

# 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.

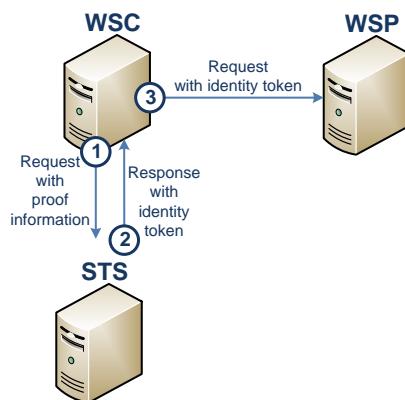
The document consists of the following sections:

- 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 certificate type 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	If Envelope/Header/Security/Timestamp/Expires value is understood but not accepted this error will be returned  Or  If the NotOnOrAfter-attribute is understood but exceeded on either Envelope/RequestSecurityToken/ActAs/Assertion/Subj ect/SubjectConfirmationData or Envelope/RequestSecurityToken/ActAs/Assertion/Conditions
wst:InvalidTimeRange	The requested time range is invalid or unsupported	If unsupported or invalid values in Envelope/Body/RequestSecurityToken/LifeTime will return this error.  (Requested lifetime will be overridden with default sts lifetime policy)

## 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].

#### 4.3.1 Request example

Note that the content of the `wst14:ActAs` can be sent Base64 encoded as it is received from the NemLogin assertion, but for purpose of this example is decoded. STS accepts both formats for the content of the `ActAs` element

```
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: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:wp="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:40ffa8d6-c575-4f38-8204-8a5d541d5e59</wsa:MessageID>
    <wsa:To wsu:Id="to">https://bootstrap.sts.nemlog-in.dk</wsa:To>
```

Commented [A1]: Bootstrap scenario

```

      <wsse:Security S11:mustUnderstand="1">
        <wsu:Timestamp wsu:Id="sec-ts">
          <wsu:Created>2015-03-19T09:06:04Z</wsu:Created>
          <wsu:Expires>2015-03-29T09:06:04Z</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">MIIGIDCCBQigAwIBAgIETAV1TzANBgkqhkiG9w0BAQsFADBiMQuwCQYDVQQGEwJESzESMBAGA1UECgwJVFJU1QyNDA4MSUwIwYDVQQDBxUU1VTVDI0MDggU31zdGVtdCBWSU1JENBMB4XDTEyMDExMjE0MTQwN1oXDTE2MDExMjE0MTM1MlowdjELMAkGA1UEBhMCREsxKjaoBgNVBAoMIC0YaN29ub21pc3R5cmVs c2VuIC8vIENWUjoxMDIxMzIzMTE7MBcGA1UEAwwQTW9ydgVUIE1vcnR1bnN1bjAgBgNVBAUTGUNWUjoxMDIxMz IZMS1SSUQ60TM5NdC1NTIwggEiMA0GCSqGSIb3DQEBAQUAA4IBDwAwggEKAoIBAQDXXgVHipGqErG8xLbYqxmp vyZzh1aBK4th2YaiIbRyZfSO3gOxhWs+XR3JL0rVmGKxERYGD4fTnNfWU7TpYaT08pnXEx2+bV2ohIzcavQYW 21KMgcp1psWr6wv5IuF0Ykhdyv900qJRouBh4oHJwvBjVJQLDw0L+d6bJ/DjW+tHwtuWMyPUKZRjQf6dWIA45p kLH8mcFNtxGIOZHvlqH7IiPHc73KKqxmig/vvdUCVI15MADeCsQQ8ds0Aw7uFJiytROF/5wD0jJOZHJToBLvt Qd8UShEtL6TSiEchi2ZVPf/tJmiRriQQNHQy/sWEPlnk2HzxRkuPNzt1GeMVBAgMBAAGjggLiMIIC3jaOBgNV HQ8BAf8EBAMCA/gwgZQGCCsGAQUBBwEBBIGHMIGEMDsGCCsGAQUBBzABhi9odHRwOi8vb2NzcC5zeXN0ZW10ZX
```

```
N00C50cnVzdDI0MDguY29tL3J1c3BvbmrRlcjBFBggrBgEFBQcwAoY5aHR0cDovL20uYWhLnN5c3R1bXR1c3Q4
LnRydXN0MjQwOC5jb20vc31zdGVzdDgtY2EuY2VyMIIBIAYDV0gBIIBFzCCARMwggEPBg0rBgEEAYH0UQ
IEBgIFMIH9MC8GCCsGAQUFBwIBFInodHRwOi8vd3d3LnRydXN0MjQwOC5jb20vcmVwb3NpdG9yeTCByQYIKwYB
BQUHAgIwgwwDBYFRGFuSUQwAwIBARqBq0rHbk1EIHR1c3QgY2VydG1maWthdGVyIGZyYSBkZW5uZSBQSB1ZH
N0ZWR1cyB1bmR1ciBPSUQgMS4zLjYuMS40LjEuMzEzMtmuMi40LjYuMi41LiBEYW5JRCB0ZXN0IGN1cnRpZmlj
YXR1cyBmc9tIHRoaXMgQ0EgYXJ1IGlzc3V1ZCB1bmR1ciBPSUQgMS4zLjYuMS40LjEuMzEzMtmuMi40LjYuMi
41LjAYBgNVHREEETAPgQ1qZWxmQG5uaXQuY29tMIGr8gNVHR8EgaMwgaAwQa4oDaGNGh0dHA6Ly9jcmwuc31z
dGVtdGVzdDgudH1c3QyNDA4LmNvbS9zeXN0ZWI0ZXN0C5jcmwwYqBgoF6kXD8aM0swCQYDVQQGEwJESzESMB
AGA1UECgwJVVFJU1QyNDA4MSUwIwYDVQQDBxUU1VTVDI0MDggU31zdGVtdGVzdCBWSU1JIENBMRARwDgYDVQD
DADDUkwMTI0MB8GA1UdIwQYMBaAFJyBnhM7IinCPfnn+PPrxss+E18EMB0GA1UdDgQWBBTv7aQGa8L1qrstrR
8ItB9Lz0RT/zAJBgNVHREMAjAAMA0GCSqGSIb3DQEBCwUAA4IBAQ0Pd04cFScEKoZgug3x+GBFoYzDgYBZR/d
SJexU3N9+e5wTgwterC9Ykk3BTV4V1B16NFUjP9TPqOzaCkqTdW1xruy0wNKvMNGacVZjhS91baTW3ZnNiAE5
x5gDxvsjuRVC0xZvyAhT7jkp4J62haMoDt+PRsZ0dcVCN0KuLWL+Lh5efaB9vSCMsyKUjXf9A/F21nhBiNsECs
WjNxyt2/igbTuYCST12dTCPHs+sDEAnaZ1TJa2B/CMUPo15niVLFuOWCPPyxurUZFB3bK/9qdHT60JvaVezwAA
mCWEW7Cw4AAKGDPMDG1qsRxRgabB3bd5zCbnJkW/SNhg8/lc</wsse:BinarySecurityToken>
```

**Commented [A2]:** Certificate used to sign the request

```
<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>NrdtWxaigbkMffHPgKCAMndq0hRMvsKQSkNelmS5cAE=</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>94gI1eCKv6T4JKBsEG3FXvvS1Nz4cqbspvHzgKUJ30=</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>PN0/5l60jJ4gfW7vMa/r6cSznZbiHBuVetvfGLuxZ4=</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>4w+7pyUBnArS07P6K3gqlZyZQcS4fVX5hX0jpzJUpv4=</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>gC0rvFzqTwR4HgCX5liQ6AnQuriSEQw9PUZ1HDD9nn0=</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>UpsGHBJSLlBiaBwvGS7cz4G0vuJCrXCQrXg54Wm1rDJ/XjFQ1bRgvoyLdFFa9pnWmLt1Oy
bxGMw+v98x0L0hyBDzrQIQp/TjWjwapWxz4yoexN0u/C3htCD0INofwTWyRhgfjpCRS7jc4XJdt1vQr2npjq4
Hy8mdL1jAIT87DAUkpiu4Gv62Xj+1v0C/FvnXaGfpnMMD5NWdbsghnFOu3ZnwKKKT2fPDlmIsbgFLvYH7iP2Dd
0TKJ30pH+8rgkGcXbaTwJSWjNycJFjpK51GbJiA/D0VykiaYGcZJUMa026kYZn1vSWUNOAaCtJTDC+6SQ6wA1
YwPUMuUnkJ3oig==</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" />
          </SignedInfo>
        </Signature>
      </saml2:Assertion>
    </wst14:ActAs>
  </wst:RequestSecurityToken>
</S11:Body>
```

```

<DigestValue>Z9fLQXTfu35PaenI+Unz9bqmZWMMH20umocZozz8cSkE=</DigestValue>
  </Reference>
  </SignedInfo>
<SignatureValue>Eb9vWhlf1GBxKYEatsurCIUEysqJMHwGvwWTIICcS3xxjAD0013L3gzqCpWdqVM/YqXZBG
5o1MJGe8s9Q9H+1y60eNTdKiA5B6oK112Soi/ovgWzTcTYmHYANvZyuSMcaZwYYg/ShrXGNi6V0tJ4dbg2X1gS
oxwNFqGYV2+9VSurTFVYEEmb5mFUEPkyfVzSwilG1MULewVEBB91pBQTSV+Zvt9Mr5W2wHtuUyQNMMjZnyfHch
zAfHMZX6Hfpw8XtQz1rXbqMquIrK+64cDQ0j//M8hdhxjN5+7oZJZGUZGeqv8wwyu1Z16i6P/YqVNaeA1APSSp
Tt+Y57aXL1HcuA==</SignatureValue>
  </Signature>
  <saml2:Subject>
    <saml2:NameID Format="urn:oasis:names:tc:SAML:1.1:nameid-
format:X509SubjectName">C=DK, O=@konomistystyrelsen // CVR:10213231, CN=Morten
Mortensen, Serial=CVR:10213231-RID:93947552</saml2:NameID>
      <saml2:SubjectConfirmation Method="urn:oasis:names:tc:SAML:2.0:cm:holder-
of-key">
        <saml2:SubjectConfirmationData
xsi:type="saml2:KeyInfoConfirmationDataType">
        <ds:KeyInfo>
          <ds:X509Data>
<ds:X509Certificate>MIIGIDCCBQigAwIBAgIETAV1TzANBgkqhkiG9w0BAQsFADBIMQswCQYDVQQGEwJESz
ESMBAGA1UECgwJVfJVV1QyNDA4MSUwIwYDVQQDBUU1VTVDI0MDggU3lzdGvtGvdCBWSU1JIENBMB4XDTEy
MDExMjE0MTQwN1oXDE2MDExMjE0MTM1MlwjdjELMAkGA1UEBhMCRESxKjAoBgNVBAoMICoYa29ub21pc3R5cm
Vsc2VuIC8vIENWUjoxMDIxMzIzMTE7MBc1UEAwuQTW9ydGVuIE1vcnR1bnN1bjAgBgNVBAUTGUNWUjoxMDIx
MzIzM51SSUQ60TM5NDc1NTIwggiEiMA0GCSqGSIb3DQEBAQUAA4IBDwAwggEKAoIBAQDXxgVHipGqErG8xLbYqx
mpVyzh1aBK4th2YaihRyZfS03g0xhwls+XR3JLoRvMgKxERYGD4fTnNfWU7TpYaT08pnXEx2+bVohIzcavQ
YW21KMgcpc1psWr6wv51uF0Ykhdyv900qJRoUh4oHjwvBjVQLDw0L+d6bJ/DjW+tHWtuWMyPUKZRjQf6dWIA4
5pkLH8mcFNztxGI0ZhvlqH7iPhC73KKqxmig/vvdUCVI15MAdeCsQ8ds0Aw7uFJiytROF/5wD0jJ0ZHJT0BL
vtQd8UShEtL6TSiEch1ZVPf/tJmRriQPNH0Qy/swEPInkt2HZxRkuPNzt1eMVBagMBAAGjggLiMIIC3jAOBg
NVHQ8BAf8EBAMCA/gwgZOGCCsGAQUFBwEBBIGHMGEMDsGCCsGAQUFBzABhi9odHRwOi8vb2NzcC5zeXN0Zw10
ZXN0OC50cnVzdDI0MDguY29tL3J1c3Bvbmr1cjbFBgggrBgEFBQcwAoY5aHR0cDovL20uYWlhLnN5c3R1bXR1c3
Q4LnRydXN0MjQwOC5jb20vc31zdGvtGvdDgtY2EuY2VyyMIIBIAYDVROgBIIBFzCCARMwggEPBgg0rBgEEAYH0
UQIEBgIFMIH9MC8GCCsGAQUFBwIBFiNodHRwOi8vd3d3LnRydXN0MjQwOC5jb20vcmVwb3NpdG9yeTCByQYIKw
YBBQUHAigwgbwxDByFRFgSUQwAwIBARqBq0Rhbk1EIHR1c3QgY2VydG1maWthdGVyIGZyYSBkZW5uZSBDSB1
ZHN0ZWR1cyB1bmR1ciBPSUsQgMS4zLjYuMS40LjEuMzEzMTMuMi40LjYuMi41LjEuMzEzMTMuMi40LjYu
Mi41LjAYBgNVHREEETAPgQ1qZwxmQG5uaXQuY29tMIGrBgNVHR8EgaMwgaAw0qa4DaGNgh0dHA6Ly9jcmwuc3
1zdGvtGvdDgudHJ1c3QyNDA4LmNbS9zeXN0Zw10ZXN0OC5jcmwwYqBgoF6kXDBaMQswCQYDVQQGEwJESzES
MBAGA1UECgwJVfJVV1QyNDA4MSUwIwYDVQQDBxU1lVTVDI0MDggU3lzdGvtGvdCBWSU1JIENBMRawDgYDVQ
QDDAdDUkwMTI0MB8GA1UdIwQYMBaAFJYbNmH7IiinCPfnn+PPrxss+E18EMB0GA1UdDgQWBbtv7aQGa8L1qrss
tR8ItB9Lz0RT/zAJBgNVHRMEAjAAmA0GCSqGSIb3DQEBCwUA4IBAQAO0Pd04cFSCEkoZgug3x+GBFoYzDgYBZR
/dSJexU3N9+e5wTgwtcr9Ykk3BTv4V1B16NfUjp9TPQoZaCkqTdw1xruy0wNKvMNGacVZjhS91baTW3ZnNiha
E5x5gdXvsjruVc0xZvyAhT7jkp4162haMoDt+pRsZoDcvCN0KuLWL+lh5efab9vSCMsyKUjxf9A/F21nhBiNsE
CsWjNXyt2/igbTuYCST12dTcpHs+sDEAnaZ1TJa2B/CMUPo15niVLFu0WPCppxurUZfb3bK/9qdHT60JvaVezw
AAmCWEW7CW4AAGKDPMG1qsRxFga0bB3bd5zCbnJklw/SNhg8/lc</ds:X509Certificate>
  </ds:X509Data>
  </ds:KeyInfo>
  </saml2:SubjectConfirmationData>
  </saml2:SubjectConfirmation>
</saml2:Subject>
```

