GA1UdDwEB/wQEAWIDuDCB1AYIKwYBBQUHAEQEEYcwgYQwOwYIKwYBBQUHMAGGL2h0dHA6Ly
9vY3NwLnN5c3R1bXRlc3Q4LnRydXN0MjQwOC5jb2VcmVzCG9uZGVyMEUGCCSQAQUBFzAChj1odHRwOi8vZi5h
awEuc3lzdGVtdGvzdDgudHJ1c3QyNDA4LmNvbS9zeXN0ZW10ZXN0OC1jYS5jZXIwggEgBgNVHSAEggEXMIIBEz
CAQ8GDSsGAQQBgFRRAgQGBA1wgf0wLWYIKwYBBQUHAEWI2h0dHA6Ly93d3cudHJ1c3QyNDA4LmNvbS9yZXBv
c210b3J5MlIHJBBggrBgEFBQcCAjCBvDAMFgVEYw5JRDADAgEBGoGrRGFuSUQgdGVzdCBjZXJ0awZpa2F0ZXIgzN
JhIGR1bm51IENBIHVkc3R1ZGVzIHVuzGVyIE9JRCAXLjMuNi4xLjQuMS4zMTMxMy4yLjQuNi40LjUuIERhbklE
IHRlc3QyY2VydG1maWnhdGVzIGZyb20gdGhpcyBQDS8hcmUgaXNzdWVkiHVuzGVyIE9JRCAXLjMuNi4xLjQuMS
4zMTMxMy4yLjQuNi40LjUuIGR1bm51IENBIHVkc3R1ZGVzIHVuzGVyIE9JRCAXLjMuNi4xLjQuMS4zMTMxMy4yLj
QyNDA4LmNvbS9zeXN0ZW10ZXN0OC5jcmwwYQBgof6kXDBAMQswCQYDVQGEwJESzESMBAGA1UECgwJVFJUVU1
QyNDA4MSUwIwYDVQDDbUUVTVVDI0MDggU3lzdGVtdGVzdBWsu1J1ENBMRADgYDVQDDADUkwxNjM0MB8G
A1UdIwQYMBaAFJYbNhm7IinCPfn+ZPrxs+s+E18EMB0GA1UdDgQWBRRFtYa8Wnp3jGC8dDwr1Sf124GfPDAJBG
NVHRMEAjaAMA0GCSqGSIb3DQEBCwUAA4IBAQDKHXvq7V4gKLCd0WRmivpyupIsxJsfb9oqjVG00HJXr7v1gY
W2bkMjUpSy6WLTd+686ZjLh1E1FWCwq1rW18/B1x62fT8j79EDamJLBAVUXOYNL1drG331H7vZK90ri330L0
SBtOy9E0m+7v/1KwdYbgHYDgFub+htYiB4RofkiVKhzgdwHV9WjMcKUQ99hwhHw4thy1RoxEjPXZLMk5G8J51
T8+GW0DgzXI817Pc0nKn5PN6ydoC+ErTgsAEMW2qq+N7G+Hs/E7IZ9HLGJ3EvPvborHqQwElh7WE0q80sAHP
NTRcdunHgyC1iJaiCK/J2CnH5XmpntX9fnq</wsse:BinarySecurityToken>
<Signature xmlns="http://www.w3.org/2000/09/xmldsig#"
  <SignedInfo>
    <CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#"
  />
  <SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#rsa-
sha256" />
  <Reference URI="#action">
    <Transforms>
      <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
    </Transforms>
    <DigestMethod Algorithm="http://www.w3.org/2001/04/xmllenc#sha256" />
    <DigestValue>NrdtWxaigbkMffHPgKCAMndq0hRMvsKQSkNe1mS5cAE=</DigestValue>
  </Reference>
  <Reference URI="#msgid">
    <Transforms>
      <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
    </Transforms>
    <DigestMethod Algorithm="http://www.w3.org/2001/04/xmllenc#sha256" />
    <DigestValue>ntTwp09a631YBBjFCaPVUL3h/Wc0BMftgDd2feQnwg=</DigestValue>
  </Reference>
  <Reference URI="#to">
    <Transforms>
      <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
    </Transforms>
    <DigestMethod Algorithm="http://www.w3.org/2001/04/xmllenc#sha256" />
    <DigestValue>sMhjXkoKEa8DfxKVK7tu0ZpijaHwgihaElBouQMVI0=</DigestValue>
  </Reference>
  <Reference URI="#sec-ts">
    <Transforms>
      <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
    </Transforms>
    <DigestMethod Algorithm="http://www.w3.org/2001/04/xmllenc#sha256" />
    <DigestValue>cVW0c8oRtzwZkPupbjy70IqJcBKUJJBDLXQtAHIMPU=</DigestValue>
  </Reference>
  <Reference URI="#sec-binsectoken">
    <Transforms>
      <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
    </Transforms>
    <DigestMethod Algorithm="http://www.w3.org/2001/04/xmllenc#sha256" />
    <DigestValue>BreEB910vyk0TDSxVt4vkiu8TbbXKcmfHaEJIV8f0=</DigestValue>
  </Reference>

```

Commented [A11]: Certificate used to sign the request

```

<Reference URI="#body">
  <Transforms>
    <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
  </Transforms>
  <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256" />
  <DigestValue>ueqWu5v0zy4yzRhR1LYk8kzdk3D7hcue0Bbj5X510iY=</DigestValue>
</Reference>
</SignedInfo>

<SignatureValue>q7vwrMlUJ5mkw6W70QQqhGk1k2i00FMc1D8IHQVX89Cr3caHdw0GE60iuuNbp6RMRvqnDEP
rvMRAFcQoQeL4Hcx6n/gA0qEsqYm/iu1oZft2rhYHdGa3sQVbhPB7XsnwWFrCFEpy/JtGeTMBfQPfqi1xpnv
N+9bzSoAuSKNq/kc1tTRawsg8nlW6EYQ8DHAwjBHiPj2zFg0FUQxRdKPG9+y9cuWiEeu7CYVGsGNQn4HSi1Njb
8408SQ6Cj2b/QphkZL84+5ZV1EU1KiX5G1jFy90ZBG3x5Pja1HpM7fcwH9SUKN94HvctHGF5+87MBarbut9CSP
w1/VypSRGkBRbQ=</SignatureValue>
  <KeyInfo>
    <SecurityTokenReference xmlns:o="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <o:Reference URI="#sec-binsectoken" />
    </o:SecurityTokenReference>
  </KeyInfo>
</Signature>
</wsse:Security>
</S11:Header>
<S11:Body wsu:Id="body">
  <wst:RequestSecurityToken Context="urn:uuid:c3f0de51-fa70-4373-9ecf-92965394a6d8">
    <wst:RequestType>http://docs.oasis-open.org/ws-sx/ws-
trust/200512/Issue</wst:RequestType>
    <wst14:ActAs>
      <saml2:Assertion ID="_941598e8-6c34-4b98-9a57-cde8f6531452"
IssueInstant="2015-03-20T08:56:39.1Z" Version="2.0">
        <saml2:Issuer>https://sts.wsc1.test</saml2:Issuer>
        <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
          <SignedInfo>
            <CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-
c14n#" />
            <SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#rsa-
sha256" />
            <Reference URI="#_941598e8-6c34-4b98-9a57-cde8f6531452">
              <Transforms>
                <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature" />
              </Transforms>
              <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256" />
            </Reference>
          </SignedInfo>
          <DigestValue>k9NjN6wtzIq54E/ng7uyNjKpGvNen60FhqZJ83FSPFI=</DigestValue>
        </Signature>
      </saml2:Assertion>
    </wst:RequestSecurityToken>
  </S11:Body>
  <SignatureValue>PzyPOF80Xi4kHR2COFC0NJAzCsk8qrX1SLGfnwtUVC/SgCRStzzWT8Bwd9KU2yxRNHwtrX
ISfv5JIb0NfctjE7v1366gWl6VrK/HY2+bCSTwalqrhB37c0d9ofkUJ0nxBEhdNGfF5YGMUcdkUJpWuRmFxf
VHIprnCdqdBwL8QgDM9IM/Lg7vbVm3IpQZ3Svb8AcQE+pUjW5A+d4Lgd2Gy7JUSb8+EQnFh9HqYQwRW41i1G25
wkMzM/3iHiJDD+Tz9Kem3isIYT4KY4Ghedc+S6INa50IMIZ8jKq8rQyWqjMWU+yX+hZEPPA7LV15s2cnKaB2
h82bSrFst7KjW=</SignatureValue>
  </Signature>
  <saml2:Subject>
    <saml2:NameID Format="urn:oasis:names:tc:SAML:1.1:nameid-
format:X509SubjectName">C=DK,0=0konomistyrelsen // CVR:10213231,CN=Morten
Mortensen,Serial=CVR:10213231-RID:93947552</saml2:NameID>

```

Commented [A12]: Subjectname to issue identity token for


```

        </saml2:Attribute>
        <saml2:Attribute FriendlyName="SpecVer"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
Name="dk:gov:saml:attribute:SpecVer">
          <saml2:AttributeValue xsi:type="xs:string"></saml2:AttributeValue>
        </saml2:Attribute>
      </saml2:AttributeStatement>
    </saml2:Assertion>
  </wst14:ActAs>
  <wsp:AppliesTo>
    <wsa:EndpointReference>
      <wsa:Address>https://saml.nnit001.dmz.dkdev</wsa:Address>
    </wsa:EndpointReference>
  </wsp:AppliesTo>
</wst:RequestSecurityToken>
</S11:Body>
</S11:Envelope>

```

Commented [A14]: Entityid of the WSP to issue identity token for

4.4.2 Response envelope example local STS (decrypted)