**Commented [A3]:** Subject that logged into Nemlogin

```
<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">PD94bWwgdmVyc2lvbj0iMS4wIiBlbmNvZGluZz0iVVRGLTgiPz48YnBw0lByaXZpb
GVnZUxpC3Qg
eG1sbnM6eHNpPSJodHRw0i8vd3d3LnczM9yZy8yMDAxL1hNTFNjaGVtYS1pbnN0YW5jZSIgeG1s
bnM6YnBwPSJodHRw0i8vaXRzdC5kay9vaW9zYW1sL2Jhc2ljX3ByaXZpbGVnZV9wcm9maWxIij48
UHJpdmlsZwd1R3JvdXAgU2NvcGU9InVybjpkazpnB3Y6c2FtbDpDdnJ0dW1iZXJJZGVudGlmaWVy
OjEwMjEzMjMxIj48UHJpdmlsZwd1Pmh0dHBz0i8vbm9ybXByaXYLnB0PC90cm12aWx1Z2U+PC90
cm12aWx1Z2VHcm91cD48L2JwcDpQcm12aWx1Z2VMaXN0Pg==</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.WSPSUAll.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/Issueuuid:ee4e62b5-e930-4b09-9777-67bb5308c45c</wsa:MessageID>
        <wsa:RelatesTo wsu:Id="relateto">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>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>bBL02guR70AN36ap5Qk8k6qIxI=</DigestValue>
</Reference>
<Reference URI="#relateto">
<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>xxCvtfcnPZPULgiIxGPx82yQ+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/oV0lv7ZjIc=</DigestValue>
</Reference>
</SignedInfo>
<SignatureValue>hJYbPDB3Xz/TvtSQ6lPy30itonNYhmKk/FQLkHKA4oim1mFPgg8k2SnfUnMYXrn3qb0TyT
bUOaocNviqxog7t4qWN/Gx6CAxfeeCwbnwMigtXI+5zuM496EhDoFEPzgEKnqkh7CJkvs261a7y+RwKHuswYx
rw/16kqw1BkXmBTjvU00DW4gjX6kSLkIpwmqpPpb3bC6PMU05DyleKRXRy92gtg1p8MzX/V3PHVUX0mn77M+yP
3+WUai0ZUK0+50ncsF3mdb07a/Ge/CrDHinw3OoGESEZusFMn/R8HVd6HOSA+dm+D7YZBVnyT2m9vZVx/S/KQM
I+oQsk70mUljqQ==</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/

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


```

```

AGjggLIMIICxDAOBgNVHQ8BAf8EBAMCBLAwgZQGCCsGAQUFBwEBBIGHMIGEMDsGCCsGAQUFBzABhi9odHRwOi8
vb2Nzc5zeXN0ZW10ZXN0OC50cnVzdDI0MDguY29tL3J1c3BvbmlRlcjBFBgrBgEFBQcwAoY5aHR0cDovL2YuY
WlhLnN5c3R1bXR1c3Q4LnRydXN0MjQwOC5jb20vc3lzdGVtdGvzdDgtY2EuY2VymIIBIAyDVR0gBIIBFzCCARM
wggEPBgrBgEEAYH0UQIEBqCMIH9MC8GCCsGAQUFBwIBFiNodHRwOi8vd3d3LnRydXN0MjQwOC5jb20vcvmb
3NpdG9yeTCByQYIKwYBBQUHAgIwgbwwDBYFRGFuSUQwAwIBARqBq0Rhbk1EIRlc3QgY2VydG1maWthdGvyIGZ
yYSBkZWuZSBDSQB1ZHN0ZWR1cyB1bmRlcibPSUQgMS4zLjYuMS40LjEuMzEzMTMuMi40LjYuNC4yLiBEYw5JR
CB0ZXN0IGN1cnRpZmljYXRlcibcm9tIHRoaXmgQ0EgYXJ1IG1z3V1ZCB1bmRlcibPSUQgMS4zLjYuMS40LjE
uMzEZMTMuM140LjYuNC4yLjCbqwYDVR0fBIGjMIIGMDagOKA2hjRodHRwOi8vY3jsLnN5c3R1bXR1c3Q4LnRyd
XN0MjQwOC5jb20vc3lzdGVtdGvzdDguY3JSMGKgYKBepFwwjELMAkGA1UEBhMCREsxEjaQBgNVBAoMCVRSVN
UMjQwODE1MCMGA1UEAwicVFJUU1QyNDA4IFN5c3R1bXR1c3QgVK1JSSBDQTEQMA4GA1UEAwHQ1JMMTY2MDAfB
gNVHSMEGDAwBgSWGzYTOyIpwz355/mT68bLPhjfBDAdBgNVHQ4EFgQUsede/DuyKIUjTMu4kt0z/qCJ9cEywCQY
DVR0TBAlwADANBkgkhkiG9w0BAqsFAAACQAQEAWfB2H/B1R8m0/qWssZTD7fMoPpNVzyK8gDJBATZnxqZYKQy
qC93DmstKuVrVdVa01H8rUXb6UrctgHWzvsbfI1M6zqXU51m1jydkn9+8NZrw2ttbxZ1MyB8uCoC0eaj5Fyfa
QTr6HVWQDE0/9Qz0btiaNweKv4DVTF+jBgcJ4s8KE9wvqB66QPfrACGY8pVizHIVMgokMu6cqSULcQ4tKRFSPG
nac2d0Dq11Zkn+pxmD1dw6Bugh0Q1ijfh15TnPvPBAuvjIbpFD6rhutETDE6u9GECo50CoqxksFbc4nfPE7u6
A1zqWr6so2rTz1ryIZWnjebcZ1BceEDZYRw==
```

&lt;/X509Certificate&gt;

&lt;/X509Data&gt;

&lt;/KeyInfo&gt;

&lt;ds:Signature&gt;

&lt;Subject&gt;

&lt;NameID Format="urn:oasis:names:tc:SAML:1.1:nameid-

format:X509SubjectName">C=DK,O=@konomistystyrelsen // CVR:10213231,CN=Morten  
Mortensen,Serial=CVR:10213231-RID:93947552</NameID>

<SubjectConfirmation Method="urn:oasis:names:tc:SAML:2.0:cm:holder-of-key">

&lt;SubjectConfirmationData a:type="KeyInfoConfirmationDataType"

xmlns:a="<http://www.w3.org/2001/XMLSchema-instance>">

<KeyInfo xmlns="<http://www.w3.org/2000/09/xmldsig#>">

&lt;X509Data&gt;

```

<X509Certificate>MIIGIDCCBQigAwIBAgIETAV1TzANBgkqhkiG9w0BAQsFADBIMQswCQYDVQQGEwJESzESM
BAGA1UECgwJVFJUU1QyNDA4MSUwIwYDVQQDBBXU1VTVDI0MDggU31zdGVtdGvzdCBWSU1JIEENBMB4XDTeYMD
xMjE0MTQwNloXDTE2MDExMjE0MTM1MlowdjELMAkGA1UEBhMCREsxEjAoBgNVBAoMiC0Ya29ub21pc3R5cmVsc
2VuIC8vIENUujoxDMDIxMzIzMTE7MBCGA1UEAwwQTW9ydGVuIE1vcnRlnb1jAgBgNVBAUTGUNWUjoxDMDIxMzI
zMS1SSUQ60TM5Ndc1NTIwggEiMA0GCSqGSIb3DQEBAQUAA4IBDwAwggEKAoIBAQDXxgVHipGqErG8xLbYqxmPv
yZzh1aBK4th2YaiBRYzfSo3gOxHws+XR3JL0rVmGKxERYGD4fTrNfwU7TpYaT08pnXEx2+bv2ohIzcyavQYw2
1KMgcplwsR6wv51uF0Ykhydv900qJRouBh4oHjwBjVJQLDw0L+d6b2/Djw+tHwtuWMyPUKZRjQf6dWIA45pk
LH8mcFNztxGIOZHv1qH7IIphC73KKQxmg/vvdUCVI15MADeCsQ08ds0Aw7uFJiytROF/5wD0jJOZHJToBLvtQ
d8USHetL6TSiEchi2ZVpf/tJmiRriQ0NHQy/swEPlnkt2HZxRkuPNzt1GeMVBAgMBAAGjggliMIIC3jAOBgNVH
Q8BAf8EBAMCA/gwgZQGCCsGAQUFBwEBBIGHMIGEMDsGCCsGAQUFBzABhi9odHRwOi8vb2Nzc5zeXN0ZW10ZXN
00C50cnVzdDI0MDguY29tL3J1c3BvbmlRlcjBFBgrBgEFBQcwAoY5aHR0cDovL20uYWhLnN5c3R1bXR1c3Q4L
nRydXN0MjQwOC5jb20vc3lzdGVtdGvzdDgtY2EuY2VymIIBIAyDVR0gBIIBFzCCARMwggEPBgrBgEEAYH0UQI
EBgIFMih9MC8GCGsGAQUFBwIBFiNodHRwOi8vd3d3LnRydXN0MjQwOC5jb20vcvmb3NpdG9yeTCByQYIKwYB
QUHAgIwgbwwDBYFRGFuSUQwAwIBARqBq0Rhbk1EIRlc3QgY2VydG1maWthdGvyIGZyYSBkZW5uZSBDSQB1ZHN
0ZWR1cyB1bmRlcibPSUQgMS4zLjYuMS40LjEuMzEzMTMuMi40LjYuMi41LiBEYw5JRCB0ZXN0IGN1cnRpZmljY
XR1cyBmc9tIHRoaXmgQ0EgYXJ1IG1z3V1ZCB1bmRlcibPSUQgMS4zLjYuMS40LjEuMzEzMTMuMi40LjYuMi4
1LjAYBgNVHREEETAPgQ1qZwxmQG5uaXquY29tMIGrBgvNVR8EgaMwgaAwOqaAoDaGNgh0dHA6Ly9jcmwuc31z
dGVtdGvzdDgudHJ1c3QyNDA4LmNvbS9zeXN0ZW10ZXN00C5jcmwYqBgoF6kXDBaMQswCQYDVQQGEwJESzESMBA
GA1UECgwJVFJUU1QyNDA4MSUwIwYDVQQDBXU1VTVDI0MDggU31zdGVtdGvzdCBWSU1JIEENBMRawDgYDVQQDD
AdDUkwxMTI0MB8GA1UdIwQYMBaAFJYbNhM7InCPfnn+ZPrxss+E18EMB0GA1UdDgQWBTTv7aQGaa8L1qrstR8

```

**Commented [A7]:** Certificate used to sign the message.  
Do not verify signature with embedded certificates.

```
ItB9Lz0RT/zAJBgNVHRMEAjAAmA0GCSqGSIB3DQEBCwUA4IBAQ0Pd04cFScEkoZgug3x+GBFoYzDgYBZR/ds
JexU3N9+e5wTgwterC9Ykk3BTv4V1B16NFUjP9TPqOZaCkqTdWlXruy0wNKvMNGacVZhS91baTW3ZnNIhAE5x
5gDxvsjuRVc0xZvyAhT7jkp4J62haMoDt+pRsZoDcVCN0KuLWL+Lh5efaB9vSCMsyKUjXf9A/F21nhBiNsECsW
jNXyt2/igbTuYCST12dTcpHs+sDEAnaZ1TJa2B/CMUPo15niVLFu0WCPPyxurUZfB3bK/9qdHT60JvaVezwAAm
CWYEW7Cw4AAGKDPMGD1qsRxFga0bB3bd5zCbnJkw/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.WPSUAll.env</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>Morten.Mortensen@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.dmx.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-3ad2-4182-88e3-4daf50c76305</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">[MIIGFDCCBPygAwIBAgIETBGSTDANBgkqhkiG9w0BAQsFADBIMQswCQYDVQGQEwJESzESMBAGA1UECgwJVJU1QyNDA4MSUwIwYDVQDDBxUU1VTVDI0MDggU3zdGVtdGVzdCBWSU1JIENBMB4XDTEZMTAwOTE5MTMzM10XDTE2MTAwOTE5MTIz0FowgYMxCzABgNVBAYTAKRMSxEwhwYDVQKDBhOTk1UIIEvUyAvLyBDV1I6MjEwOTMxDYXUTAgBgvNVAUTGUNWUjoyMTA5MzEwNi1GSUQ6NDkxOTY0MzEwLQYDVQQDCZOTk1UIEZPQ0VTIGIncnQyIChmwd5rG1vbnnjZX0aWZpa2F0KTCASiDQYJKoZIhvcNAQEBBQADggEPADCAQoCggEBAM/ZnSGCUTb5QEENOYbRo9ivhyhvWh0wpqjxd034T5J6q2sGyRhmjt+U0ED0fVqMSPYR01ovaеLpt+1Nz08EG0ZP7mek5UeyQ1BZSeAe8ZUKFSUXFvNyYo/+x/inVxePCTBwPvVvU1ap/V4drCz/\\_Y1e5+jqrweWuJ1Yct1KqWzSGXfZTEBFdsiTV1xAiLwcM9KvThv+rUB3dgtu1FVV00T0QJlxzD7eP60bF1gRGG14kG0fknrkCpvq350vFluvIED](MIIGFDCCBPygAwIBAgIETBGSTDANBgkqhkiG9w0BAQsFADBIMQswCQYDVQGQEwJESzESMBAGA1UECgwJVJU1QyNDA4MSUwIwYDVQDDBxUU1VTVDI0MDggU3zdGVtdGVzdCBWSU1JIENBMB4XDTEZMTAwOTE5MTMzM10XDTE2MTAwOTE5MTIz0FowgYMxCzABgNVBAYTAKRMSxEwhwYDVQKDBhOTk1UIIEvUyAvLyBDV1I6MjEwOTMxDYXUTAgBgvNVAUTGUNWUjoyMTA5MzEwNi1GSUQ6NDkxOTY0MzEwLQYDVQQDCZOTk1UIEZPQ0VTIGIncnQyIChmwd5rG1vbnnjZX0aWZpa2F0KTCASiDQYJKoZIhvcNAQEBBQADggEPADCAQoCggEBAM/ZnSGCUTb5QEENOYbRo9ivhyhvWh0wpqjxd034T5J6q2sGyRhmjt+U0ED0fVqMSPYR01ovaेLpt+1Nz08EG0ZP7mek5UeyQ1BZSeAe8ZUKFSUXFvNyYo/+x/inVxePCTBwPvVvU1ap/V4drCz/_Y1e5+jqrweWuJ1Yct1KqWzSGXfZTEBFdsiTV1xAiLwcM9KvThv+rUB3dgtu1FVV00T0QJlxzD7eP60bF1gRGG14kG0fknrkCpvq350vFluvIED)</wsse:BinarySecurityToken>  
            </S11:Header>

**Commented [A10]:** Local token scenario

7cykHfedVeAZP3DY3dgrsWaKi8zt1IUHH5avIq5hKm6JCcYzrB6LaX6aG0GMFMZ9R/Mw9a1uXtvak//K0CAwEA  
Aa0CAsgwggLEMA4GA1UdDwEB/wQEAwIDuDCB1AYIKwYBBQUHAQEEgYcwgYQwOwYIKwYBBQUHMAGGL2h0dHA6Ly  
9vY3NwlNn5c3R1bKR1c3Q4LnRydXN0MjQwOC5jb20vcvzcG9uZGvyMEUGCCsGAQUBzAChjlodHRwO18vZ15h  
aWEuc31zdGVtdGVzdDgudHJ1c3QyNDA4LmNbS9zeXN0ZW10ZXN00C1jYS5jZXiwggEgBgNVHSAEggEXMIIBEZ  
CCA08GDSsGAQOBgFRRAgQGBAIwgf0lwLwYIKwYBBQUHAgeWI2h0dHA6Ly93d3cudHJ1c3QyNDA4LmNbS9yZBv  
c210b3J5MIHJBgrBgfFBQcCAjCBvDAMFgVEYW5JRDADAgEBGoGrRGFuSUQgdGVzdCBjZXJ0aWZpa2F0ZXIgZn  
JhIGRlmb51IENBIHVkc3R1zGVzIHVuZGvyIE9JRCAxLjMuLi4xLjQuMS4zMTRmxMy4yLjQuNi40LjIuIERhbk1E  
IHR1c3QgY2VydGlmaWnhGDVzIGZyb20gdGhpvyBDQS8hcmUgaXNzdwVkiHVuZGvyIE9JRCAxLjMuNi4xLjQuMS  
4zMTMxMy4yLjQuNi40LjIuMIGrBgnVNR8EgaMwgaAw0qA4oDaGNg0dHA6Ly9jcmwuc31zdGVtdGVzdDgudHJ1  
c3QyNDA4LmNbS9zeXN0ZW10ZXN0C5jcmwwYqBgoF6kXDBaMQswCQYDVQQGEwJESzESMBAGA1UECgwJVfJVU1  
QyNDA4MSUwIwYDVQDDBxUU1VTVDI0MDggU31zdGVtdGVzdCBWSU1JIENBMRawDgYDVQQDDAdDUkwxNjM0MB8G  
A1UdIwQYMBaAFJYbNhMTIinCPfn+ZPrxss+E18EMB0GA1UdDgQWBFRtYa8Wnp3jGC8dDwriSf124GfpDAJBg  
NVHRMEAJAAmA0GCSIB3DQEBCwUA4IBAQDKHXVqqwV4gKLcd0WRmivpyupIsxJsfB9oqjVGOOHJXr7vlgY  
W2bkMjUpSy6WLTd+686ZjLh1E1FWCwqw1rwI8/B1xX62fT8j79EdamJLBAvUXOYnl1drG331H7vZK90r1330LO  
SBtOy9E0m+7v/1KwdYbgHYDgFub+htYiB4RofkivKhzgdwHV9WjMcKUO99hwHw4thy1RoXejPXZLMKSG8J51  
T8+GW0DGzXI817Pc0nKcn5PN6ydoC+ErTTgsAEWM2qq+N7G+Hs/E7IZ9HLGJ3EvPvb0rHqQwElh7WE0q80sAHp  
NTrcdunHgvCliJaIC/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>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/xmlenc#sha256" />
                <DigestValue>ntTwpa09a631YBBjFCaPVUL3h/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/xmlenc#sha256" />
                <DigestValue>sMhjXKoKEa8DfxKVk7tu0ZpijaHwgihAE1BouQMViS0=</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>cW0c8oRtzwZkPUpbjy70IqJcBKUJJBDLDxQtAHIMpU=</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>BREEB910vyk0TDSxVt4vkiu8sTbbXKCmfchAEJIV8f0=</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>ueqWu5v0zy4yzRhR1LYk8kzdk3D7hcue0Bbj5X5l0iY=</DigestValue>
</Reference>
</SignedInfo>

<SignatureValue>q7vwRmUJ5mkw6W70Q0qhGk1k2i00FMc1D8IHQVX89Cr3caHdw0GE60iuuNbp6RMVqnDEP
rvMRaFcQoQeL4Hcx6n/gA0qEsqYm/iu1oZft2rhYHdGa3sQVbhPB7XsnwFrCFEpy/JtGeTMBfQPfqilxpnv
N+9bzSoAuSKNq/kc1tTRawsq8n1l6EQY8DHawjBHjPj2zFg0FUQxRdKPG9+y9cuWiEeu7CYVGsGNQn4HSi1Nj
b
8408S06Cj2b/QphkZL84+5ZV1EU1KiX5G1jFy90ZBG3x5Pj1Hpm7fcwH9SUkN94HvctHGF5+87MBarbut9CSP
wl/VypSRGkBRbQ==</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: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>
                    <SignatureValue>k9NJN6wtzIq54E/ng7uyNjkpGvNen60FhqZJ83FSPFI=</SignatureValue>
                </Signature>
            </saml2:Subject>
            <saml2:NameID Format="urn:oasis:names:tc:SAML:1.1:nameid-
format:X509SubjectName">C=DK,O=@konomistystyrelsen // CVR:10213231,CN=Morten
Mortensen,Serial=CVR:10213231-RID:93947552</saml2:NameID>
        </wst14:ActAs>
    </wst:RequestSecurityToken>
</S11:Body>

```

**Commented [A12]:** Subjectname to issue identity token for

```

        <saml2:SubjectConfirmation Method="urn:oasis:names:tc:SAML:2.0:cm:holder-
of-key">
            <saml2:SubjectConfirmationData
xsi:type="saml2:KeyInfoConfirmationDataType">
                <ds:KeyInfo>
                    <ds:X509Data>

<ds:X509Certificate>MIIGFDCCBPygAwIBAgIETBGSTDANBgkqhkiG9w0BAQsFADBIMQswCQYDVQQGEwJESz
ESMBAGA1UECgwJVfJVU1QyNDA4MSUwIwYDVQQDDBxUU1VTVDI0MDggU31zdGVzdCBWSU1JIENMB4XDTEz
MTAwOTE5MTMzM10XDT0MTAwOTE5MTIzOFowYmxCzAJBgNVBAYTAKRlMSEwHwYDVQQKDBhOTk1UIEEvUyAvLy
BDV1I6MjEwOTMxDYxUTAgBgNVBAUTGUNWUjoyMTA5MzEwNi1GSUQ6NDkxOTY0MzEwLQYDVQQDCZOTk1UIEZP
Q0VTIGN1cnQyICmdW5rdG1vbnnJzXJ0aWZpa2F0KTCCASiDQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBAM
/ZnSGcUTb5QEgNo9iVhyhvh0WPqjxd034T5J6q2sGyRhmjt/U0ED0fvqMSPYR01ovaefpT+1Nz08EG0
ZP7mek5eUeyQ1BZseAe8ZUKFSUXFnVYo/x/inVxePCTBwPvYVUP1ap/V4dRcz/Y1e5+qjrweWuZJ1Yct1KqW2
sGXfTEBFDsiTV1xAiLwcM9KvthV+rUB3dqtu1FVV00T0QJlxzD7eP60bF1eGG14kG0fknrKcPqv350yFluvI
ED7cykHfedveAZP3DY3dgrsWaKi8zt1IUHH5avIq5hKm6JCCyzrB6LaX6aG0GMFMZ9R/Mw9a1UxTvak//K0CAw
EAAoCAsgwggLEMA4GA1UdDwEB/wQEawIDuDCBIAyIKwYBBQUHAQEEgYcwgYQwOwYIKwYBBQUHMAAGL2h0dHA6
Ly9vY3NwLnN5c3R1bXrlc3Q4LnRydXN0MjQwOC5jb20vcvmVzcG9uZGVyMEUGCcsGAQUBFzAChjlodHRwOi8vZi
5hawEuc31zdGvtdGVzdDgdHJ1c3QyNDA4LmNbS9zeXN0Zw10ZN00C1jYS5jZXIwggEgBgNVHSAEggEXMIIB
EzCCAQ8GDSSgAQQBgfrRAgQGBAIwgf0wLwYIKwYBBQUHagEWI2h0dHA6Ly93d3cuDHJ1c3QyNDA4LmNbS9vZx
Bvc210b3J5MIHJBggrBgEFBQcCAjCBvDAMFgWEYV5JRDADAgEBGoGrRGFuSUQgdGVzdCBjZXJ0aWZpa2F0ZXig
ZnJhIGR1bm5IENB1IHVkc3R1ZGVzIHVuZGVyIE9JRCaxLjMuNi4xLjQuMS4zMTMxMy4yLjQuNi40LjIuIERhbk
1EIHr1c3QyY2VydG1maWNhGvzIGZyb20gdGhpccyBDQSBhcmUgaXNzdWvkIHVuZGVyIE9JRCaxLjMuNi4xLjQu
MS4zMtxMy4yLjQuNi40LjIuMIGrBgvNVR8EgaMwgaAw0qA4oDaGNgh0dHA6Ly9jcmwu31zdGvtdGVzdDgdH
J1c3QyNDA4LmNbS9zeXN0Zw10ZXN00C5jcmwwYdBgoF6kXDBaM0swCQYDVQQGEwJESzEsmBAGA1UECgwJVfJv
U1QyNDA4MSUwIwYDVQQDDBxUU1VTVDI0MDggU31zdGVzdCBWSU1JIENMB4XDTEz
8GA1UdIwQYMBaAFJYbhM7IinCPfn+e18EMB0GA1UdDgQWBFRtY8wNp3jGC8dDwri5f124GfpDAJ
BgNVRHREAJAAAMA0GCSqGSIb3DQEBCwUAA4IBAQDKHvqqw7V4gKLcd0WRmivpyupIsxJsfB9oqjVG00HJXr7v1
gYW2bkMjUpSy6WLdT+686ZjLh1E1FcwqwlrwI8/BlxX62fT8j79EDamJLBaVUXOYNL1drG331H7vZK90ri330
LOSbtOy9E0m+7v/1KwdvbgHYDgFub+htYiB4RofkiVKhzgdwHV9wjMcKuQ99hWhlw4thy1RoxEjPXZLMkSG8J
51T8+GW0DGzXI817Pc0nKcn5PN6ydoC+ErTTgsAEMW2qq+N7G+Hs/E7Iz9HLGJ3EvPvborHqQwElh7WE0q80sA
HpNTrcdnHgvC1iJaicJ/2CnHSXmpntX9fn</ds:X509Certificate>
        </ds:X509Data>
    </ds:KeyInfo>
    <saml2:SubjectConfirmationData>
    </saml2:SubjectConfirmation>
    </saml2:Subject>
    <saml2:Conditions NotBefore="2015-03-20T08:56:39.1Z" NotOnOrAfter="2015-03-
20T16:56:39.1Z">
        <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="SeNumberIdentifier"
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>