```

<S11:Envelope xmlns:S11="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:wsa="http://www.w3.org/2005/08/addressing" xmlns:wsu="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd"
xmlns:wss="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-
1.0.xsd">
  <S11:Header>
    <wsa:Action wsu:Id="action">http://docs.oasis-open.org/ws-sx/ws-
trust/200512/RST/Issue</wsa:Action>
    <wsa:MessageID wsu:Id="messageid">uuid:95a3219f-079f-407b-b14a-
c511ea25d8da</wsa:MessageID>
    <wsa:RelatesTo wsu:Id="relatesto">uuid:af73276c-3ad2-4182-88e3-
4daf50c76305</wsa:RelatesTo>
    <wsse:Security S11:mustUnderstand="1">
      <wsu:Timestamp wsu:Id="sec_timestamp">
        <wsu:Created>2015-03-20T08:57:20.010Z</wsu:Created>
        <wsu:Expires>2015-03-20T16:57:20.010Z</wsu:Expires>
      </wsu:Timestamp>
      <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
        <SignedInfo>
          <CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-
c14n#"></CanonicalizationMethod>
          <SignatureMethod Algorithm="http://www.w3.org/2000/09/xmldsig#rsa-
sha1"></SignatureMethod>
          <Reference URI="#action">
            <Transforms>
              <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
            </Transforms>
            <DigestMethod
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
            <DigestValue>1hj8fpM7T5rcOsNRPpnxA3p3AkM=</DigestValue>
          </Reference>
          <Reference URI="#messageid">
            <Transforms>

```

```

    <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
  </Transforms>
  <DigestMethod
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
  <DigestValue>Pze07vMcton9klub2j/AHElgOmI=</DigestValue>
</Reference>
  <Reference URI="#relatesto">
  <Transforms>
    <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
  </Transforms>
  <DigestMethod
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
  <DigestValue>5R2m6yiD0DStzkwbmdK0z1K9aIk=</DigestValue>
</Reference>
  <Reference URI="#sec_timestamp">
  <Transforms>
    <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
  </Transforms>
  <DigestMethod
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
  <DigestValue>NdIhX7CfyjRMmbN5Cqo1vLJXNs=</DigestValue>
</Reference>
  <Reference URI="#body">
  <Transforms>
    <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
  </Transforms>
  <DigestMethod
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
  <DigestValue>zMOQ+z07XwwIC9W4nj5k3iDIMog=</DigestValue>
</Reference>
</SignedInfo>

<SignatureValue>HU3ue730Zupo2CYrxxZ+V0x72PwPH94X+ma65MuDwDSFhFVrgRIOM2IXGue10WXilcZpoX
6LIzStcpc14WZ0u043z0D15xpi4VC0BycAT75PjX1I+D8Sdw3o+L/Gs23M9c41NUF7U+Mt+s0zu1ide98P2cX0
CCQfAZ6Y/KGrE98Ie5Q0y8kLP0qT4JqZI972Nw4A6arkmjLT2NzsHxuQrX/tuF/rZjdr7Imr8gojioMbKINEU
PSU7L4E97vrthNHj2Dy92g/VqHC30Fg4Ib6ERYfmWqzPk027Js40QgI0hyqu472mzEfdBN8N1So9Ie1qTUaGCJ
OrB80eMTzhRdQg==</SignatureValue>
  </Signature>
</wsse:Security>
</S11:Header>
<S11:Body wsu:Id="body">
  <RequestSecurityTokenResponseCollection xmlns="http://docs.oasis-open.org/ws-
sx/ws-trust/200512">
    <RequestSecurityTokenResponse Context="urn:uuid:c3f0de51-fa70-4373-9ecf-
92965394a6d8">
      <TokenType />
      <AppliesTo xmlns="http://schemas.xmlsoap.org/ws/2002/12/policy">
        <EndpointReference xmlns="http://www.w3.org/2005/08/addressing">
          <Address>https://saml.nnit001.dmz.dkdev/Address</Address>
        </EndpointReference>
      </AppliesTo>
      <RequestedSecurityToken>
        <Assertion ID="_d360e5b5-a558-411e-a417-9097b9e84033" IssueInstant="2015-03-
20T08:57:20.010Z" Version="2.0" xmlns="urn:oasis:names:tc:SAML:2.0:assertion">

```

Commented [A15]: Entityid of the WSP this identitytoken is issued for


```
<Attribute Name="dk:gov:saml:attribute:AssuranceLevel"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="AssuranceLevel">
  <AttributeValue>True</AttributeValue>
</Attribute>
<Attribute Name="dk:gov:saml:attribute:SpecVer"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" FriendlyName="SpecVer">
  <AttributeValue />
</Attribute>
<Attribute Name="urn:oid:2.5.4.4"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" FriendlyName="surName">
  <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
</Attribute>
<Attribute Name="urn:oid:2.5.4.3"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="CommonName">
  <AttributeValue>Morten Mortensen</AttributeValue>
</Attribute>
<Attribute Name="urn:oid:0.9.2342.19200300.100.1.1"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" FriendlyName="uid">
  <AttributeValue>CVR:10213231-RID:93947552</AttributeValue>
</Attribute>
<Attribute Name="urn:oid:0.9.2342.19200300.100.1.3"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" FriendlyName="mail">
  <AttributeValue>MortenMortensen@kfobs.dk</AttributeValue>
</Attribute>
<Attribute Name="urn:oid:2.5.4.5"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="serialNumber">
  <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
</Attribute>
<Attribute Name="urn:oid:1.3.6.1.4.1.1466.115.121.1.8"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="userCertificate">
  <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
</Attribute>
<Attribute Name="urn:oid:2.5.29.29"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="Certificate issuer attribute">
  <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
</Attribute>
<Attribute Name="dk:gov:saml:attribute:UniqueAccountKey"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="UniqueAccountKey">
  <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
</Attribute>
<Attribute Name="dk:gov:saml:attribute:Privileges_intermediate"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="Privileges">
  <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
</Attribute>
```

```

        <Attribute Name="dk:gov:saml:attribute:IsYouthCert"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="IsYouthCert">
        <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
        </Attribute>
        <Attribute Name="dk:gov:saml:attribute:PidNumberIdentifier"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="PidNumberIdentifier">
        <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
        </Attribute>
        <Attribute Name="urn:oid:2.5.4.10"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="organizationName">
        <AttributeValue>Økonomistyrelsen // CVR:10213231</AttributeValue>
        </Attribute>
        <Attribute Name="dk:gov:saml:attribute:UserAdministratorIndicator"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="UserAdministratorIndicator">
        <AttributeValue>0</AttributeValue>
        </Attribute>
        <Attribute Name="dk:gov:saml:attribute:CvrNumberIdentifier"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="CVRnumberIdentifier">
        <AttributeValue>10213231</AttributeValue>
        </Attribute>
        <Attribute Name="dk:gov:saml:attribute:RidNumberIdentifier"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="RidNumberIdentifier">
        <AttributeValue>93947552</AttributeValue>
        </Attribute>
        <Attribute Name="urn:oid:2.5.4.65"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" FriendlyName="OCES
Pseudonym">
        <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
        </Attribute>
        <Attribute Name="urn:liberty:disco:2006-08:DiscoveryEPR"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic">
        <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
        </Attribute>
    </AttributeStatement>
</Assertion>
</RequestedSecurityToken>
<wst:RequestedAttachedReference xmlns:wst="http://docs.oasis-open.org/ws-
sx/ws-trust/200512">
    <wsse:SecurityTokenReference>
        <wsse:Reference URI="#encryptedassertion" />
    </wsse:SecurityTokenReference>
</wst:RequestedAttachedReference>
<wst:RequestedUnattachedReference xmlns:wst="http://docs.oasis-open.org/ws-
sx/ws-trust/200512">
    <wsse:SecurityTokenReference>
        <wsse:Reference URI="#encryptedassertion" />
    </wsse:SecurityTokenReference>
</wst:RequestedUnattachedReference>

```

Commented [A18]: Asserted attributes

```

    <Lifetime>
      <Created xmlns="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-utility-1.0.xsd">2015-03-20T08:57:20.01Z</Created>
      <Expires xmlns="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-utility-1.0.xsd">2015-03-20T16:57:20.01Z</Expires>
    </Lifetime>
  </RequestSecurityTokenResponse>
</RequestSecurityTokenResponseCollection>
</S11:Body>
</S11:Envelope>

```

4.4.3 Request example local IDP

```

<S11:Envelope xmlns:S11="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:wsa="http://www.w3.org/2005/08/addressing"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:wss="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd"
xmlns:wsu="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-
1.0.xsd" xmlns:ds="http://www.w3.org/2000/09/xmldsig#" xmlns:wst="http://docs.oasis-
open.org/ws-sx/ws-trust/200512" xmlns:wst14="http://docs.oasis-open.org/ws-sx/ws-
trust/200802" xmlns:saml2="urn:oasis:names:tc:SAML:2.0:assertion"
xmlns:wsp="http://schemas.xmlsoap.org/ws/2002/12/policy">
  <S11:Header>
    <wsa:Action wsu:Id="action">http://docs.oasis-open.org/ws-sx/ws-
trust/200512/RST/Issue</wsa:Action>
    <wsa:MessageID wsu:Id="msgid">uuid:f2243dbd-3e58-4032-8a2c-
89474b9e5c6b</wsa:MessageID>
    <wsa:To wsu:Id="to">https://local.sts.nemlog-in.dk/</wsa:To>
    <wsse:Security S11:mustUnderstand="1">
      <wsu:Timestamp wsu:Id="sec-ts">
        <wsu:Created>2015-03-20T09:04:26Z</wsu:Created>
        <wsu:Expires>2015-03-30T09:04:26Z</wsu:Expires>
      </wsu:Timestamp>
      <wsse:BinarySecurityToken wsu:Id="sec-binsectoken" ValueType="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-x509-token-profile-1.0#X509v3"
EncodingType="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-soap-message-
security-
1.0#Base64Binary">MIIGFDCCBPYgAwIBAgIETBGSTDANBqkqhkiG9w0BAQsFADBIMQswCQYDVQQGEwJESzES
MBAGA1UECgwJVJFVJU1QyNDA4MSUwIiwYDQYDQDBxUU1VTVDI0MDggU3lzdGltZGVzdCBWU1JJENBMB4XDTEzMT
AwOTE5MTMzMTx0XDE2MTAwOTE5MTIzOwFowgYmxCzAJBgNVBAYTAKRMLSEwHwYDVQQKDBh0Tk1UIEEvUyAvLyBD
VlI6MjEwOTMxMDYxUTAgBgNVBAGUUNWUjoyMTA5MzEwNi1GSUQ6NDkxOTY0MzEwLWYyYDQYDVQDZCZ0t1IUIE
ZPQ0
VTIGNlcnQyIChtdW5rdG1vbnNjZXJ0aWZpa2F0KTCASIWdQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBAM/Z
nSGcUTb5QEGNoYbRo9ihvhyhvh0Wpqjxd034T5J6q2sGyRhmj+t/U0ED0fvqMSPYR01ovaeLpT++lNz08EG0ZP
7mek5eUeyQ1BzseAe8ZUKFSUXfNvYvo/x/inVxePCTBwPvYVUP1ap/V4dRcz/Y1e5+qjrweWuZJ1Yct1KqW2sG
XFZTEBFdsiTVLxAiLwcM9KVthV+rUB3dqtu1FvV00TQJLxzD7eP60bF1gRGG14kg0fknrKcPvq350yFluvIED
7cykHfedVeAZP3DY3dgrsWaKi8zt1IUHHSavIq5hK6JcCyzrB6LaX6aG0GMFMZ9R/Mw9a1UxTvak//K0CAwEA
Aa0CAsgwggLEMA4GA1UdDwEB/wQEAwIDuDCBIAyIKwYBBQUHAQEgYcwgYQwOwYIKwYBBQUHMAGGL2h0dHA6Ly

```

Commented [A19]: Local token case


```
9vY3NwLnN5c3R1bXR1c3Q4LnRydXN0MjQwOC5jb20vcvZcG9uZGVyMEUGCCsGAQUBZACHj1odHRwOi8vZi5h  
aWUuc3lzdGVtdGVzdDgudHJ1c3QyNDA4LmNvbS9zeXN0ZW10ZXN0OC1jYS5jZlIwggEgBgNVHSAEgGEMIIIBEz  
CCAQ8GDSsGAQQBgFRRAgQGBAIIWgf0wLWYIKwYBBQUHAgEWI2h0dHA6Ly93d3cudHJ1c3QyNDA4LmNvbS9yZXBv  
c2l0b3J5MIHJBBgrBgEFBQcCAjCBvDAMFgVEYw5JRDADAgEBGoGrRGFuSUQgdGVzdCBjZXJ0awZpa2F0ZXIgzN  
JhIGR1bm51IENBIHVkc3R1ZGVzIHVuzGVyIE9JRCAXLjMuNi4xLjQuMS4zMtMxMy4yLjQuNi40LjIuIERhbklE  
IHR1c3QyY2VydG1maWNhdGVzIGZyb20gdGhpcyBDQSBhcmUgaXNzdWVkiHVuzGVyIE9JRCAXLjMuNi4xLjQuMS  
4zMtMxMy4yLjQuNi40LjIuMIGrBgNVHR8EgaMwgaAwOQA4oDaGNH0dHA6Ly9jcmwuc3lzdGVtdGVzdDgudHJ1  
c3QyNDA4LmNvbS9zeXN0ZW10ZXN0OC5jcmwvYqBgoF6kXDBAMQswCQYDVQGEwJESzESMBAGA1UECgwJVFJU1  
QyNDA4MSUwIuYDVQDDbUUVTVDI0MDggU3lzdGVtdGVzdCBWSU1JIEENBMRAwDgYDVQQDDAdDUkwXNjM0MB8G  
A1UdIwQYMBaAFJYbNhm7IiInCPfn+ZPrxs+E18EMB0GA1UdDgQWBRRFtYa8Wnp3jGC8dDwriSf124GfpDAJBg  
NVHRMEAjAAMA0GCsGSIb3DQEBcWUAA4IBAQQKHxvqqw7V4gKLCd0WRmivpyupIsxJsfB9oqjVG00HJXr7v1gY  
W2bkMjUpSy6WLTd+686ZJh1E1FWCwq1rwrI8/B1x62fT8j79EDamJLBAvUXOYNL1drG33LH7vZK90ri330L0  
SBtOy9E0m+7v/lKwdYbgHYDgFub+htYiB4RofkiVKhzgdwHV9WjMcKUQ99hwhHww4thy1RoxEjPXZLMkSG8J51  
T8+GW0DGzX1817Pc0nkn5PNydoC+ErTtGsAEMW2qq+N7G+Hs/E7IZ9HLGJ3EvPvborHqQwElh7WE0q80sAHP  
NTRcdunHgvClijaiCK/J2CnH5XmpntX9fn</wsse:BinarySecurityToken>
```

```
<Signature xmlns="http://www.w3.org/2000/09/xmldsig#">  
  <SignedInfo>  
    <CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />  
    <SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#rsa-sha256" />  
    <Reference URI="#action">  
      <Transforms>  
        <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />  
      </Transforms>  
      <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256" />  
      <DigestValue>NrdtWxaigbkMffHPgKCAMndq0hRMvsKQSkNeImS5cAE=</DigestValue>  
    </Reference>  
    <Reference URI="#msgid">  
      <Transforms>  
        <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />  
      </Transforms>  
      <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256" />  
      <DigestValue>V09c9Qe8xqWvVXJLewhGI0oa1+wf9Ji/dRyMzHpcDSg=</DigestValue>  
    </Reference>  
    <Reference URI="#to">  
      <Transforms>  
        <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />  
      </Transforms>  
      <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256" />  
      <DigestValue>sMhjXKoEa8DfxKvk7tu0ZpijaHwgihAE1BouQMVIIs0=</DigestValue>  
    </Reference>  
    <Reference URI="#sec-ts">  
      <Transforms>  
        <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />  
      </Transforms>  
      <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256" />
```

```
<DigestValue>IrS/aAyD6HzeBEZVuM2T04Bh00U8aCHFkQXnSsXlzQI=</DigestValue>
</Reference>
<Reference URI="#sec-binsectoken">
  <Transforms>
    <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
  </Transforms>
  <DigestMethod Algorithm="http://www.w3.org/2001/04/xmenc#sha256" />
  <DigestValue>BreEB910vyk0TDSxVt4vkiu8sTbbXKCMfcHaEJIV8f0=</DigestValue>
</Reference>
<Reference URI="#body">
  <Transforms>
    <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
  </Transforms>
  <DigestMethod Algorithm="http://www.w3.org/2001/04/xmenc#sha256" />
  <DigestValue>e4ZBdV2ZgDRpU1HYvCznGQG/hFca/nz1b+N3qYPSqKk=</DigestValue>
</Reference>
</SignedInfo>
<SignatureValue>HM/n2dsLwJiJIdirTwx1BwxyZYj04JW9/cH1SmYxQyokQwcfoGMA7mgbL/fMz/BxFG40/A
TWDSXFP1QilFs+4fNzaX81lGZpCyEXh6VPWqXOk3dE2+oT6z6HANQRS0Ax513XRnkDRqDJLZavcEHU8c7091JG
Q3eCehtx4U9nHRmEu70reueQQGB6z1hpDgn3km5BsykGYuSFZgDTK+gF+pCurU8fNGJ6asu4SYnQRumKS8p0b8
bXKPXAYxXBufzQs9nh1gkvMEHshs059v0IVgQ3vw5UP6Knw+0a1/sw+F29QOVrpp1ZX0BYIuuDrKe84uHKqwN
c2nLhEwwEq3MCQ=</SignatureValue>
  <KeyInfo>
    <o:SecurityTokenReference xmlns:o="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <o:Reference URI="#sec-binsectoken" />
    </o:SecurityTokenReference>
  </KeyInfo>
</Signature>
</wsse:Security>
</S11:Header>
<S11:Body wsu:Id="body">
  <wst:RequestSecurityToken Context="urn:uuid:502e6d53-d2fb-46fc-afa8-24c8c43623cd">
    <wst:RequestType>http://docs.oasis-open.org/ws-sx/ws-
trust/200512/Issue</wst:RequestType>
    <wst14:ActAs>
      <saml2:Assertion ID="_09659fea-6c62-4eb4-b65f-789ba396e4ca"
IssueInstant="2015-03-20T09:04:26.1Z" Version="2.0">
        <saml2:Issuer>https://sts.wsc1.test</saml2:Issuer>
        <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
          <SignedInfo>
            <CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-
c14n#" />
            <SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#rsa-
sha256" />
            <Reference URI="#_09659fea-6c62-4eb4-b65f-789ba396e4ca">
              <Transforms>
                <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
```