```

**Commented [A13]:** Certificate used to sign the request message since SubjectConfirmation is set to holder-of-key

```

        </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.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: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:95a3219f-079f-407b-b14a-
c511ea25d8da</wsa:MessageID>
        <wsa:RelatesTo wsu:Id="relateto">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>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>Pze07Vmcton9klub2j/AHElg0mI=</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>NdIhx7CfyjRMmkbN5Cqo1vLJXNs=</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>zMQQ+z07XwwIC9W4nj5k3iDIMog=</DigestValue>
</Reference>
</SignedInfo>

<SignatureValue>HU3ue730Zupo2CYrxXZ+V0x72PWPwH94X+ma65MuDWDSFhFVrgRIOM2IXGUE10WXilcZpoX
6LIZStcpc14WZ0u043z0D15xpi4VC0BycAT75PjX1I+D8Sdw3o+l/Gs23M9c41NUf7U+Mt+s0zu1ide98P2cXO
CCQfAZ6Y/KGrE98Ie5Q0y8KLPOtT4JqZI972Nw4A6arkmjLT2NzsHxuQrX/tuF/rZjdkr7Imr8gojiomBkINEU
PSU7L4E97vrthNjh2Dy92g/VqHC30Fg4Ib6ERyfmWqzPk027Js40QgI0hyqu472mzEfdbN8N1So9IelqTuA6CJ
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.dmx.dkdev</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

```

<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="#_d360e5b5-a558-411e-a417-9097b9e84033">
        <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:Reference>
    </ds:SignedInfo>
  <ds:DigestValue>Hc5MpIhMWiRF6T01+/qe6n1LjM8CZFA5xtUpmjafNqk=</ds:DigestValue>
  <KeyInfo xmlns="http://www.w3.org/2000/09/xmldsig#">
    <X509Data>

<ds:SignatureValue>WapxF8RcJdMxndZIESjdH3pWGS0Efr+Vvvv5KrAG/IkT/fA9gQqLQxhPQN5sDkWGeNe
kWeuMuAe12f1JlhbhYhByL7r89z/R0064CEViNs+nxMDMoBnwoKPL8VxvPlaIANzNudgT4kbGaMN1R25r1fbQEo
XUIPJn53iDGxUcwYXNHDLgQzD1G+kSsdRsaUM22mJNPT+beP1kC114NFyNJ9B1Lh5okXkmZx0FFRMq9Zvby
zYWILmIB3XbgmUeBpXep1Ft7yZsBZAKTPC4+URGXRoHVTI3sSlOhmTKrge/mE0wsNxNL402hvuEAh8Cc1+27E
/zJyW20Xn8xIrZKeQ=</ds:SignatureValue>
  <KeyInfo xmlns="http://www.w3.org/2000/09/xmldsig#">
    <X509Data>

<x509Certificate>MIIGFDCCBPygAwIBAgIETBGSSjANBgkqhkiG9w0BAQsFADBIMQswCQYDVQQGEwJESzESM
BAGA1UECgwJVVFJU1QyNDA4MSUwIwYDVQQDBxUU1VTVDI0MDggU31zdGVtdGVzdCBWSU1JIENBM4XDTEzMTA
w0tE5MDUwMVxDTE2MTAwOTE5MDM0OFowgYMxCzABgNVBAYTAkRLMSEwHwYDVQQKDBhOTk1U1IEEvUyAvLyBDV
1iGmjEwOTMxmDYxUTAgBgNVBAUTGUUNUjjoyMTAS5mzEwni1GSUQGNTk3MjQwMzQwLQYDVQQDCZOTk1U1EZPQ0V
TIGNlcnQxIChmdw5rdGlvnbnjZXJ0awZpa2F0KTCACSiwdQYJKoZIhvCNAQEBBQADggEPADCCAQcCggEBAKG10
mrGwc+bU6MbI9kyHRjfWkkkl0Nbwh0M7oV2o5mbTzX+bqiow21RihyKTm0xtKkXC1sKCPjj9a0jhiN/jDYTBG/
bUeMSuIpvy183VM0HnjXQF1fe1f1R9gBDEdzd4fVhcbnJNMeMLFb/rdnXACdzPcmsy5w0QxOnrPbGhwzPEON
2Q0/NzS+tz61EfL6nt9WhOkUD/gur16PVtyWrJ9/bxRGGTyQ06FAp1zz+OZ5MGmCNmi1BDeJzC5kMMbkyN7e
JUCLkXDwIwqXoeypCmr68TU4+r/1GvumZTPZw/qRCNpUci96e8ZjrvFrHWlKcnqVVvU+JHey5QXu89ecCAwEAA
aOCAsgwggLEMA4GA1UdDwEB/wQEAWIDuDCB1AYIKwYBBQUHAQEEgYcgwYQwOwYIKwYBBQUHMAGGL2h0dHA6ly9
vY3NwLnN5c3R1bXR1c3Q4LnRydXN0MjQwOC5jb20vcvzcG9uZGvMEUGCCsGAQUBBzAChj1odHRwO18vZi5ha
WEuc31zdGVtdGVzDgudHJ1c3QyNDA4LmNvbS9zN02w102XN00C1jYS5jZXIwggEgBgvHSAEggEXM1BEzC
CAQ8GDSSGAQQBgfrRAgQGBAIwgf0wlwYIKwYBBQUHAgEWI2h0dHA6Ly93d3cudHJ1c3QyNDA4LmNvbS9yZXbvc
210b3J5MIHJBgrgBgEFBQccAjCBvDAMFgVEWY5jRDADAgEBGoGrRGFuSUQgdGVzdCbjZXJ0awZpa2F0ZXigZnJ
hIGR1bm51IENB1HVkc3R1ZGVzIHvuzGvIE9JRCAxLjMuNi4xLjQuMS4zMTMxMy4yLjQuNi40LjIuIERhbk1EI
HR1c3QgY2VydG1malwNhdGVzIGZyb20gdGhpcyBDQSBhcmUgaXNzdWVkiHvuzGvIE9JRCAxLjMuNi4xLjQuMS4
zMTMxMy4yLjQuN140LjIuM1GrBgNVHR8EgaMwgaAw0Qa4oDaGNgh0dHA6Ly9jcmwuc3LzdGVtdGVzdDgudHJ1c
3QyNDA4LmNvbS9zeXN0Zw10ZxN00C5jcmwYqBgoF6kxDBaMQswCQYDVQQGEwJESzESMBAGA1UECgwJVFJU1Q
yNDA4MSUwIwYDVQQDBBxU1lTVDI0MDggU31zdGVtdGVzdCBWSU1JIENBMRAwDgYDVQDDAdUkwxNjM0MB8GA
1UdIwQYMBaaFJYbNhM7IiinCPfn+ZPrxss+E18EMB0GA1UdDgQWBTTqfHrtduHeFr001hFT0ou/HItjATAjBgn
VHRMEAjAAMA0GCSqGSiB3DQEBCwUA4IBAQc0LTDB/5B0cepHu0G80BGrH+ARIhJE/ZD11bi5Z3R70dBBSR2W2
QiB4GKsZC9sQ1jNheK707/RCqg+w0U7p5W6+xdAsd5dywidMx5Ja11LsovoxFyvfFPK9nU+yaozrciasScy1p
mio7AnzW26HotU+REoN9vaeLFIEnQnbJmpV1BG0Cm7pa4tR8ULC1SjQjTmJXMzNU0Jdhb7nDyzYW4sK+40t
4sEg1Ufj8eo8oE913HMM2I6PoapXSK42s51G6b0OmbwMwqQ57wgJ8qB7YanDu+9hFHje88xrRT12R2dWfjb57R
6kB9uS/DojoA7A1dTx2hGC5qRNobRY1M</x509Certificate>
  <X509Data>
  </KeyInfo>
</ds:Signature>
```

**Commented [A16]:** Certificate used to sign the response. Do not verify signature with embedded certificates.

```

<Subject>
    <NameID Format="urn:oasis:names:tc:SAML:1.1:nameid-
format:X509SubjectName">C=DK,O=@konomistyrelsen // CVR:10213231,CN=Morten
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/xmldsig#">
                <X509Data>

<X509Certificate>MIIGFDCCBPygAwIBAgIETBGSTDAnBgkqhkiG9w0BAQsFADBMQswCQYDVQGEWJESzESM
BAGA1UECgwJVFJVU1QyNDA4MSUwIwYDQVQDBBXu1VTVDI0MDggU31zdGVtdGVzdCBWSU1JIENBM
B4XDTEzMTA
w0TE5MTMzM1oXDTE2MTAwOTESMTIzOfowgYmxCzAJBgNVBAYTAkRLMSEwHwYDVQKQD
b0TKE1UEEEvUyAvLyBD
1I6MjEwOTMxMDYxUTAgBgNVBAUTGUNWUjyoMTA5MzEwNi1GSU06NDkxOTY0MzEwLQYDVQ
QDDCZOTk1UEZPQ0V
TIGlnQyIChmdw5rdG1vbnnJzXJ0aWZpa2F0KTCASIwDQYJKoZIhv
cNAQEBBQADggEPADCAQoCggEBAM/Zn
SGCtB5EQGNoYbRo5ivhvhWhWpjqxd034T53q62sGyRhmj+ t/U0E0fvpMSPYR01ova
eLpT++1Nz08EG0ZP7
mek5eUyeQ1BZseAe8ZUUKSUXFnxNvYvo/x/inVxePCTBwPvYVUP1ap/V4dRcz/Y1e5+qjrwe
wUzJ1Yct1KqW2sGX
fZTEBFdsiTV1xAlwCM9KVtVh-vrUB3dq1tFv00TQ0QJLxZD7eP6Ob1gRGG14kG0FknrKcpVq350yFluvIED7
cykHfedVeAPZ3DY3dgrsWaK18zt1IUHH5avIq5hKm6JCCyZrB6LaX6aG0GMFMZ9R/Mw9a1uTxvak//K0CAwEAA
a0CAsgwggLEMA4GA1udDwEB/wQEAWIduDCB1AYIKwYBBQUHAQEEgYcgwYQwOwYIKwYBBQUHMA
GL2h0dHA6L9y
vY3NwLnN5c3R1bXR1c3Q4lNryDXN0MjQwC5j20bcvmZcVg9uZvYhMEUGCCsGAQUBFZ
AChjlodRhW018vZ15ha
WEuc31zdGVtdGVzdDgudGu1h3cQyNDA4LmNbvsS9zeXN0Zw10ZXN0C1jY55jZXJwggEgBgvNHS
AEggEXMIIBzC
CAQ8GDSSgAQQBgfRRAgQGBAIwgf0wLWYIKwYBBQUHAgEW12h0dHA6L9y3d3cudHj1c3QyNDA4LmNb
vS9yZX
Bvc210b3J5MIHJBggrBgfEFBQcCAjCbVdAMFgVEYw5JRDAdAgEBGoGrRGFuSUQgdGVzdCbjZXJ0aWZpa2F0Z
XigznJ
hIGR1bm51IENBIHVkc3R1ZGV2IhVUzGvIE9jRCAxLjMuNi4xLjQuMS4zMTMxMy4yLjQuNi40LjIuIERhbk1EI
HR1c3QyG2VydGlmaWnhGvZIGyb20gdGhpvcyBDQSBhcmUgaXNzdWkIhVUzGvIE9jRCAxLjMuNi4xLjQuMS4
zMTMxMy4yLjQuNi40LjIuIMIGrBvNHVR8EgawMwgawQoA4oDaGNH0dHA6L9jcmwuc31zdGvtDGVzdDgudHj1c
3QyNDA4LmNbvsS9zeXN0Zw10ZXN0C5jcmwqYBgoF6kXDbMqSwCQYDVQGEWJESzESMBAGA1UECgwJVFJVU1Q
yNDA4MSUwIwYDQVQDBBXu1VTVDI0MDggU31zdGVtdGVzdCBWSU1JIENBMRAwDgYDVQ
QDDA
dDUKwxNjM0MB8GA
1UDIwQYMaAFJyBnhM7IinCPfnn+ZPrxss+E18EMB0GA1udDgQWBFRtYa8Wnp3jGc8dDwriSfL24GfpD
A1BjgN
VHRMEajAAMAQgQsGSIb3DQEBCwUA4IBAQDCKHxvqqw7V4gKLCd0WRmipvyupIsxJsfB9oqjVGOOHJXr7v1gYw
2bkMjUpSy6WLtD+686ZjLh1E1FWCwqwlwR18/B1x62ft8j79EdamLBvAOYX0N1l
drG331H7vZK90ri330L0S
BtOy9E0m+7v/1kwdfYbgHYdgFub+htYib4RofkiVKhzgdwH9WjMcKUQ99hWhHw4thy1RoxEjpxZLmkSG8J51T
8+Gw0DGzX1817Pc0nKcn5PN6ydoC+ErrTgsAEMW2qq+N7G+Hs/E7Iz9HLGJ3EvPvb0rHqQwElh7WE0q80sAhPn
TrcdunHgvClijaiCK/J2cHn5XmpntX9fn</X509Certificate>
    <X509Data>
        <KeyInfo>
        </KeyInfo>
    </SubjectConfirmationData>
</SubjectConfirmation>
</Subject>
<Conditions NotBefore="2015-03-20T08:57:20.010Z" NotOnOrAfter="2015-03-
20T16:57:20.010Z">
    <AudienceRestriction>
        <Audience>https://saml.nnit001.dmx.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>
    <Attribute Name="dk:gov:saml:attribute:SENNumberIdentifier" NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic" FriendlyName="SeNumberIdentifier">
        <AttributeValue />
    </Attribute>

```

**Commented [A17]:** Certificate used to sign the request message since SubjectConfirmation is set to holder-of-key