```

        </ds:KeyInfo>
        </saml2:SubjectConfirmationData>
        </saml2:SubjectConfirmation>
        </saml2:Subject>
        <saml2:Conditions NotBefore="2015-03-20T09:04:26.1Z" NotOnOrAfter="2015-03-
20T17:04:26.1Z">
        <saml2:AudienceRestriction>
        <saml2:Audience>https://local.sts.nemlog-in.dk/</saml2:Audience>
        </saml2:AudienceRestriction>
        </saml2:Conditions>
        <saml2:AttributeStatement>
        <saml2:Attribute FriendlyName="ProductionUnitIdentifier"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
Name="dk:gov:saml:attribute:ProductionUnitIdentifier">
        <saml2:AttributeValue xsi:type="xs:string"></saml2:AttributeValue>
        </saml2:Attribute>
        <saml2:Attribute FriendlyName="SeNumberIndentifie"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
Name="dk:gov:saml:attribute:SENumberIdentifier">
        <saml2:AttributeValue xsi:type="xs:string"></saml2:AttributeValue>
        </saml2:Attribute>
        <saml2:Attribute FriendlyName="AssuranceLevel"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
Name="dk:gov:saml:attribute:AssuranceLevel">
        <saml2:AttributeValue xsi:type="xs:string">True</saml2:AttributeValue>
        </saml2:Attribute>
        <saml2:Attribute FriendlyName="SpecVer"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
Name="dk:gov:saml:attribute:SpecVer">
        <saml2:AttributeValue xsi:type="xs:string"></saml2:AttributeValue>
        </saml2:Attribute>
        </saml2:AttributeStatement>
        </saml2:Assertion>
        </wst14:ActAs>
        <wsp:AppliesTo>
        <wsa:EndpointReference>
        <wsa:Address>https://saml.nnit001.dmz.dkdev</wsa:Address>
        </wsa:EndpointReference>
        </wsp:AppliesTo>
        </wst:RequestSecurityToken>
        </S11:Body>
    </S11:Envelope>

```

Commented [A20]: Mandatory audience for both local STS and IDP policies. For the latter additional audiences are allowed

4.4.4 Response envelope example local IDP (decrypted)

```

<S11:Envelope xmlns:S11="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:wsa="http://www.w3.org/2005/08/addressing" xmlns:wsu="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd"
xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-

```

```
1.0.xsd">
  <S11:Header>
    <wsa:Action wsu:Id="action">http://docs.oasis-open.org/ws-sx/ws-
trust/200512/RST/Issue</wsa:Action>
    <wsa:MessageID wsu:Id="messageid">uuid:6a30340d-37d6-4b06-bf23-
ed8ce500feab</wsa:MessageID>
    <wsa:RelatesTo wsu:Id="relatesto">uuid:f2243dbd-3e58-4032-8a2c-
89474b9e5c6b</wsa:RelatesTo>
    <wsse:Security S11:mustUnderstand="1">
      <wsu:Timestamp wsu:Id="sec_timestamp">
        <wsu:Created>2015-03-20T09:04:46.256Z</wsu:Created>
        <wsu:Expires>2015-03-20T17:04:46.256Z</wsu:Expires>
      </wsu:Timestamp>
      <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
        <SignedInfo>
          <CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-
c14n#"></CanonicalizationMethod>
          <SignatureMethod Algorithm="http://www.w3.org/2000/09/xmldsig#rsa-
sha1"></SignatureMethod>
          <Reference URI="#action">
            <Transforms>
              <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
            </Transforms>
            <DigestMethod
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
              <DigestValue>1hj8fpM7T5rcOsNRPpnxA3p3AkM=</DigestValue>
            </Reference>
            <Reference URI="#messageid">
              <Transforms>
                <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
              </Transforms>
              <DigestMethod
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
                <DigestValue>uCXhfwmKLctxTEUFIkXQ49Gq3c=</DigestValue>
              </Reference>
            <Reference URI="#relatesto">
              <Transforms>
                <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
              </Transforms>
              <DigestMethod
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
                <DigestValue>FZhXB+BSpXWxXIEhgtpNhK0oTcg=</DigestValue>
              </Reference>
            <Reference URI="#sec_timestamp">
              <Transforms>
```

```
<Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
</Transforms>
<DigestMethod
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
<DigestValue>eQY5cdqEBXcQU4uEB4+zEFeUr9c=</DigestValue>
</Reference>
<Reference URI="#body">
<Transforms>
<Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
</Transforms>
<DigestMethod
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
<DigestValue>p9fH1dnXThomMxcm7xZ4KJe5p4=</DigestValue>
</Reference>
</SignedInfo>
<SignatureValue>YqDI035dNEmzP8j7375Nj/dZLHnTwr0iFb9zhe2aPRobbBPXAIgzvofW43si41FXkrkx1b
X1ZDnWeKCFY4zahEINvp2hvrV1VCf7UgE+MFFYtF9u8ksaLXKRyq96Yw1YnM237HUDSH8eAtYP4/0u4yQwvtfg
6jSkm89nEkm6WBVVVBZKyVE1cr871trAddRPFIlyoxYWo1NWjVGnWPyTFKRx21mBoTn3Pdb3DFqXffPB7HgI7BR
Sc1bx6MJk1zPc1Cvvc4ZK8Fj6SYZ2JnXUAF96e46K4BOy9UK+f+oixEjPCByIJy611nc59+UJdd28sJydXm7bE
xSmdWpkIAjo0ng==</SignatureValue>
</Signature>
</wsse:Security>
</S11:Header>
<S11:Body wsu:Id="body">
<RequestSecurityTokenResponseCollection xmlns="http://docs.oasis-open.org/ws-
sx/ws-trust/200512">
<RequestSecurityTokenResponse Context="urn:uuid:502e6d53-d2fb-46fc-afa8-
24c8c43623cd">
<TokenType />
<AppliesTo xmlns="http://schemas.xmlsoap.org/ws/2002/12/policy">
<EndpointReference xmlns="http://www.w3.org/2005/08/addressing">
<Address>https://saml.nnit001.dmz.dkdev</Address>
</EndpointReference>
</AppliesTo>
<RequestedSecurityToken>
<Assertion ID="_cc909803-e214-459c-842d-67915512f655" IssueInstant="2015-03-
20T09:04:46.256Z" Version="2.0" xmlns="urn:oasis:names:tc:SAML:2.0:assertion">
<Issuer Format="urn:oasis:names:tc:SAML:2.0:nameid-
format:entity">https://local.sts.nemlog-in.dk</Issuer>
<ds:Signature xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
<ds:SignedInfo>
<ds:CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-
exc-c14n#" />
<ds:SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-
more#rsa-sha256" />
<ds:Reference URI="#_cc909803-e214-459c-842d-67915512f655">
```