```
<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/">
  <ns1: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>
  <ns1: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">MIIGFDCCBPygAwIBAgIETBGSTDANBgkqhkiG9w0BAQsFADBIMQswCQYDVQQGEwJESzES
      MBAGA1UECgwJVFJVU1QyNDA4MSUwIwYDVQQDBxUU1VTVDI0MDggU31zdGVtGvzCBWSU1JENMB4XDTEzMT
      AwOTE5MTMzM1oXDTE2MTAwOTE5MTizOFowgYMxCzAJBgNVBAYTAkRLMSEwHwYDVQQKDBhOTk1UIEEvUyAvLyBD
      VlI6MjEwOTMxMDYxUTAgBgNVBAUTGUNWUjoxMTAMzEwNi1GSU06NDkxOTY0MzEwLQYDVQQDCzOTk1UIEZPQ0
      VTIGN1cnQyIChmwd5rdGlvbnNjZXJ0awZpa2F0KTCCASiwDQYJKoZIhvcNAQEEBBQADggEPADCCAQoCggEBAM/Z
      nSGCUTb5QEGNoYbRo9ivhyhvWh0Wpqjxd034T5J6q2sGyRhmj+t/U0ED0fvqmSPYR01ovaelpT++1Nz08EG0ZP
      7mek5eUeyQ1BZseAe8ZUKFSUXfNvYvo/x/inVxePCTBwPvYVUP1ap/V4dRcz/Y1e5+qjrweWuZJ1Yct1KqW2sG
      XFZTEBFdsiTvlxAiLwcm9KVthV+rUB3dqtu1FvVO0T0QJLx2D7eP6ObF1gRGG14KG0fknrKcpVq35OyFluvIED
      7cykHfedVeAZP3DY3dgrsWaKi8zt1IUHH5avIq5hKm6JCcYzrB6LaX6aG0GMFMZ9R/Mw9a1UxTvak//K0CAwEA
      AaOCAsgwggLEMA4GA1UdDwEB/wQEawIDuDCB1AYIKwYBBQUHAQEEgYcwgYQwOwYIKwYBBQUHMGGL2h0dHA6Ly

```

**Commented [A19]: Local token case**

9vY3NwLnN5c3R1bXR1c3Q4LnRydXN0MjQwOC5jb20vcmVzcG9uZGVyMEUGCCsGAQUBzAChjlodHRwOi8vZi5h  
aWEuc31zdGVtdDgudHJ1c3QyNDA4LmNbS9zeXN0ZW10ZXN00C1jYS5jZXIwggEgBgvNVHSAEggEXMIIBEz  
CCAQ8GDSsGAQQBgfRRAgQGBAIwgf0wLwYIKwYBBQUHAgEWI2h0dHA6Ly93d3cudHJ1c3QyNDA4LmNbS9yZXBv  
c210b3J5MIHJBggrBgeFBQcCAjCBvDAMFgVEYW5JRDADAgEBGoGrRGFuSUQgdGVzdCBjZXJ0aWZpa2F0ZXIgZn  
JhIGR1bm51IENBIHVkc3R1ZGVzIHvuZGVyIE9JRCAxLjMuNi4xLjQuMS4zMTRmxMy4yLjQuNi40LjIuIERhbk1E  
IHR1c3QgY2VydG1maWNhdGVzIGZyb20gdGhpcyBDQSBlcmUgaXNzdWVkiHVuZGVyIE9JRCAxLjMuNi4xLjQuMS  
4zMTMxMy4yLjQuNi40LjIuMIGr8gNVHR8EgaMwgaAwQa4oDaGNHg0dHA6Ly9jcmwuc31zdGVtdGVzdDgudHJ1  
c3QyNDA4LmNbS9zeXN0ZW10ZXN00C5jcmwwYqBgoF6kXDBaMQswCQYDVQOGewJESzESMBAGA1UECgwJVfJU1  
QyNDA4MSUwIwYDVQDDDbUU1VTVDI0MDggU3lzdGVtdGVzdCBWSU1JIENBMRawDgYDVQDDAddDUkwNjM0MB8G  
A1UdIwQYMBaAFJYbNm7IinCPfnn+PPrxss+E18EMB0GA1UdDgQWBFRtYa8Wnp3jGC8sdDwriSf124GfpDAJBg  
NVHMEAjAAmA0GCSqGSIB3DQEBCwUAA4IBAQDKHXVqqw7V4gKLcd0WRmivpyupxJsfB9oqjVG0OHJXr7vlgY  
W2bkMjUpSy6WLTD+686ZjLh1E1FWCwqw1rwI8/B1x62FT8j79EDamJLBAvUXOYNL1drG331H7vZK90ri330LO  
SBtOy9E0m+7v/1KwdYbgHYDgFub+htYiB4RofkiVKhzgdwHV9WjMcKUO9hWhHw4thy1RoxEjPXZLMkSG8JS1  
T8+GW0DGzX1817Pc0nKcn5PN6ydoC+ErtTgsAEWm2qq+N7G+Hs/E7IZ9HLGJ3EvPvb0rHqQwElh7WE0q80sAHp  
NTrcduHgvCliJaiCK/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>NrdtWxaigbkMffHPgKCAMndq0hRMvsKQSkNeImSScAE=</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>sMhjXKoKEa8DfxKVk7tu0ZpijaHwgihAEElBouQMVIs0=</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" />
    </Reference>
```

```
<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/xmlenc#sha256" />
  <DigestValue>BreEB910vyk0TDSxVt4vkiu8sTbbXKCmfchaeEJIV8f0=</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>e4ZBdV2ZgDRpUlHYvCznGQG/hFca/nz1b+N3qYPSqKk=</DigestValue>
</Reference>
</SignedInfo>
<SignatureValue>HM/n2dsLwJiJIdirTwx1BwxYZYj04JW9/cH1SmYxQyokQwcfoGMA7mgbL/fMz/BxFG40/A
TWD5XFp1QilFs+4fNzaX811GZpCyExh6VPWqX0k3dE2+oT6z6HANQRS0Ax513XRNkDRqDJLZavcEHU8c7091JG
Q3eCehtx4U9nHRmEu70reueQ0GB6z1hpDGn3km5BsykGYuSFZgDTK+gF+pCURU8fNGJ6asu4SYnQRumKS8p0b8
bXKPXAYxBUFzQs9nh1gkvMEEhshs059v0IVgQ3vw5UP6KnW+0a1/sw+F29Q0vrpp1ZX0BYIuuDrKe84uHKqwN
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-
```

```
signature" />
  </Transforms>
  <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256" />
<DigestValue>1E63Z24+rwT2XKovXtaYBoByWG3L01wesdJqsUDA8gg=</DigestValue>
</Reference>
  </SignedInfo>
<SignatureValue>dw7EH6kc1c0/xxCPv0QTZSBu6faKP1j8WI6+dHpy16jRb4a6Af+iaHWhY9L1/bQ70UrtM9
hAazGirB2xw1gvnPOBAefTjxMh4w6pfWqs61h1CY6svJIhcovq93D0dz1E5B6/Zv9XrGTX8iVMHoBS144gKIhM
lFKARfVz1C+yptZcfXu1dHf9aBSn0BtIWldSMvfUccQva90o0jwb8p/609mC4r5nxdkgyg/GYjkWQ9Uvhn5Ev
orityTURD+oxRaU0V3JGzIuCK7mMBVnyi9QSNKIBepsCmpxnnGojgUYrURSoCLIVMOESPkLuoKiWvGW1cKE2j
eaBt9WkIepyOpw==</SignatureValue>
  </Signature>
  <saml2:Subject>
    <saml2:NameID Format="urn:oasis:names:tc:SAML:1.1:nameid-
format:X509SubjectName">C=DK,O=@konomistystyrelsen // CVR:10213231,CN=Morten
Mortensen,Serial=CVR:10213231-RID:93947552</saml2:NameID>
    <saml2:SubjectConfirmation Method="urn:oasis:names:tc:SAML:2.0:cm:holder-
of-key">
      <saml2:SubjectConfirmationData
xsi:type="saml2:KeyInfoConfirmationDataType">
        <ds:KeyInfo>
          <ds:X509Data>
<ds:X509Certificate>MIIGFDCCBPygAwIBAgIETBGSTDANBgkqhkiG9w0BAQsFADBIMQswCQYDVQQGEwJESz
ESMBAGA1UECgwJVFJVU1QyNDA4MSUwIwDVQQDBBXU1VTVDI0MDggU31zdGVtdCBWSU1JIENMB4XDTEz
MTAwOTE5MTMzM1oXDE2MTAwOTE5MTIzOFowgYMxCzAJBgNVBAYTAkRLMSEwHwYDVQQKDBhOTk1UIEEvUyAvLy
BDVI6MjEwOTMxMDYxUTag8gNVBAUTGUJNwUjoyMTA5MzEwNi1GSUQ6NDkxOTY0MzEwLQYDVQDDCZOTk1UIEZP
Q0VTIGN1cnQyIChmd5RdGlvbNnjZJ0awZpa2F0KTCASIwDQYJKoZIhvCNAQEQQADggEPADCCAQoCggEBAM
/ZnSGcUTB5QEGNoYBhRo9ivhyhvWh0Wpqjxd034T5J6q2sGyRhmj+t/U0ED0fvqMSPYR01ovaEIpT++1Nz08EG0
ZP7mek5eUeyQ1BZseAe8ZUKFSUXFnvYvo/x/inVxePCTBwPvYYVUP1ap/V4drCz/Y1e5+qjrwewuZJ1Yct1KqW2
sGXfZTEBFdsiTV1xAilwcM9KVthV+rUB3dqtu1FvV00T0QJLxzD7eP6ObF1gRGG14kG0fknrKcpvq350yFluvI
ED7cykHfedVeAZP3DY3dgrsWaKi8zt1IUHH5avIq5hKm6JCcYZrB6LaX6aG0GMFMZ9R/Mw9a1UxTvak//K0CAw
EAAaOCAsgggLEMA4GA1UdDwEB/wQEAWIDuDCB1AYIKwYBBQUHAQEEgYcwgYQwOwYIKwYBBQUHMAGGL2h0dHA6
Ly9vY3NwLnN5c3R1bXR1c3Q4LnRydXN0MjQw0C5jb20vcvmVzcG9uZGVyMEUGCcsGAQUBFBzAChjlodHRwOi8vZi
5hawEuc31zdGvtzdGvdDgudHJ1c3QyNDA4LmNbS9zeXN0Zw10ZXN00C1jYS5jZXIwggEgBggNVHSAEggEXMIIB
EzCCAQ8GDSsGAQQBgffRRAgQGBAIwgf0wLwYIKwYBBQUHAgEWI2h0dHA6Ly93d3cudHJ1c3QyNDA4LmNbS9yZx
Bvc210b3J5MIHJBggrBgEFBQcCAjCBvDAMFgVEWY5JRDADAgEBGoGrRGFuSUQgdGvzdCbjZXJ0aWZpa2F0ZxIg
ZnJHIGR1bm5IENBIHVkc3R1ZGVzIhvZGVyIE9JRCaxLjMuNi4xLjQuMS4zMTMxMy4yLjQuNi40LjIuIERhbk
1EIHrlc3QgY2VydG1maWNhdGVzIGZyb20gdGhpccyBDQSBhcmUgaXNzdWvkIhvZGVyIE9JRCaxLjMuNi4xLjQu
MS4zMTMxMy4yLjQuNi40LjIuMIGBgnVHRS8EgaMwgaAwOqa4oDaNGh0dHA6Ly9jcmwuc31zdGVtdGvzdDgudH
J1c3QyNDA4LmNbS9zeXN0Zw10ZXN00C5jcmwwYqBgoF6kXDBaMQswCQYDVQQGEwJESzESMBAGA1UECgwJVfJV
U1QyNDA4MSUwIwYDVQQDBBXU1VTVDI0MDggU31zdGVtdCBWSU1JIENBMRawDgYDVQDDAdDUkwxNjM0MB
8GA1UdIwQYMBaAFJYbNhM7IinCPfnN+ZPrxss+E1E8EMB0GA1UdDgQWBFRFtYa8Wnp3jGC8dDwriSF124GfpDAJ
BgNVHrMEEAjAAMA0GCSqGSIb3DQEBCwUA4IBAQDKHXvqqw7V4gKLcd0WRmivpyupIsxJsfB9oqjVG0OHJXr7v1
gYw2bkMjUpSy6WLTd+686Zjh1e1FWCwqw1rwI8/B1xx62FT8j79EDamJLBavUXOYNL1drG331H7vZK90ri330
LOSbt0y9E0m+7v/1KwdYbgHYDgFub+htYiB4RofkiVKhzgdwH9WjMcKUQ99hWhHw4thy1RoxEjPXZLMkSG8J
51T8+GW0DGzXI817Pc0nKn5PN6ydoC+ErTTgsAEMW2qq+N7G+Hs/E7IZ9HLGJ3EvPvborHqQwElh7WE0q80sA
HpNTrcdunHgvCliJaick/J2CnH5XmpntX9fn</ds:X509Certificate>
</ds:X509Data>
```

```

        </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="SeNumberIdentifier"
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.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>uCXhfWzmKLctxTEUFIkXQ49Gq3c=</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+BSpXWxXIhgtpNhK0oTcg=</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/dZLHnTwr0iFb9zhe2aPRopbBPXAIGzvofW43si41FXkrkxlb
X1ZDnWeKCFY4zahEINVp2hvRV1VCF7UgE+MffYtF9u8ksaLXRyq96Yw1YnM237HUDSH8eAtYP4/0u4yQwvtfg
6jSkm89nEkm6WBVBZKyVE1cr87litrAdDRPFIlyoxYWo1NwjVGnWPYTFKRx2lmBoTn3Pdb3DFqXffPB7hgI7BR
Sc1bx6MJK1zPc1CvvC4ZK8Fj6SYZ2JnXUAf96e46K4B0y9UK+f+oixEjPCByIJy611nc59+UJdd28sJydXm7bE
xSmdWpkIAjoOng==</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.dmx.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">
```

```
<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>V/0KsXEEEuSF/qC8K6Q2sCzGjbfbQB4KUBLccuxeSoC4=</ds:DigestValue>
</ds:Reference>
</ds:SignedInfo>
<ds:SignatureValue>WwBbPMuPObjJYfxI3uMTgZd5471mI7A3r4dzeSqUNEA57BYA1g05Azkx1ts2P9Lwhip
J/2XQD2oecugaQNCg7THTMavctHzj+hYRz+Ww8fujHnxChysaKBMi531TydwkwWizkAHJ21mJKMBxSsAXK93
C+fjw5Bi9V+kjV8dA3Md1wtSbhMxx7Hw6BzsJ079axyBKIBEx1E4aTeMlnEr7xyAozT01JRs0/4eMF6KYbx6
FZHOJLPb1geiMqOxNbdqCMolfbTTPmjvUp7w+EI/bgRamp/bGgL0D5UlukB/pVlaB1orKXew46SMzr//Pftcy
WtcjbD81U2vPJzyhw==</ds:SignatureValue>
<KeyInfo xmlns="http://www.w3.org/2000/09/xmldsig#">
  <X509Data>
<X509Certificate>MIIGFDCCBPygAwIBAgIETBGSSjANBgkqhkiG9w0BAQsFADBIMQswCQYDVQQGEwJESzESM
BAGA1UECgwJVfJUU1QyNDA4MSUwIwYDVQQDBxUU1VTVDI0MDggU31zdGVtdGvzdCBWSU1JIENBMB4XDTEzMTA
wOTE5MDUwMVoxDTE2MTAwOTE5MDM0OFowgYmxCzAjBgNVBAYTAKRMSEwHwYDVQQKDBHOTk1UIEEvUyAvLyBDV
1I6MjEwOtMxDYxUTAgBgNVBAUTGUNNUjjoyMTA5MzEwNi1GSU06NTk3MjQwMzQwLQYDVQQDCZotk1U1EZPQ0V
TIGN1cnQxIChmdW5rdG1vbNjZXJ0aWZpa2F0KTCASiwdQYJKoZIhvcaNAQEBBQADggEPADCCAQoCggEBAKG10
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bUeMSuIpvyrl83Vw0HhjXQFife1f1R9gBDEdzd4fYVHcbnJNMeMLFb/rdnXCADzPcmsy5w0Qx0nrPbGHwzPE0N
2Q0/NzS+tz61EWfLGnt9Wh0KuD/gur16PVtyWrJ9/bxRGGTyQ06FAp12z+OZ5MGMxCNmi1BDeJzC5kMMbkyN7e
JUCLkXDwIwqXoeypCumr68TU4+r/1GvumZTPZW/qRCNpUci96e8ZJrFvrlKcnqvYvU+JHey5QXu89ecCAwEAA
a0CAswgwgLEMA4GA1UdDwEB/wQEAwIDuDCB1AYIKwYBBQUHAQEEgYcwgYQwOwYIKwYBBQUHMAgGL2h0dHA6Ly9
vY3NwLnN5c3R1bXR1c304LnRydXN0MjowOC5jb20vcmvzcG9uZGVyMEUGCcsGAQUBzAchjlodHRwOi8vZisha
WEuc31zdGVtdGvzdDgudHJ1c3QyNDA4LmNvbS9zeXN0ZW10ZXN00C1jYS5jZXIwggEbgNVHSAEggEXMIIBzC
CAQ8GDssGAQQBgfrRAgQGBAIwgf0wlwYIKwYBBQUHAgEWI2h0dHA6Ly93d3cudHJ1c3QyNDA4LmNvbS9yZXvC
210b3J5MIHJBgggBgEFBQcCAjCbvDamFgVEYW5JRDADAgEBGoGrRGFuSUQgdZCbjZXJ0aWZpa2F0ZIxgZnJ
hIGR1bm5IENBIHVkc3R1ZGVzIHVuZGVyIE9jRCaxLjMuNi4xLjQuMS4zMTMxMy4yLjQuNi40LjIuIERhbk1EI
HR1c3QgY2VydGlmawNhdGVzIGZyb20gdGhpccyBDQSbhcUmgaXNzdWVkIHVuZGVyIE9jRCaxLjMuNi4xLjQuMS4
zMTMxMy4yLjQuNi40LjIuMIGrBgnVHR8EgmaWgaaWQoA4oDaGNgh0dHA6Ly9jcmwuc31zdGVtdGvzdDgudHJ1c
3QyNDA4LmNvbS9zeXN0ZW10ZXN00C5jcmwvYqBgf6KDBaMQswCQYDVQQGEwJESzESMBAGA1UECgwJVFJUU1Q
yNDA4MSUwIwYDVQQDBxUU1VTVDI0MDggU31zdGVtdGvzdCBWSU1JIENBMRawDgYDVQQDDAdDUkwNjM0MB8GA
1UdIwQYMBaAFJYbNhM7IinCPfnn+ZPrxss+E18EMB0GA1UdDgQWBbtqfHrtduHeFr001hFT0ou/HItjATAjBgn
VHRMEAjAAMA0GCSqGSIb3DQEBCwUAIAIBAQc0LTDB/5B0cepHu0G8QBGrH+ARIhJE/ZD11bi5Z3R70dBBSR2W2
QiB4GKsZC9qS1jNheK7o7/RCqg+w0U7p5W6+xdAsd5dYwidzMxsJa1lLsovoxFyvFFPK9nU+yaozrciasScylp
mio7AnzWJ26HotU+REoNw9vaeLFIEqnqbJmpV1B0Gcm7pa4tR8ULC1SQjJtmJXMzNU0JdHb7nDyzYW4sK+40t
4sEG1ufj8eo8oE913HMM2I6P0aipXSK42s5IG6b0OmblwqQ57wgJ8qB7YanDu+9hFHje88xrRT12R2dWFjbS7R
6kb9uS/DojroA7A1dTx2hGC5qrRNobRY1M</X509Certificate>
  </X509Data>
</KeyInfo>
</ds:Signature>
<Subject>
  <NameID Format="urn:oasis:names:tc:SAML:1.1:nameid-
format:X509SubjectName">C=DK,0=@konomistystyrelsen // CVR:10213231,CN=Morten