```

Mortensen,Serial=CVR:10213231-RID:93947552</NameID>
  <SubjectConfirmation Method="urn:oasis:names:tc:SAML:2.0:cm:holder-of-
key">
    <SubjectConfirmationData a:type="KeyInfoConfirmationDataType"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance">
      <KeyInfo xmlns="http://www.w3.org/2000/09/xmldsigsig#">
        <X509Data>
<X509Certificate>MIIGFDCCBPYgAwIBAgIETBGSTDANBgkqhkiG9w0BAQsFADBIMQswCQYDVQQGEWJESzESM
BAGA1UECgwJVFJVVU1QyNDA4MSUwIwYDVQQDDBxUU1VTVDI0MDggU3lzdGVtdGVzdCBWSU1JIEENBMB4XDTEzMTA
wOTE5MTMzMioXDTEzMTA0OTE5MTIzOFowYmxcZAJBgNVBAYTAkRLMSEwHwYDVQQKDBhOTk1UIEEvUyAvLyBDV
lI6MjEwOTMxMDYxUTAgBgNVBAUTGNUNUJoyMTA5MzEwNi1GSUQ6NDkxOTY0MzEwLQYDVQDDCZOTk1UIEZPQ0V
TIGN1cnQyIChmdW5rdGlvbnNjZXJ0awZpa2F0K2CCASiWdQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBAM/Zn
SGcUTb5QEGNoYbRo9ivhyhVWh0Wpqjxd034T5J6q2sGyRhmj+t/U0ED0fvqMSPYR01ovaeLpT++1Nz08EG0ZP7
mek5eUeyQ1BZseAe8ZUKfSUXFNvVo/x/inVxePCTBwPvYVUP1ap/V4dRcz/Y1e5+qjrweWuZJ1Yct1KqW2sGX
fZTEBFdsiTV1xAiLwcM9KvthV+rUB3dqtu1FvV00TOQJLxzd7eP60bF1gRGG14kG0fknrKcPvq350yFluvIED7
cykHfEdVeAZP3DY3dgrsWaKi8zt1IUHH5avIq5hK6JCcYzrB6LaX6aG0GMFMZ9R/Mw9a1UxTvak//K0CAwEAA
aOCAsgwggLEMA4GA1UdDwEB/wQEAwIDwDCBIAYIKwYBBQUHAQEgYcwgYQw0wYIKwYBBQUHMAGGL2h0dHA6Ly9
vY3NwLnN5c3R1bXRlc3Q4LnRydXN0MjQwOC5jb20vcmlzZG9uZGVyMEUGCCsGAQUFBzAChlodHRwOi8vZi5ha
WEuc3lzdGVtdGVzdGdudHJ1c3QyNDA4LmNvbS9zeXN0ZW10ZXN0OC1jY55jZiWggEgBgNVHSAEgGEXMIIEBzC
CAQ8GDSsGAQQBFRRAgQGBAiwf0wLWYIKwYBBQUHAgEWI2h0dHA6Ly93d3cuZGVzdGVzdCBjZXJ0awZpa2F0ZiZnZn
210b3J5MIHjBgggrBgEFBQcCAjCBVDAMFgVEYw5JRDAADAgEBGoGrRGFuSUQgdGVzdCBjZXJ0awZpa2F0ZiZnZn
hIGR1bm51IENBIHVkc3R1ZGVzIHVuzGVyIE9JRCAXLjMuNi4xLjQuMS4zMTMxMy4yLjQuNi40LjUuIERhbkk1EI
HRIc3QgY2VydG1maWnhdGVzIGZyb20gdGhpcyBDQS8hcmUgaXNzdWVkiHVuzGVyIE9JRCAXLjMuNi4xLjQuMS4
zMTMxMy4yLjQuNi40LjUuIuIgrBgNVHR8EgaMwgaAwOQA4oDaGNh0dHA6Ly9jcmwuc3lzdGVtdGVzdGdudHJ1c
3QyNDA4LmNvbS9zeXN0ZW10ZXN0OC5jcmwWYqBgoF6kXDBAMQswCQYDVQQGEWJESzESMBAGA1UECgwJVFJVVU1Q
yNDA4MSUwIwYDVQQDDBxUU1VTVDI0MDggU3lzdGVtdGVzdCBWSU1JIEENBRMAwDgYDVQDDAdDUkwXNjM0MB8GA
1UdIwQYMBaAFJYbNhm7IinCPfn+ZPrxss+E18EMB0GA1UdDgQWBRRFtYa8wnp3jGC8dDwriSf124GfPDAJBGN
VHRMEAjAAMA0GCsGqSIB3DQEBCWUAA4IBAQQDKHXvqqw7V4gKlCd0WRmivpyupIsXjsfB9oqjVGO0HJXR7v1gYW
2bkMjUpSy6wLTD+686ZjLh1E1FWCqw1rWI8/B1xX62ft8j79EDamJLBAVUXOYNL1drG331H7vZK90ri330LOS
BtOy9E0m+7v/1KwDybgHYDgFub+htYiB4RoFkiVKhzgdwHV9WjMcKUQ99hWhHww4thy1RoxEjPXZLMkSG8J51T
8+GW0DGzXI817Pc0nKcn5PN6ydoC+ErTTgsAEMW2qq+N7G+Hs/E7IZ9HLGJ3EvPvborHqQwElh7WE0q80sAHpN
TrcdunHgvC1iJaicK/J2CnH5XmpntX9fn</X509Certificate>
        </X509Data>
      </KeyInfo>
    </SubjectConfirmationData>
  </SubjectConfirmation>
</Subject>
  <Conditions NotBefore="2015-03-20T09:04:46.256Z" NotOnOrAfter="2015-03-
20T17:04:46.256Z">
    <AudienceRestriction>
      <Audience>https://sam1.nnit001.dmz.dkdev</Audience>
    </AudienceRestriction>
  </Conditions>
  <AttributeStatement>
    <Attribute Name="dk:gov:saml:attribute:ProductionUnitIdentifier"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="ProductionUnitIdentifier">
      <AttributeValue />
    </Attribute>
  </AttributeStatement>

```

Commented [A21]: Always holder-of-key for local IDP policy

Commented [A22]: WSC certificate refereced for the local IDP policy


```
<Attribute Name="dk:gov:saml:attribute:SENumberIdentifier"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="SeNumberIdentifie">
  <AttributeValue />
</Attribute>
<Attribute Name="dk:gov:saml:attribute:AssuranceLevel"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="AssuranceLevel">
  <AttributeValue>True</AttributeValue>
</Attribute>
<Attribute Name="dk:gov:saml:attribute:SpecVer"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" FriendlyName="SpecVer">
  <AttributeValue />
</Attribute>
<Attribute Name="urn:oid:2.5.4.4"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" FriendlyName="surName">
  <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
</Attribute>
<Attribute Name="urn:oid:2.5.4.3"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="CommonName">
  <AttributeValue>Morten Mortensen</AttributeValue>
</Attribute>
<Attribute Name="urn:oid:0.9.2342.19200300.100.1.1"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" FriendlyName="uid">
  <AttributeValue>CVR:10213231-RID:93947552</AttributeValue>
</Attribute>
<Attribute Name="urn:oid:0.9.2342.19200300.100.1.3"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" FriendlyName="mail">
  <AttributeValue>MortenMortensen@kfobs.dk</AttributeValue>
</Attribute>
<Attribute Name="urn:oid:2.5.4.5"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="serialNumber">
  <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
</Attribute>
<Attribute Name="urn:oid:1.3.6.1.4.1.1466.115.121.1.8"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="userCertificate">
  <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
</Attribute>
<Attribute Name="urn:oid:2.5.29.29"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="Certificate issuer attribute">
  <AttributeValue a:nil="true" />
</Attribute>
```

```
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
  </Attribute>
  <Attribute Name="dk:gov:saml:attribute:UniqueAccountKey"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="UniqueAccountKey">
  <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
  </Attribute>
  <Attribute Name="dk:gov:saml:attribute:Privileges_intermediate"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="Privileges">
  <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
  </Attribute>
  <Attribute Name="dk:gov:saml:attribute:IsYouthCert"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="IsYouthCert">
  <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
  </Attribute>
  <Attribute Name="dk:gov:saml:attribute:PidNumberIdentifier"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="PidNumberIdentifier">
  <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
  </Attribute>
  <Attribute Name="urn:oid:2.5.4.10"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="organizationName">
  <AttributeValue>Økonomistyrelsen // CVR:10213231</AttributeValue>
  </Attribute>
  <Attribute Name="dk:gov:saml:attribute:UserAdministratorIndicator"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="UserAdministratorIndicator">
  <AttributeValue>0</AttributeValue>
  </Attribute>
  <Attribute Name="dk:gov:saml:attribute:CvrNumberIdentifier"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="CVRnumberIdentifier">
  <AttributeValue>10213231</AttributeValue>
  </Attribute>
  <Attribute Name="dk:gov:saml:attribute:RidNumberIdentifier"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="RidNumberIdentifier">
  <AttributeValue>93947552</AttributeValue>
  </Attribute>
  <Attribute Name="urn:oid:2.5.4.65"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" FriendlyName="OCES
```

```

Pseudonym">
    <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
    </Attribute>
    <Attribute Name="urn:liberty:disco:2006-08:DiscoveryEPR"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic">
    <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
    </Attribute>
    </AttributeStatement>
  </Assertion>
</RequestedSecurityToken>
<wst:RequestedAttachedReference xmlns:wst="http://docs.oasis-open.org/ws-
sx/ws-trust/200512">
  <wsse:SecurityTokenReference>
    <wsse:Reference URI="#encryptedassertion" />
  </wsse:SecurityTokenReference>
</wst:RequestedAttachedReference>
<wst:RequestedUnattachedReference xmlns:wst="http://docs.oasis-open.org/ws-
sx/ws-trust/200512">
  <wsse:SecurityTokenReference>
    <wsse:Reference URI="#encryptedassertion" />
  </wsse:SecurityTokenReference>
</wst:RequestedUnattachedReference>
<Lifetime>
  <Created xmlns="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-utility-1.0.xsd">2015-03-20T09:04:46.256Z</Created>
  <Expires xmlns="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-utility-1.0.xsd">2015-03-20T17:04:46.256Z</Expires>
</Lifetime>
</RequestSecurityTokenResponse>
</RequestSecurityTokenResponseCollection>
</S11:Body>
</S11:Envelope>

```

4.5 Signature scenario

In this scenario the "user identity" is proofed by the signing of the request to Nemlog-in STS. The scenario which exists in an Identity policy and a System policy variant contains no bootstrap tokens.

Request and response messages are described in detail in [STS-RULES].

4.5.1 Request example ("Identity" / MOCES certificate)

POST <https://securetokenservice.nemlog-in.dk/SecurityTokenService.svc> HTTP/1.1
 SOAPAction: <http://docs.oasis-open.org/ws-sx/ws-trust/200512/RST/Issue>


```

    <CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#"
  />
  <SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#rsa-
sha256" />
  <Reference URI="#action">
    <Transforms>
      <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
    </Transforms>
    <DigestMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#sha256" />
    <DigestValue>NrdtWxaigbkMffHPgKcAMndq0hRMvsKQSkNeImS5cAE=</DigestValue>
  </Reference>
  <Reference URI="#msgid">
    <Transforms>
      <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
    </Transforms>
    <DigestMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#sha256" />
    <DigestValue>dBMmqthBFSaQDgkdW4gE99QbqbyiS/9BbMk3p0/CWS4=</DigestValue>
  </Reference>
  <Reference URI="#to">
    <Transforms>
      <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
    </Transforms>
    <DigestMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#sha256" />
    <DigestValue>VRjscE+sMXyWgDFXLwczBVCnXdPBwx7vm800+bGCrQw=</DigestValue>
  </Reference>
  <Reference URI="#sec-ts">
    <Transforms>
      <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
    </Transforms>
    <DigestMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#sha256" />
    <DigestValue>Za45FgPz/Ayqtbhxa0QC4P26P0ev+0S/hVyzK8KvAic=</DigestValue>
  </Reference>
  <Reference URI="#sec-binsectoken">
    <Transforms>
      <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
    </Transforms>
    <DigestMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#sha256" />
    <DigestValue>gC0rvFzqTW4HgCX51iQ6AnQuriSEQw9PUZ1HDD9nn0=</DigestValue>
  </Reference>
  <Reference URI="#body">
    <Transforms>
      <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
    </Transforms>
    <DigestMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#sha256" />
    <DigestValue>y5x5ngzpwCabqA7/8KPzuIUmk2Au/ovaCBRHPimVbGY=</DigestValue>
  </Reference>
</SignedInfo>

<SignatureValue>0EfmkHRk/wESKHfHlktNM85Mpkn7pcGGq0SrTDBul6ix52tDr7nUIlq3sWSRmpdTtb6Bkn
IWarQ2CLkckzhy4tMYIrvARA1x1cMvUGOCsqevTTbZ17zhcLgZVUsykM6wRwnmF9QGRJZ9d0BPVXqh1HSAT7RU
6jL8/IHbNI/wo71h7NYM1X8xLyfXJIPxAfj2o0Th+WVv1uu04Li8KTJ/2kYzgtXPC2dMByfRb2EyjGuT2NUF0
Eab8KyqFfoUw5dUuuUzt+afSWpqr8ALVnKhpEy0ij62gXUAm1hscz06QSkEiv4+VBZRzEfXwyAc1+Lro82q0u
39/O+A1qv2NT4Q=</SignatureValue>
  <KeyInfo>
    <o:SecurityTokenReference xmlns:o="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <o:Reference URI="#sec-binsectoken" />
    </o:SecurityTokenReference>
  </KeyInfo>

```

```

    </KeyInfo>
  </Signature>
</wss:Security>
</S11:Header>
<S11:Body wsu:Id="body">
  <wst:RequestSecurityToken Context="urn:uuid:705515c8-54d0-4336-9c28-d05f30093125">
    <wst:RequestType>http://docs.oasis-open.org/ws-sx/ws-
trust/200512/Issue</wst:RequestType>
    <wsp:AppliesTo>
      <wsa:EndpointReference>
        <wsa:Address>https://saml.nnit001.dmz.dkdev</wsa:Address>
      </wsa:EndpointReference>
    </wsp:AppliesTo>
  </wst:RequestSecurityToken>
</S11:Body>
</S11:Envelope>

```

Commented [A25]: EntityId to issue identity token for

4.5.2 Response envelope example local STS ("Identity" / MOCES certificate) (decrypted)

```

<S11:Envelope xmlns:S11="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:wsa="http://www.w3.org/2005/08/addressing" xmlns:wsu="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd"
xmlns:wss="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-
1.0.xsd">
  <S11:Header>
    <wsa:Action wsu:Id="action">http://docs.oasis-open.org/ws-sx/ws-
trust/200512/RST/Issue</wsa:Action>
    <wsa:MessageID wsu:Id="messageid">uuid:6f89d3ae-0fad-4c5d-925c-
60e9240e6a13</wsa:MessageID>
    <wsa:RelatesTo wsu:Id="relatesto">uuid:541a1974-13e5-4d36-a6c5-
f71d0605b275</wsa:RelatesTo>
    <wss:Security S11:mustUnderstand="1">
      <wsu:Timestamp wsu:Id="sec_timestamp">
        <wsu:Created>2015-03-20T08:03:13.429Z</wsu:Created>
        <wsu:Expires>2015-03-20T16:03:13.429Z</wsu:Expires>
      </wsu:Timestamp>
      <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
        <SignedInfo>
          <CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-
c14n#"></CanonicalizationMethod>
          <SignatureMethod Algorithm="http://www.w3.org/2000/09/xmldsig#rsa-
sha1"></SignatureMethod>
          <Reference URI="#action">
            <Transforms>
              <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
            </Transforms>
          </Reference>
          <DigestMethod
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
          <DigestValue>1hj8fpM7T5rc0sNRPpnxA3p3AkM</DigestValue>
        </Reference>
      </Signature>
    </wss:Security>
  </S11:Header>
  <S11:Body wsu:Id="body">
    <wst:RequestSecurityToken Context="urn:uuid:705515c8-54d0-4336-9c28-d05f30093125">
      <wst:RequestType>http://docs.oasis-open.org/ws-sx/ws-trust/200512/Issue</wst:RequestType>
      <wsp:AppliesTo>
        <wsa:EndpointReference>
          <wsa:Address>https://saml.nnit001.dmz.dkdev</wsa:Address>
        </wsa:EndpointReference>
      </wsp:AppliesTo>
    </wst:RequestSecurityToken>
  </S11:Body>
</S11:Envelope>

```

```

    <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
  </Transforms>
  <DigestMethod
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
  <DigestValue>YFINY7VV9KL8xD8uiy0aneffjFI=</DigestValue>
  </Reference>
  <Reference URI="#relatesto">
  <Transforms>
    <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
  </Transforms>
  <DigestMethod
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
  <DigestValue>08Ji4Y2kwdfhjWbs5tYB4eUkoS0=</DigestValue>
  </Reference>
  <Reference URI="#sec_timestamp">
  <Transforms>
    <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
  </Transforms>
  <DigestMethod
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
  <DigestValue>jSPcIsNzQaUWI7EnZG5EMlkDt7s=</DigestValue>
  </Reference>
  <Reference URI="#body">
  <Transforms>
    <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
  </Transforms>
  <DigestMethod
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
  <DigestValue>J2sdhxiII1poBx33sQTtd2bs4AM=</DigestValue>
  </Reference>
  </SignedInfo>

<SignatureValue>YIN1SzPV/ThEewqVTY9nLdE1RwhqyPQ7PxZznZRHgEvyvquIMnjGGQ28fc8UouU4LFqSc
czMoxDqSzYz6izT4RJ9YbGAYDHZOyg7ItioaWSLk7VQ9pwbQFSv/nT2+6fangc3+qzGdPhLDLevwPTFmki272i
KeBmVgSeD06JR0x9K+gV1BfVr7qj7JQ0gE182ZPrk62tQ7weXhDuGalqtmqeif4gXJtz7jAwlweItUt1EHsZ0V
mgZ2piR3HH9+o/i/tRv6ZsscplmzhqfRMNdq1XyNxZktYA2GAJCN+aFn1hDti6U/0KX39AZVafEn0v+6u7LUwE
wSrSZntJzgw2tA=</SignatureValue>
  </Signature>
</wsse:Security>
</S11:Header>
<S11:Body wsu:Id="body">
  <RequestSecurityTokenResponseCollection xmlns="http://docs.oasis-open.org/ws-
sx/ws-trust/200512">
    <RequestSecurityTokenResponse Context="urn:uuid:705515c8-54d0-4336-9c28-
d05f30093125">
      <TokenType />
      <AppliesTo xmlns="http://schemas.xmlsoap.org/ws/2002/12/policy">
        <EndpointReference xmlns="http://www.w3.org/2005/08/addressing">
          <Address>https://saml.nnit001.dmz.dkdev/Address</Address>
        </EndpointReference>
      </AppliesTo>
      <RequestedSecurityToken>
        <Assertion ID="_284fff56-38b7-470a-96d3-961a43a38b5b" IssueInstant="2015-03-
20T08:03:13.429Z" Version="2.0" xmlns="urn:oasis:names:tc:SAML:2.0:assertion">

```

Commented [A26]: Entityid of the WSP this identity token is issued for

```

    <Issuer Format="urn:oasis:names:tc:SAML:2.0:nameid-
format:entity">https://signature.sts.nemlog-in.dk/</Issuer>
    <ds:Signature xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
      <ds:SignedInfo>
        <ds:CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-
exc-c14n#" />
        <ds:SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-
more#rsa-sha256" />
        <ds:Reference URI="#_284fff56-38b7-470a-96d3-961a43a38b5b">
          <ds:Transforms>
            <ds:Transform
Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature" />
            <ds:Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#"
/>
          </ds:Transforms>
          <ds:DigestMethod Algorithm="http://www.w3.org/2001/04/xmllenc#sha256"
/>
        </ds:Reference>
        </ds:SignedInfo>
        <ds:SignatureValue>AVt5zPLJvgUA8o0sjqCk1z0pu/V0s/10o7guZugGJkyLdX7z18pr1Gk1xTQazb9FSDL
Hpvdo4RJ5bYJSq73gas1QIWWX0coVvS5UuNQ/v/NP8x84/x9uR5xsGQDEXi6U8TbLq/VTamh0uYbHBQqaJIPst
KqniJy8FZJRBTQWazJMVA1ccmH1zrostkYGFVGTFRiWtTVw3nG0cDGN0b6HFkh21gKr0RKFJw+UUDpeghU4ap
pdTmjV1gplMMqYnwxeEi+JRtgOKJWX9Q2iYj+YXeuulji0FeMCNAKszewAjXz6jowGraM6wJzYSaYBYqPJ6Ng
+nMCT634XTAivrcwA=
```

Commented [A27]: Certificate used to sign the response. Do not verify signature with embedded certificates.