```

```

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/xmldsig#">
                <X509Data>
<X509Certificate>MIIGFDCCBPygAwIBAgIEtBGSTDANBgkqhkiG9w0BAQsFADBiMQswCQYDVQQGEwJESzESM
BAGA1UECgwJVJU1QyNDA4MSUwIwYDVQQDBxUUVTVDI0MDggU31zdGVtdGVzdCBWSUlJIENBMb4XDTEzMTA
wOTE5MTMzM1oXDTE2MTAwOTE5MTIzOFowgYMxCzABgNVBAYTAKRMLSEwHwYDVQQKDBhOTk1UIEEvUyAvLyBDV
1I6MjEwOTMxMDYxUTAgBgNVBAUTGUWUjoxMTA5MzEwNi1GSUQ6NDkx0T0MzEwLQYDVQQDCZOTk1UIEZPQ0V
TIGlncnQyIChmwd5rdG1vbnnjZXJ0aWZpa20KTCASIwDQYJKoZIhvNAQEBBQADggEPADCCAQoCggEBAM/Zn
SGCUTb5QEGRoYbRo9ivhyhvlh0Wpqjxd034T5J6q2sGyrhmj+t/J0ED0fvqMSPYR01ovaelp++1nZ08EG0ZP7
mek5eUeyQ1BZseAe8ZUKFSUXFNVyvo/x/inVxePCTBwPvYYUP1ap/V4dRCz/Y1e5+qjrweWuZJ1Yct1KqW2sGX
fZTEBFDsITV1xAlwCM9KVthV+UB3dqtu1FvVO0TOQJLxzD7eP60bF1gRG14kG0fknrKcPvq350yFluvIED7
cykHfedVeAZP3DY3dgrsWaKi8zt1IUHH5avIq5hKm6JCcYzrB6LaX6aG0GMFMZ9R/Mw9a1uxTvak//K0CAwEAA
aOCAsgwggLEMA4GA1UdDwEB/wQEAWIDuDCB1AYIKwYBBQUHAQEgYcgwYQwOwYIKwYBBQUHMAAGL2h0dHA6Ly9
vY3NwLnN5c3R1bXR1c3Q4LnRydXN0MjQwOC5jb20vcvzcG9uZGvMEUGCCsGAQUBFzAChj1odHRwOi8vZi5ha
WEuc31zdGvzdGvdGudHJ1c3QyNDA4LmNvbS9zeXN0Zw10ZxN00C1jYS5jZXIwggEgBgvNVHSAEggEXMIIBezC
CAQ8GDSSGAQQBgfrRAgQGBAIwgf0wLwYIKwYBBQUHAgEWI2h0dHA6Ly9d3cuDHJ1c3QyNDA4LmNvbS9yZXbvc
210b3J5MIHJBgggrBgfFBQcCAjCBvDAMFgVEw5JRDADAgEBGoGrRGFuSUQgdGvzCbjZXJ0awZpa2F0ZXigZnJ
hIGrlbm5IENBIHVkc3R1ZGvzIHvuzGvyeIE9JRCAxLjMuNi4xLjQuMS4zMtmxMy4yLjQuNi40LjIuIERhbk1EI
HRlc3QgY2VydG1maWNhdGvzIGzb20gdGhpvyBDQSBhcmUgaXNzdlVkIhvuzGvyeIE9JRCAxLjMuNi4xLjQuMS4
zMTMxMy4yLjQuNi40LjIuIMIGrBgvNHR8EgaMwgaAwOqa4oDaGNgh0dHA6Ly9jcmwuc31zdGvzdGvdGudHJ1c
3QyNDA4LmNvbS9zeXN0Zw10ZxN00C5jcmwwYqBgoF6kxDBaMqswwCQYDVQQGEwJEszESMBAGA1UECgwJVFJU1Q
yNDA4MSUwIwYDVQQDBBxUUVTVDI0MDggU31zdGVtdGVzdCBWSUlJIENBMRAwDgYDVQDDAdUkwxNjM0MB8GA
1UdIwQYMBaAFJYbNhM7IinCPfn+ZPrxss+18EMB0GA1UdGQWBFRFtYa8Wnp3jGC8dDwriSf124GfpDAJBgN
VHRMEAjaAMA0GCSqGSIB3DQEBCwUA4IBAQDKHxvqqw7V4gKLcd0WRmivpyupIsxJsfB9oqjVG0OHJXr7vlgYW
2bkMjUpSy6LTd+686ZjLh1E1FWCwqw1rwI8/B1xx62fT8j79EDamJLBavUx0YNL1drG331H7vZK90ri330LOS
BtOy9E0m+7v/lKwdYbgHYDgPub+htYiB4RofkiVKhzgdwH9WjMcKUQ99hWhHw4thy1RoxEjPXZLMkSG8J51T
8+GW0DGzXI817Pc0nKcn5PN6ydoC+ErtTgsAEMW2qq+N7G+Hs/E7IZ9HLGJ3EvPvborHqQwElh7WE0q8OsAHpN
TrcdunHgvC1iJaiCK/J2CnH5XmpntX9fn</X509Certificate>
    </X509Data>
    <KeyInfo>
        <SubjectConfirmationData>
            <SubjectConfirmation>
                <Conditions NotBefore="2015-03-20T09:04:46.256Z" NotOnOrAfter="2015-03-
20T17:04:46.256Z">
                    <AudienceRestriction>
                        <Audience>https://saml.nnit001.dmx.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>
                </Conditions>
            </SubjectConfirmation>
        </SubjectConfirmationData>
    </KeyInfo>

```

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

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

```
<Attribute Name="dk:gov:saml:attribute:SENumberIdentifier"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic"
FriendlyName="SeNumberIdentifier">
    <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>Morten.Mortensen@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>
<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
```