```

    <NameID Format="urn:oasis:names:tc:SAML:1.1:nameid-
format:X509SubjectName">C=DK,O=Økonomistyrelsen // CVR:10213231,CN=Morten
Mortensen,Serial=CVR:10213231-RID:93947552</NameID>
    <SubjectConfirmation Method="urn:oasis:names:tc:SAML:2.0:cm:bearer" />
  </Subject>
  <Conditions NotBefore="2015-03-20T08:03:13.429Z" NotOnOrAfter="2015-03-
20T16:03:13.429Z">
    <AudienceRestriction>
      <Audience>https://saml.nnit001.dmz.dkdev</Audience>
    </AudienceRestriction>
  </Conditions>
  <AttributeStatement>
    <Attribute Name="dk:gov:saml:attribute:SpecVer"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" FriendlyName="SpecVer">
      <AttributeValue>DK-SAML-2.0</AttributeValue>
    </Attribute>
    <Attribute Name="dk:gov:saml:attribute:AssuranceLevel"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="AssuranceLevel">
      <AttributeValue>2.0</AttributeValue>
    </Attribute>
    <Attribute Name="urn:oid:2.5.4.4"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" FriendlyName="surName">
      <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
    </Attribute>
    <Attribute Name="urn:oid:2.5.4.3"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="CommonName">
      <AttributeValue>Morten Mortensen</AttributeValue>
    </Attribute>
    <Attribute Name="urn:oid:0.9.2342.19200300.100.1.1"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" FriendlyName="uid">
      <AttributeValue>CVR:10213231-RID:93947552</AttributeValue>
    </Attribute>
    <Attribute Name="urn:oid:0.9.2342.19200300.100.1.3"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" FriendlyName="mail">
      <AttributeValue>MortenMortensen@kfobs.dk</AttributeValue>
    </Attribute>
    <Attribute Name="urn:oid:2.5.4.5"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="serialNumber">
      <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
    </Attribute>
    <Attribute Name="urn:oid:1.3.6.1.4.1.1466.115.121.1.8"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="userCertificate">
      <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
    </Attribute>
    <Attribute Name="urn:oid:2.5.29.29"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="Certificate issuer attribute">
      <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
    </Attribute>

```

Commented [A28]: Subjectname extracted from the certificate used to sign the request

```
<Attribute Name="dk:gov:saml:attribute:UniqueAccountKey"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="UniqueAccountKey">
  <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
  </Attribute>
<Attribute Name="dk:gov:saml:attribute:Privileges_intermediate"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="Privileges">
  <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
  </Attribute>
<Attribute Name="dk:gov:saml:attribute:IsYouthCert"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="IsYouthCert">
  <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
  </Attribute>
<Attribute Name="dk:gov:saml:attribute:PidNumberIdentifier"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="PidNumberIdentifier">
  <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
  </Attribute>
<Attribute Name="urn:oid:2.5.4.10"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="organizationName">
  <AttributeValue>Økonomistyrelsen // CVR:10213231</AttributeValue>
</Attribute>
<Attribute Name="dk:gov:saml:attribute:ProductionUnitIdentifier"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="ProductionUnitIdentifier">
  <AttributeValue>1003388503</AttributeValue>
</Attribute>
<Attribute Name="dk:gov:saml:attribute:UserAdministratorIndicator"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="UserAdministratorIndicator">
  <AttributeValue>0</AttributeValue>
</Attribute>
<Attribute Name="dk:gov:saml:attribute:SENumberIdentifier"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="SENumberIdentifier">
  <AttributeValue>66662222</AttributeValue>
</Attribute>
<Attribute Name="dk:gov:saml:attribute:CvrNumberIdentifier"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="CVRnumberIdentifier">
  <AttributeValue>10213231</AttributeValue>
</Attribute>
<Attribute Name="dk:gov:saml:attribute:RidNumberIdentifier"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="RidNumberIdentifier">
  <AttributeValue>93947552</AttributeValue>
</Attribute>
<Attribute Name="urn:oid:2.5.4.65"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" FriendlyName="OCES
Pseudonym">
```

```

        <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
      </Attribute>
      <Attribute Name="urn:liberty:disco:2006-08:DiscoveryEPR"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic">
        <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
      </Attribute>
    </AttributeStatement>
  </Assertion>
</RequestedSecurityToken>
<wst:RequestedAttachedReference xmlns:wst="http://docs.oasis-open.org/ws-
sx/ws-trust/200512">
  <wsse:SecurityTokenReference>
    <wsse:Reference URI="#encryptedassertion" />
  </wsse:SecurityTokenReference>
</wst:RequestedAttachedReference>
<wst:RequestedUnattachedReference xmlns:wst="http://docs.oasis-open.org/ws-
sx/ws-trust/200512">
  <wsse:SecurityTokenReference>
    <wsse:Reference URI="#encryptedassertion" />
  </wsse:SecurityTokenReference>
</wst:RequestedUnattachedReference>
<Lifetime>
  <Created xmlns="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-utility-1.0.xsd">2015-03-20T08:03:13.429Z</Created>
  <Expires xmlns="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-utility-1.0.xsd">2015-03-20T16:03:13.429Z</Expires>
</Lifetime>
</RequestSecurityTokenResponse>
</RequestSecurityTokenResponseCollection>
</S11:Body>
</S11:Envelope>

```

Commented [A29]: Issued attributes

4.5.3 Request example ("System" / FOCES/VOCES certificate)

```

<S11:Envelope xmlns:S11="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:wsa="http://www.w3.org/2005/08/addressing"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:wsse="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd"
xmlns:wssu="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-
1.0.xsd" xmlns:ds="http://www.w3.org/2000/09/xmldsig#" xmlns:wst="http://docs.oasis-
open.org/ws-sx/ws-trust/200512" xmlns:wst14="http://docs.oasis-open.org/ws-sx/ws-
trust/200802" xmlns:saml2="urn:oasis:names:tc:SAML:2.0:assertion"
xmlns:wsp="http://schemas.xmlsoap.org/ws/2002/12/policy">
  <S11:Header>
    <wsa:Action wsu:Id="action">http://docs.oasis-open.org/ws-sx/ws-
trust/200512/RST/Issue</wsa:Action>

```



```
</Transforms>
<DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256" />
<DigestValue>NrdtWxaigbkMffHPgKCAMndq0hRMvsKQSkNeImS5cAE=</DigestValue>
</Reference>
<Reference URI="#msgid">
  <Transforms>
    <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
  </Transforms>
  <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256" />
  <DigestValue>DGrhNDOP5WVXHv32syDFjz/EvkwX9fUho0E4Z7Ng858=</DigestValue>
</Reference>
<Reference URI="#to">
  <Transforms>
    <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
  </Transforms>
  <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256" />
  <DigestValue>VRjscE+sMXYwGdFXLwczBVCnXdPBwx7vm800+bGCrQw=</DigestValue>
</Reference>
<Reference URI="#sec-ts">
  <Transforms>
    <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
  </Transforms>
  <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256" />
  <DigestValue>OKCzjbMTQzBTl+Du4FO+7uqIx6rn4HX0ztPoPqWUiK4=</DigestValue>
</Reference>
<Reference URI="#sec-binsectoken">
  <Transforms>
    <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
  </Transforms>
  <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256" />
  <DigestValue>Q2VuF5Ly9NMqX3gnkPXEb4CP6iIIU18iIf20CptoUNY=</DigestValue>
</Reference>
<Reference URI="#body">
  <Transforms>
    <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
  </Transforms>
  <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256" />
  <DigestValue>AkcsxCYOD/d3ts/9xR5kL+thdatMMTteK6pwMj1tQdg=</DigestValue>
</Reference>
</SignedInfo>
<SignatureValue>Ki2+KJK83cE1RAiH113n40CTv/yDsm/U/gXmGt0pnZvew7hAu65YiGVH5M71NArRVs5k6J
+u4u8je1EdBe09s3Jbb9xtoK/10th13Ny+o3PBwDN/Kvb06yFH+B3Z1HxhS/SP0NqcwT/rgxw2uT+zpVvy0gd2
Iv5tg7rU77yaGb13FRWrFfCwdmf4GpkzAMV4rnjIgJpFRsP00mZc56wLq1w/+eHrHGfMYcIiLVASfHzrxL8ww
30dC0S1dNmFbTpvQ/kVft/PJU6j22Hbj6csPcVYY1N7MRv1f91j/b2mpkR1FCG6cPe/GMtrIr81qyvFyZ0SIQ3
78++RwtBGPfmg=</SignatureValue>
<KeyInfo>
```

```

    <o:SecurityTokenReference xmlns:o="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <o:Reference URI="#sec-binsectoken" />
    </o:SecurityTokenReference>
  </KeyInfo>
</Signature>
</wsse:Security>
</S11:Header>
<S11:Body wsu:Id="body">
  <wst:RequestSecurityToken Context="urn:uuid:9f4e1596-7d81-4af5-8334-99d3d1bc169f">
    <wst:RequestType>http://docs.oasis-open.org/ws-sx/ws-
trust/200512/Issue</wst:RequestType>
    <wsp:AppliesTo>
      <wsa:EndpointReference>
        <wsa:Address>https://saml.nnit001.dmk.dkdev</wsa:Address>
      </wsa:EndpointReference>
    </wsp:AppliesTo>
  </wst:RequestSecurityToken>
</S11:Body>
</S11:Envelope>

```

4.5.4 Response envelope example ("System" / FOCES/VOCES certificate) (decrypted)