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:wsa="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:saml2="urn:oasis:names:tc:SAML:2.0:assertion"
  xmlns:sp="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:541a1974-13e5-4d36-a6c5-f71d0605b275</wsa:MessageID>
    <wsa:To wsu:Id="to">https://signature.sts.nemlog-in.dk/</wsa:To>
    <wsse:Security S11:mustUnderstand="1">
      <wsu:Timestamp wsu:Id="sec-ts">
        <wsu:Created>2015-03-20T08:02:23Z</wsu:Created>
        <wsu:Expires>2015-03-30T08:02:23Z</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">>MIIGIDCCBQiAwIBAgIETAV1TzANBgkqhkiG9w0BAQsFADBiMQswCQYDVQQGEwJESzESMBAGA1UECgwJVFJVU1QyNDA4MSUwIwYDVQDDBxUU1VTVDi0MDggU31zdGVtgdGVzCBwSU1JIEENBMb4XDTEyMDExMjE0MTQwN1oXDTE2MDExmjE0MTM1MlowdjELMAkGA1UEBhMCRESxKjAoBgNVBAoMICoYyA29ub21pc3R5cmVsC2VjIC8vIENNUUjoxMDIxMzIzMTE7MBcGA1UEAwuQTW9ydGVuIE1vcnRlnljbAgBgNVBAUTGUNNUUjoxMDIxMzIzM1SSQ60TM5Ndc1NTIwggeiMA0GCSqGSIb3DQEBAQUAA4IBDwAwggEKAoIBAQDQXgVHipGqErG8xLbYqxmpvyZzh1aBK4th2YaiIBryZfSO3gOxHws+XR3JL0rVmGKxERYD4fTnNfwU7TpYaT08pnXEx2+bV2ohIzcyavQW21KMgcPwR6wv5Iuf0Ykhdyv900qJRouBh4ohJlwvBjVJQLDw0L+d6bJ/Djw+thWtuMyPUKZRj0f6dwIA45pkLH8mcFNxtzGI0ZHvlH7IiPHz73KQxmig/vvdUCVI15MADeCsQ98ds0Aw7uFJiytROF/5wD0jJOZHJToBLvtQd8USHetL6TSiEchi2ZVPf/tJmIrriQONHQy/sWEPlnkT2HzxRkuNzt1GeMVAgMBAAGjggLiMIIc3jaOBgNVHQ8BAf8EBAMCA/gwgZQGCCSGAQUBwEBBIGHMIGEDMSGCCsGAQUBzABhi9odHRw0i8vb2Nzc5zeXN0ZW10ZXN00C50cnVzdDI0MDguY29tl3Jlc3BvbmRlcjBFBggrBgfEFBQcwAoY5aHR0cDovL20uYWhLn5c3R1bXR1c3Q4LnRydxN0MjQwOC5jb20vc31zdGVzdDgtY2EuY2VMIIBIAyDVR0gBIIiFzCCARMwgEPB0g0BgEEAYH0UQIEBgIFMIH9MC8GCCsGAQUBwIBF1NodHRw0i8vd3d3LnRydxN0MjQwOC5jb20vcmVwb3NpdG9yeTCByQYIKwYBQUHAgIwgbwwDBYFRGFuSUQwAwIBARQb0Rhbk1EiHrlc3QyY2VydG1maWthdGVyIGZyYSBkZW5uZSBQSB1ZHN0ZWR1cyB1bmRlcjBPSUQgMS4zLjYuMS40LjEuMzEzMTMuMi40LjYuMi41LjBEYw5JRCB0ZxN0IGN1cnRpZmljYXR1cyBmc9tIHRoaxMgQ0EgYXJ1IGlzc3V1ZCB1bmRlcjBPSUQgMS4zLjYuMS40LjEuMzEzMTMuMi40LjYuMi41LjAYBgNVHREEETAPg01qZwXmQG5uaQxQuY29tM1GrBgNVHR8EgaMwgaw0dA4oDaGNGh0dHA6Ly9cmwuc31zdGVtdGVzdgudHJ1c3QyY2VydG1maWthdGVyIGZyYSBkZW5uZSBQSB1ZHDAdDUkwMTI0MB8GA1udIwQYMaAFJyBnhM7IincPfn+PPrxss+E18EMB0GA1udDgQWBTV7aQG08L1qrstrR8ItB9Lz0RT/zAJBgNVHREMeAjAMA0GCSqGSIb3DQEBCwUAA4IBAQAO0Pd04cFScEKoZgug3x+GBF0yZDgYBZR/dSjexU3N9+e5wTgwterC9Ykk3BTV4V1B1NFujP9TPqOzaCkqTdWlxruy0wNkVMGacVZjhS91baTw3ZnNihe5x5gDxvsjuRvc0xZvyAhT7jkp4J62haMoDt+pRszoDcVCN0kuLWL+Lh5efaB9vSCMsyKUjxf9A/F21nhBiNsEcswjNxyt2/igbTuYCST12dTcPhs+sDEAnaZlTja2B/CMUPo15niVLfuOWCPPyxurUZFB3bK/9qdHT60JvaVezaAmCwYEW7CW4AAGKDPMG1qsRxFgaObB3bd5zCbnjkW/SNhg8/lc</wsse:BinarySecurityToken>
  <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
    <SignedInfo>
```

**Commented [A23]:** Signature scenario

**Commented [A24]:** Moces certificate used to sign the message

```
<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>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/xmlenc#sha256" />
  <DigestValue>dBMMqthBFSaQDgkdw4gE99QbqbyiS/9BbMk3pO/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/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>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/xmlenc#sha256" />
  <DigestValue>gC0rvFzqTwR4HgCX5liQ6AnQuriSEQw9PUZ1HDD9nn0=</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>y5x5ngzpwCabqA7/8KPzuIUmk2Au/ovaCBrHPimVbGY=</DigestValue>
</Reference>
</SignedInfo>

<SignatureValue>OEfmkHRk/wESKFh1ktNM85Mpkn7pcGGq0SrTDBul6ix52tDr7nUIlq3sWSRmpdTtb6BknIWarQ2CLkczhy4tMYIrARAlx1cMvUGOCsgevTTbZl7zhcLgZVUsykM6wRwnmF9QGRJZ9d0BPVXqh1HSAT7RU6jL8/IHbNI/wo71h7NYYM1X8xLyfXJIpAfj2o0Tb+WVvluu04Li8KTJ/2kYzgtXPC2dMBByfRb2EyjGuT2NUF0Eab8KygFfoUw5du1uZt+afsWpqor8ALvnKhpEy0ij62gXUAmlhscz06QSkElv4+VBYRzEfXwyAcl+Lro82q0u39/0+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>
    </Signature>
</wsse: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.dkmz.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/">
    <ns1:Action wsu:Id="action">http://docs.oasis-open.org/ws-sx/ws-
trust/200512/RST/Issue</ns1:Action>
    <ns1:MessageID wsu:Id="messageid">uuid:6f89d3ae-0fad-4c5d-925c-
60e9240e6a13</ns1:MessageID>
    <ns1:RelatesTo wsu:Id="relateto">uuid:541a1974-13e5-4d36-a6c5-
f71d0605b275</ns1:RelatesTo>
    <wsse: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>
                <DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
            </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>YFINY7VV9KL8xDuiyOaneffjFI=</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>jSPcIsNzQaUWI7EnZG5EM1kDt7s=</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>J2sdhxiiIIpoBx33sQTtd2bs4AM=</DigestValue>
</Reference>
</SignedInfo>

<SignatureValue>YIN1SzPV/ThEewqVTY9nLdE1RwhqyPQ7PxZznZRHgEvqvqIMnjGGoQ28fc8UouU4LFqSc
czMoxDqSzYz6izT4RJ9YbGAYDHZ0yg7ItioaWSLk7VQ9pbwQFSv/nT2+6fangc3+qzGdPhLDLevwPTFmKi272i
KeBmVgSeD063ROx9K+g1BfVr7qj7JQ0gE182Zprk62tQ7weXhDuGaLqtmeif4gXJtz7jAwlwEitUt1EHsZ0V
mgZ2piR3HH9+o/i/tRv6Zsscp1mzhqFRMNdq1XyNxZktYA2GAJCN+aFn1hDt16U/OKX39AZvafEn0v+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://samlnnit001.dmx.dkdev</Address>
</EndpointReference>
</AppliesTo>
<RequestedSecurityToken>
<Assertion ID="_284ffff56-38b7-470a-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="#_284ffff56-38b7-470a-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/xmlenc#sha256" />
      </ds:Reference>
    </ds:SignedInfo>
    <ds:SignatureValue>P5Nez2ge68csaXnrFsvc/AAsywWMcRY0e6R1VLnXG7Q=</ds:DigestValue>
    <KeyInfo xmlns="http://www.w3.org/2000/09/xmldsig#">
      <X509Data>
<X509Certificate>MIIGFDCCBPygAwIBAgIETBGSSjANBgkqhkiG9w0BAQsFADBIMQswCQYDVQQGEwJESzESM
BAGA1UECgwJVJUU1QyNDA4MSUwIwYDVQQDBxUU1VTVDI0MDggU31zdGVzdCBWSU1JIEENBM4XDTEzMTA
wOTE5MDUwMv0xDTE2MTAwOTE5MDM0OFowgYMxCzAjBgNVBAYTAKRLMSEwHwYDVQQKDBhOTk1UIEevUyAvLyBDV
1I6mjEwOTMxDYxUTAgBgNVBAUTGUuNUUjoyMTASmZewNi1GSUQ6NTk3MjQwMzQwLQYDVQQDCZOTk1UIEZPQ0V
TIGNlcnQxIChmdW5rdGlvbnnjZXJ0awZpa2F0KTCASIwDQYJKoZIhvcNAQEBBQAdggEPADCCAQoCggEBAK10
mrGwc+bU6MbI9kyHRjFwkkkLoNbwh0M7oV2o5mbTzX+bqiw21RihyKT0xtKkXC1sKCPjj9a0jhIn/jDTBG/
bUeMSuIpvry183VW0HhjXQFife1f1R9gBDEdzd4fVhcbnJNMeMLFb/rdnXCADzPcmsy5w0QxOnrPbGhzPEON
2Q0/NzS+tz61EWfLGnt9Wh0KuD/gur16PVtWrJ9/bxRGGTYQ06FAp12z+OZ5MGmCXNmi1BDeJzC5kMMbkyN7e
JUCLkXdiWqXoeypCumr68TU4+r/1GvumZTPZW/qRCNpuCui96e8Z3rFvrHw1KcnqVVu+JHeysQXu89ecCAwEAA
a0CAsgwggleMA4GA1oDwEB/PEQAWIDuCB1AYIKwYBBQUHAQEgYcwgYQwOwYIKwYBBQUHAMGLL2h0dHA6Ly9
vY3NwLnN5c3rlbXRlc3Q4LnRydXN0MjQwOC5jb20vcmVzcG9uZGVyMEUGCCsGAQUFBzAChjlodHRwOi8vZi5ha
WEuc31zdGVzdGvzdDgudHJ1c3QyNDA4LmNvbS9zeXN0ZW10ZN00C1jYS5jZXIwggEgBgNVHSAEggEXMIIBezC
CAQ8GDSSGAQQBgfrRAgQGBAIwgf0wlwYIKwYBBQUHAgEWI2h0dHA6Ly93d3cuDHJ1c3QyNDA4LmNvbS9yZXBvc
210b3J5MIHJBgrBgfFBQccAjCBvDAMFgVEYw5JRDADAgEBGoGrRGFuSUQgdGVzdCbjZXJ0awZpa2F0ZXiZnJ
hIGR1bm51IENBIHvk3R1ZGVzIHVuZGVyIE9JRCAxLjQuMS4zMTMxMy4yLjQuNi40LjIuIERhbk1EI
HRl3QgY2VydGlmawNhdGvzIIGzby20gdGhpccyBDQSbhcUmgaXNzdVlkIHVuZGVyIE9JRCAxLjMuNi4xLjQuMS4
zMTMxMy4yLjQuNi40LjIuIMGrBgNVHR8EgaMwgaAwOqa4oDaGNgh0dHA6Ly9jcmwuc31zdGVzdDgudHJ1c
3QyNDA4LmNvbS9zeXN0ZW10ZN00C1jcmwvYqBgoF6kXDBaMQswCQYDVQQGEwJESzESMBAGA1UECgwJVJUU1Q
yNDA4MSUwIwYDVQQDBxUU1VTVDI0MDggU31zdGVzdCBWSU1JIEENBMRAwDgYDVQQDAdUkwNjM0MB8GA
1UdIwQYMBAfJYbNhM7IiNCPfn+ZPrxss+E18EMB0GA1UdDgQwBTFqfHrtduHEfr001hFTou/HItjATAJBgN
VHMEAjaAMA0GCSqGSIb3DQEBCwUA41BAQC0LTDB/5B0cepHuQ8QBGrH+ARIhJE/ZD11bi5Z3R70dBBSR2W2
QiB4GKsZC9qS1jNheK7o7/RCqg+w0U7p5W6+xdAsd5dYwidzMsJa1lLsovoxFyvFPK9nU+yaorciasScylp
mio7AnzWJ26HotU+REoNW9vaeLFIEqnqbJmpV1BG0Cm7pa4tR8ULC1SQjJTmJXMZNU0JdHb7nDyzYW4sK+40t
4sEG1Ufj8eo8oE913HMM216PoaiPSK42s51G6b0OmblWqQ57wgJ8qB7YanDu+9hFHje88xrRT12R2dwFbjbS7R
6kb9uS/Dojoa7A1dT2hGC5qRNobRY1M</X509Certificate>
      <X509Data>
    </KeyInfo>
  </ds:Signature>
  <Subject>

```

**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=@konomistyrelsen // 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.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/">
<ns1:Body xmlns:ns1="http://www.w3.org/2001/XMLSchema">
<ns2:RequestSecurityTokenResponseCollection
  xmlns:ns2="http://schemas.xmlsoap.org/soap/envelope/">
<ns3:RequestSecurityTokenResponse
  xmlns:ns3="http://www.w3.org/2005/08/addressing">
<ns4:RequestSecurityTokenResponseCollection
  xmlns:ns4="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">
<ns5:RequestSecurityTokenResponse
  xmlns:ns5="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">
<ns6:RequestSecurityTokenResponse
  xmlns:ns6="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:e5bda526-5923-4d78-a4d7-
534a3e6d1b5a</wsa:MessageID>

<wsa:To wsu:Id="to">https://signature.sts.nemlog-in.dk/</wsa:To>
Commented [A30]: Signature case

<wsse:Security S11:mustUnderstand="1">
<wsu:Timestamp wsu:Id="sec-ts">
<wsu:Created>2015-03-20T08:05:49Z</wsu:Created>
<wsu:Expires>2015-03-30T08:05:49Z</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">MIIGGTCCBQggAwIBAgIEUw+gETANBgkqhkiG9w0BAQsFADBMQswCQDVQQGEwJESzES
MBAGA1UECgwJVFJU1QyND4AMSwIgYDvQDDBtU1lVTVDI0MDggU31zdGVtdGVzCBYSVggQ0EwhcNMTUwMT
IxMTgwNDQ0WhcNMTIxtMtgwNDA5WjCBhxEMLAkGA1UEBhMCREsxITAfBgNVBAoMGE5OSVgQS9TIC8vIENW
UjoyMTA5MzEwNjFVMCAAGA1UEBRMZQ1ZSojIxMDkzMTA2LuzRd010TQ30DA5MTAxBgNVBAMKktG0JTLVRFU1
QtRk9DRVmtdMU51ChmdW5rdGlvbnnjZXJ0awZpa2F0KTCASIwDQYJKoZIhvNAQEBBQADggEPADCCAQoCggEB
AIQ1H94vHdHGtq1o1DFRvQYmmsitJxbI5PyIJQxoFPiGbjon7A9+tgR/Nt5mF2X2aGh10uw8kfLnetVsoifg0Y
0Gyp2rKzEqTsU4Emxw4Myj4FwDG06xkYuxiBKkB6won86Rxr3QvRed28vAKDSEniFGIabXRx1Vv/HWASEJIEo
+yqFnV0mmqSBh9RIQ51/JpJUhJdZ2M988010RuNo2SIRrJ2/Mv+Flt1S1JLa4IgedQ936ATE0heNOLsVNLOMww
qfvWv3im+RwqBTvktYqWnB7qmM8oBJSbxRS4e4gJ+PQfQ4s37BK+5/NSmrV8WnNqoFrxsV9SRMwhUavGxI4mA0C
AwEEAAoCAsowggLGMA4GA1UDwEB/wQEawIDuDCB1wYIKwYBQUHAQEEgYowGycwPAYIKwYBQUHMAGGMgh0dH
A6Ly9v3NwLN5c3R1bxR1c3QxOS50cnVzdDI0MDguY29tL3J1c3Bvbmr1cjBHBgrBgfFBQcwAoY7aHR0cDov
L2YUyW1hLnN5c3R1bxR1c3QxOS50cnVzdDI0MDguY29tL3N5c3R1bxR1c3QxOS1jYS5jZXIwggEgBgNVHSAEgg
EXMIIBezCCAQ8GDssGAQQBgfRRAgQGBAIwgf0wLwYIKwYBQUHAgEWI2h0dHA6Ly93d3cudHJ1c3QyNDA4LmNv
bS9yXBv210b3J5MIHJBgrBgfFBQcCAjCBvDAMFgVEYw5JRDADAgEBGofRGFuSUQgdGVzCBjZXJ0awZpa2
F0ZXIgZnhJIGR1bm51IENBIHVkc3R1ZGVzIHVuZGVyIE9JRCAXLjmuNi4xLjQuMS4zMTMxMy4yLjQuNi40LjIu
IERhbk1EIHR1c3QgY2VydG1maWNhdGVzIGZyb20gdGhpccyBDQSBhcmUgaXNzdLwVKIHVuZGVyIE9JRCAXLjMuNi
4xLjQuMS4zMTMxMy4yLjQuNi40LjIuMIGqBgNVHR8EgaIwgZ8wPKA6oDiGNmh0dHA6Ly9jcmwuc31zdGvtGvz
dDE5LnRydXN0MjQwOC5jb20vc31zdGVtdGVzde5LmNybdBfoF2gW6RZMFcxCzAJBgNVBAYTAKRLMRIwEAYDVQ
QKDAlUU1VTVDI0MDgxJDA1BgNVBAMMG1RSVNVNUMjQwOCBTeXN0ZW10ZxN0IFhJWCBDQTEOMAwGA1UEAwFQ1JM
MjIwHwYDVR0jBBgwFoAUzAJVDOSBdk8gVNURFFeckVI4f6AwHQYDV00BBYEFNc41PG/agTmqzigwWuFpNkf8z
f3MAkGA1UdEwQCMIAwDQYJKoZIhvNAQELBQADggEBADnssIGIxgIPwgfgLjxuOYPVchS5W68JeQo0ljGhEGJY
/9sao8HvtLiJCPSwJ0SuyPJUu6/b6r1Q0ATGwk1fmCEjDQidy0Ag2Lsn1sDix+Nbf+CxvtI2F1gIx7IasExBDJ
gsC0sozCDdoHBaPbAqrhj/pu0tp+rCHA/tG3DAasyHS1bZBYm03QyKn7+GViikEi2sSnwvaT95fRUUvf4ur2n9s
11gIfXqbPlIwgAiHeAn8u9FzjvIZmb00t3yuzf3tr6ZREB3Emp6spHWmlERNeiHFSrZIIGk/kDYLyc80za4sNe
FmIGVUaReidHGGVA3IMACfJCVLqGBG6VyZaJHPVhs=</wsse:BinarySecurityToken>
Commented [A31]: Signing certificate of type VOCES or FOICES for System policy

<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>NrdtWxaigbkMffHPgKCAMndq0hRMvsKQSkNelmS5cAE=</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>DGhNDOP5WVXHv32syDFjz/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>OKCzbMTQzBTl+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/KvbO6yFH+B3Z1HxhS/SP0NqcwT/rgxW2uT+zpVvy0gd2
Iv5tg7rU77yaGb13FRWrFFCwdmf4GPkzAMV4rnjIgJPpFRsP00mZc56wLq1w/+eHrHGFMycIiLVASfHzrxL8ww
30dC0S1dNmFbTpVQ/kVft/PJU6j22Hbj6csPcVYY1N7MRv1f91j/b2mpkR1FCG6cPe/GMtrIr81qvFyZ0SIQ3
78++RwtBGPfmog==</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.dmx.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/">
    <ns1:Action wsu:Id="action">http://docs.oasis-open.org/ws-sx/ws-
trust/200512/RST/Issue</ns1:Action>
    <ns1:MessageID wsu:Id="messageid">uuid:38753c46-9a4f-4559-9bd6-
    ac0d7625e9e6</ns1:MessageID>
    <ns1:RelatesTo wsu:Id="relatesto">uuid:e5bda526-5923-4d78-a4d7-
    534a3e6d1b5a</ns1: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>1hj8fpM7T5rc0sNRPpxA3p3AkM=</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
```

```
Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"></DigestMethod>
    <DigestValue>w7mwHz+Hzxj95VQSBobpcpRmHdY=</DigestValue>
</Reference>
</SignedInfo>
<SignatureValue>ZEctXNhsoDF2Cq2/vx9p1fxJ8072FiJOGg1nf64WKQS0aYuQoH3yweCzaHJ3hDisSGEEgn
iCHGcCIbLQ2CNW0POPBk47Zq0Zo0L EgZam0093z3Z8SgmtTGR3UHNMfGYxItBG/AAM4R5T3Rp82dKisHPNTGn31
4fUt+2rPf3ZQNzS75sw53yMC+im2Q0puFJ6THyThr4sF8+CuUvMJQEx7urqIzPOwCdRjgNUfHGpJJvn5QFXG
8mnf0/MBea2qHFFFjwaZ0qh1u4WnQkUqQPqsUsZahS8NV5maaN+mncDDbah1FaS166PUxxVtEsu5R4nQUKx0qe
xjR7byjs0zUgSQ==</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:9f4e1596-7d81-4af5-8334-
99d3d1bc169f">
            <TokenType />
            <AppliesTo xmlns="http://schemas.xmlsoap.org/ws/2002/12/policy">
                <EndpointReference xmlns="http://www.w3.org/2005/08/addressing">
                    <Address>https://saml.nnit001.dmx.dkdev</Address>
                </EndpointReference>
            </AppliesTo>
            <RequestedSecurityToken>
                <Assertion ID="_10fbef57-875f-4e91-b477-76308c247772" IssueInstant="2015-03-
20T08:05:52.871Z" 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://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="#_10fbef57-875f-4e91-b477-76308c247772">
                                <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:Reference>
                        </ds:SignedInfo>
                    </ds:Signature>
                <ds:DigestValue>Mdc0E55VZSD6s1E4wq6U60QKdhvKz5lJ5b3Jtm50jk4=</ds:DigestValue>
                </ds:Reference>
            </ds:SignedInfo>
        <ds:SignatureValue>T5217YL7Sm1rMQsMsNrdnphh+rF43mdXoEcWiQ0XVm0YAbvjs98Acc1VX1FKrAjvyKP
Iaj0makE5EiqK68UFNb61/hvLt7SmYclydojt0PzxIKHIU+RYnnexqxVr6HeKEYDgek0GrivwFZBz067jyx6h3
TdcZZ30f2UAzHFG23BvMv2d/8YNWtYd7e/hMKUlictoUQpGznDo9ZEyNnITHf1kh+Bt+YY5kuXMEEmEzhfQH455
7sSbEzSrFPx+Jp+OG6m3Ytp/J1D6ZG/424ugXPD7ohPs1UPVYgLATKWMJEC8470KrjqfxYmbPBTTIRNVuT9StqX

```

```

vRqcvbcewQWad9A1Q==</ds:SignatureValue>
    <KeyInfo xmlns="http://www.w3.org/2000/09/xmldsig#">
        <X509Data>
<X509Certificate>MIIGFDCCBPygAwIBAgIETBGSSjANBgkqhkiG9w0BAQsFADBIMQswCQYDVQQGEwJESzESM
BAGA1UECgwJVJYU1QyNDA4MSUwIyYDVQQDBxUU1VTVDI0MDggU31zdGVzdCBWSU1JIENBMB4XDTEzMTA
wOTE5MDUwMVoXDTE2MTAwOTE5MDM0OFowgYMxCzAJBgNVBAYTAKRLMSEwHwYDVQQKDBhOTk1UIEEvUyAvLyBDV
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            <Subject>
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                        xmlns:a="http://www.w3.org/2001/XMLSchema-instance">
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```

**Commented [A32]:** Entity format for the System policy

**Commented [A33]:** EntityId for the WSC

**Commented [A34]:** SubjectConfirmation Method always holder-of-key for the System Policy

```
wEAAaOCAsowggLGMA4GA1UdDwEB/wQEAwIBuDCB1wYIKwYBBQUHAQEEgYowgYcwPAYIKwYBBQUHMAggMGh0dHA
6Ly9vY3NwLnN5c3R1bXR1c3QxOS50cnVzdDI0MDguY29tL3J1c3BvbmRlcjBHBgrBgEFBQcwAoY7aHR0cDovL
2YuYWlhLnN5c3R1bXR1c3QxOS50cnVzdDI0MDguY29tL3N5c3R1bXR1c3QxOS1jYS5jZXIwggEgBgNVHSAEggE
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    </X509Data>
        </KeyInfo>
    </SubjectConfirmationData>
</SubjectConfirmation>
</Subject>
<Conditions NotBefore="2015-03-20T08:05:52.871Z" NotOnOrAfter="2015-03-20T16:05:52.871Z">
    <AudienceRestriction>
        <Audience>https://saml.nnit001.dmx.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="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 <a href="https://test-nemlog-in.dk/Testportal/dokumenter/NemLog-in%20-STS-Processing%20rules.pdf">https://test-nemlog-in.dk/Testportal/dokumenter/NemLog-in%20-STS-Processing%20rules.pdf</a>
[CSS – USERMANUAL]	CSS User manual <a href="http://digitaliser.dk/resource/2561041">http://digitaliser.dk/resource/2561041</a>
[DanIDVoicesGyldig.p12]	DanId Voices test certificate used for the test WSP <a href="https://test-nemlog-in.dk/Testportal/certifikater/DanIDVoicesGyldig.p12">https://test-nemlog-in.dk/Testportal/certifikater/DanIDVoicesGyldig.p12</a>
[IntegrationTestSigning.cer]	Integration test signing certificate <a href="https://test-nemlog-in.dk/Testportal/certifikater/IntegrationTestSigning.zip">https://test-nemlog-in.dk/Testportal/certifikater/IntegrationTestSigning.zip</a>
[ProductionSigning.cer]	Production signing certificate <a href="https://test-nemlog-in.dk/Testportal/certifikater/ProductionSigning.zip">https://test-nemlog-in.dk/Testportal/certifikater/ProductionSigning.zip</a>
[OIOIDWS]	OIO Identity-based Web Services v1.0.1a <a href="http://digitaliser.dk/resource/526486">http://digitaliser.dk/resource/526486</a>
[SOAP11]	Simple Object Access Protocol (SOAP) 1.1 <a href="http://www.w3.org/TR/2000/NOTE-SOAP-20000508/">http://www.w3.org/TR/2000/NOTE-SOAP-20000508/</a>

## 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