```

<S11:Envelope xmlns:S11="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:wsa="http://www.w3.org/2005/08/addressing" xmlns:wsu="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd"
xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-
1.0.xsd">
  <S11:Header>
    <wsa:Action wsu:Id="action">http://docs.oasis-open.org/ws-sx/ws-
trust/200512/RST/Issue</wsa:Action>
    <wsa:MessageID wsu:Id="messageid">uuid:38753c46-9a4f-4559-9bd6-
ac0d7625e9e6</wsa:MessageID>
    <wsa:RelatesTo wsu:Id="relatesto">uuid:e5bda526-5923-4d78-a4d7-
534a3e6d1b5a</wsa:RelatesTo>
    <wsse:Security S11:mustUnderstand="1">
      <wsu:Timestamp wsu:Id="sec_timestamp">
        <wsu:Created>2015-03-20T08:05:52.871Z</wsu:Created>
        <wsu:Expires>2015-03-20T16:05:52.871Z</wsu:Expires>
      </wsu:Timestamp>
      <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
        <SignedInfo>
          <CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-
c14n#"></CanonicalizationMethod>
          <SignatureMethod Algorithm="http://www.w3.org/2000/09/xmldsig#rsa-
sha1"></SignatureMethod>
          <Reference URI="#action">

```

```

    <Transforms>
      <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
    </Transforms>
    <DigestMethod
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
    <DigestValue>1hj8fpM7T5rc0sNRPpnxA3p3AkM=</DigestValue>
  </Reference>
  <Reference URI="#messageid">
    <Transforms>
      <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
    </Transforms>
    <DigestMethod
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
    <DigestValue>hF7C+AMXxUURhrOLDjsKx09bEF4=</DigestValue>
  </Reference>
  <Reference URI="#relatesto">
    <Transforms>
      <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
    </Transforms>
    <DigestMethod
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
    <DigestValue>Akm30KBGu0EG53Tz5PtNW9YeWS8=</DigestValue>
  </Reference>
  <Reference URI="#sec_timestamp">
    <Transforms>
      <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
    </Transforms>
    <DigestMethod
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
    <DigestValue>df1/tn25bpb0JeBIqiy0PKln6d0=</DigestValue>
  </Reference>
  <Reference URI="#body">
    <Transforms>
      <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-
signature"></Transform>
    </Transforms>
    <DigestMethod
```



```
wEAAa0CAosowgGLGMA4GA1UdDwEB/wQEAWIDuDCB1wYIKwYBBQUHAQEgYowgYcwPAYIKwYBBQUHMAGGMGh0dHA6L
6Ly9vY3NwLnN5c3R1bXR1c3QxOS50cnVzdDI0MDguY29tL3JlL3Bvbmlc3BHBGgrBgEFBQcwAoY7aHR0cDovL
2YuYWhlLnN5c3R1bXR1c3QxOS50cnVzdDI0MDguY29tL3N5c3R1bXR1c3QxOS1jYS5jZXIwggEgBgNVHSAEggE
XMIIBEzCCAQ8GDSsGAQQBgFRRAQGBAiwgf0wLwYIKwYBBQUHAgEWI2h0dHA6Ly93d3cudHJ1c3QyNDA4LmNvb
S9yZXVvc2l0b3J5MIHJBggrBgEFBQcCAjCBvDAMFgVEYw5JRDADAgEBGoGrRGFuSUQgdGVzdCBjZXJ0awZpa2F
0ZXIgzZnJhIGR1bm51IENBIHVkc3R1ZGVzIHVuzGVyIE9JRCAxLjMuNi4xLjQUMS4zMTMxMy4yLjQuNi40LjIuI
ERhbklEIHRLc3QyY2VydG1maWVhdGVzIGZyb20gdGhpcyBDQSBhcmUgaXNzdWVkdGVzIGVzIGVzIE9JRCAxLjMuNi4
xLjQUMS4zMTMxMy4yLjQuNi40LjIuMIGqBgNVHR8EgaIwZ8wPKA6oDiGNmh0dHA6Ly9jcmwuc3lzdGVtdGVzd
DE5LnRydXN0MjQwOC5jb2Vvc3lzdGVtdGVzdDE5LmNybdBfoF2gW6RZMFcxCAJBGVBAYTAkRlMRlWwEAYDVQQ
KDA1U1U1VTVDI0MDgxJDAiBgNVBAMM1RSVVNUMjQwOCBTeXN0ZW10ZXN0IFhJWCBDQTEOMAwGA1UEAwFQ1JMM
jIwHwYDVR0jBBgwFoAUAzAJVDOSBkK8gVNUrFFeckVI4f6AwHQYDVR0OBBYEFnc41PG/agTmqzigwUfPnkf8zf
3MAkGA1UdEwQCAAAwDQYJKoZIhvcNAQELBQADggEBAADnssIGIXgIPwgfLjxu0YPVchS5W68JeQ0oLjGhEGJY/
9sao8HvTLiJCPsWJ0SuyPJUu6/b6r1Q0ATGwk1fmCEjDQidy0Ag2Lsn1sDix+Nbf+CxvtI2F1gIx7IasExBDJg
sC0sozCDdoHBaPbAqhrj/pu0tp+rCHA/tG3DAsyHS1bZBYm03QyKn7+GVIkEi2sSnwvaT95fRUUvf4ur2n9s1
1gIfXqbPliwGaiHeAn8u9FzjvIZmb00t3yuzf3tr6ZREB3Emp6spHwmlERNeihFSrZIIgk/kDYLyc80za4sNeF
mIGUvAReidHGVA3IMACfJCVLqGBG6VyZaJHPVhs=</X509Certificate>
```

```
</X509Data>
  </KeyInfo>
  </SubjectConfirmationData>
</SubjectConfirmation>
</Subject>
  <Conditions NotBefore="2015-03-20T08:05:52.871Z" NotOnOrAfter="2015-03-
20T16:05:52.871Z">
  <AudienceRestriction>
    <Audience>https://sam1.nnit001.dmz.dkdev</Audience>
  </AudienceRestriction>
</Conditions>
  <AttributeStatement>
    <Attribute Name="dk:gov:saml:attribute:SpecVer"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" FriendlyName="SpecVer">
<AttributeValue>DK-SAML-2.0</AttributeValue>
    </Attribute>
    <Attribute Name="dk:gov:saml:attribute:AssuranceLevel"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="AssuranceLevel1">
    <AttributeValue>2.0</AttributeValue>
  </Attribute>
  <Attribute Name="dk:gov:saml:attribute:Privileges_intermediate"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="Privileges">
    <AttributeValue a:nil="true"
xmlns:a="http://www.w3.org/2001/XMLSchema-instance" />
  </Attribute>
  <Attribute Name="dk:gov:saml:attribute:CvrNumberIdentifier"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="CVRnumberIdentifier">
    <AttributeValue>21093106</AttributeValue>
  </Attribute>
</AttributeStatement>
```

Commented [A35]: The certificate for the WSC for the System policy. Note this structure is different from the Identity policy Response.

```
</Assertion>
</RequestedSecurityToken>
<wst:RequestedAttachedReference xmlns:wst="http://docs.oasis-open.org/ws-
sx/ws-trust/200512">
  <wsse:SecurityTokenReference>
    <wsse:Reference URI="#encryptedassertion" />
  </wsse:SecurityTokenReference>
</wst:RequestedAttachedReference>
<wst:RequestedUnattachedReference xmlns:wst="http://docs.oasis-open.org/ws-
sx/ws-trust/200512">
  <wsse:SecurityTokenReference>
    <wsse:Reference URI="#encryptedassertion" />
  </wsse:SecurityTokenReference>
</wst:RequestedUnattachedReference>
<Lifetime>
  <Created xmlns="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-utility-1.0.xsd">2015-03-20T08:05:52.871Z</Created>
  <Expires xmlns="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-utility-1.0.xsd">2015-03-20T16:05:52.871Z</Expires>
</Lifetime>
</RequestSecurityTokenResponse>
</RequestSecurityTokenResponseCollection>
</S11:Body>
</S11:Envelope>
```

5 Reference

Reference	Description
[STS-RULES]	Security Token Service DS – Processing rules https://test-nemlog-in.dk/Testportal/dokumenter/NemLog-in2%20-%20STS-Processing%20rules.pdf
[CSS – USERMANUAL]	CSS User manual http://digitaliser.dk/resource/2561041
[DanIDVocesGyldig.p12]	DanId Voces test certificate used for the test WSP https://test-nemlog-in.dk/Testportal/certifikater/DanIDVocesGyldig.p12
[IntegrationTestSigning.cer]	Integration test signing certificate https://test-nemlog-in.dk/Testportal/certifikater/IntegrationTestSigning.zip
[ProductionSigning.cer]	Production signing certificate https://test-nemlog-in.dk/Testportal/certifikater/ProductionSigning.zip
[OIOIDWS]	OIO Identity-based Web Services v1.0.1a http://digitaliser.dk/resource/526486
[SOAP11]	Simple Object Access Protocol (SOAP) 1.1 http://www.w3.org/TR/2000/NOTE-SOAP-20000508/

6 Change log

Date	Version	Description of Changes	Initials
2014-03-19	0.1	Document created	AxPe
2014-04-02	0.2	Document updated	AxPe
2014-04-03	1.0	Approved by DIGST	AxPe
2014-04-22	1.1	Added reference to "ECHO" test service	AxPe
2014-10-30	1.2	Section "3.2 Binding" updated to include SOAP version. Request examples updated with http headers	TMLN
2015-03-20	1.3	Document updated with new Request – Response examples and descriptions of new scenarios.	TRq