Digilink service technical description
(AUTHENTICATION PROCESSING INTERFACE)

version 6.0 CA (for legal) and 6.0 (for private), 01.12.2020

TABLE OF CONTENT

1. Used terms, abbreviations

Term	Description
External system	System (web page) of the service provider, who uses DIGI::LINK service in accordance with the concluded Agreement.
Agreement	Agreement between "Citadele banka" and the owner of the External system (Service provider) on DIGI::LINK service.
User	User of Citadele Online Banking and the External system web page.
Link	Link created in Citadele Online Banking to the External system.
FiDAViSta	Financial data exchange unified standard. For data exchange DIGI::LINK uses adjusted FiDAViSta standard http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2/fidavista.xsd
AMAI	*Authentication and payment process interface.*
HTTP	*Hyper Text Transport Protocol*
HTTPS	*Secured Hyper Text Transport Protocol*
SSL	*Secure Sockets Layer*
UTF-8	*8-bit UCS/Unicode Transformation Format.*
W3C	*World Wide Web Consortium*
XML	*eXtensible Markup Language* (specially developed to work with network documents).

2. Purpose of the document

Document describes DIGI::LINK service functionality and requirements that developers should observe while creating communication between the External system and Citadele Online Banking.

3. Summary

3.1.   DIGI::LINK service provides an opportunity to perform the following actions in Citadele Online Banking:
   3.1.1.   User authentication in Citadele Online Banking when logging in from the External system;
   3.1.2.   authenticated User access to the External system from Citadele Online banking (hereinafter referred to as – Access);
3.2.   All the above mentioned actions are based on data exchange between the Bank and the Service provider using public Internet network.
3.3.   Service is provided to Citadele Online Banking users – private customers, legal customers who are Latvian residents in Latvia, and Estonian residents in Estonia and Lithuanian residents in Lithuania.
3.4.   Available languages: English, Latvian, Russian, Estonian, Lithuanian.

4. Data exchange

4.1. Sending data

4.1.1. HTTPS protocol is used for data exchange. Data is in the XML format, UTF-8 encoding
4.1.2. For sending data of AMAI *AUTHREQ*, *AUTHRESP*, *ESERVICEREQ*, requests, the hidden field "xmldata" (type="hidden") of the form (element <form>) and forward function in the client's browser are used.
4.1.3. Before placing information in the hidden field it should be formatted – symbol " should be replaced with '**"**'. If the '&' symbol is used in any of the fields, then double formatting should be performed – before signing the request the '&' symbol should be replaced with '**&**' and before placing information in the hidden field '**&**' should be replaced with '**&amp;**'.

4.2. Signing of data

4.2.1. Before sending XML data it should be signed. For this purpose public and private key signature RSA algorithm and SHA256 hashing algorithm are used. To store public and private key, the X.509 certificate is used. This certificate is also used for data exchange between the involved parties, after the Agreement was signed. To format the signed XML data, XDS standard of the Web consortium W3C is used. "Enveloped" signing method will be used, signature will be placed in the "Extension" section.
4.2.2. Certificate requirements:
   - Algorithm: SHA256withRSA
   - Public key encoding algorithm: RSA

- Public key length: 4096

4.2.3. Certificate can be generated, for example, with the keytool help:

keytool -genkeypair -alias [alias] –keyalg RSA -keysize 4096 -keystore [keystore]

where,

alias – key name of the generated certificate in the certificate store;

keystore – certificate store name. If the store does not exist, it will be created.

4.2.4. Signature requirements: SHA256 algorithm

4.3. Data encryption

For data encryption SSL protocol is used.

5. Process description

5.1. User authentication in Citadele Online Banking, when logging in from the External system

5.1.1. User, being on the External system web page, selects authentication type - Citadele Online Banking.

5.1.2. The External system creates and signs the AUTHREQ authentication request (see [6.2]) and forward user to Citadele Online Banking page.

5.1.3. Citadele Online Banking receives the request, performs the required verifications and if everything is all right, user is offered to log into Citadele Online Banking with his/her own user name and password.

5.1.4. Citadele Online Banking creates and signs the AUTHRESP response (see [6.3), where depending on verification result and User action (proceed or cancel), the according request processing code is placed (see [**Error! Reference source not found.**]), and User is forwarded back to the External system web page, which address was received in the AUTHREQ request (see [6.2]).

5.2. Authenticated User forwarding from Citadele Online Banking to the External system

5.2.1. User, being in Citadele Online Banking, clicks one of the Links.

5.2.2. Citadele Online Banking creates and signs the ESERVICEREQ authorization request (see [6.4]), closes Citadele Online Banking User working session and forwards User to the External system web page in accordance with the selected Link.

5.2.3. The External system receives the request, performs the required verifications and if everything is all right authorises the User, using the information received in the request.

6. Data verification

6.1. General rules

Partner should perform the following checks:

- XML has valid signature;
- Xml must be signed with a valid Citadele Online Banking/External system certificate - The certificate the XML (x509Certificate field) is signed is the same that is provided by the bank;
- RequestUID" must be correct;
- PMTRESP/AUTHRESP/ESERVICEREQ should not have "RequestUID" that was already processed by partner system (protection against code replay attack);
- RequestUID should be the same as corresponding PMTREQ/AUTHREQ previously sent by partner system (the partner system should check that it is receiving response for the request that it has sent);
- Difference between the value indicated in the "Timestamp" element and current time should not exceed 15 minutes.

6.2. ESERVICEREQ

In addition to general rules "Target" field must be present for AMAI v2.0

"Target" value must match Contract identifier assigned for the External system.

7. Data description

7.1. Data structure

- Adjusted FiDAViSta standard is used for data exchange
  (http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2/fidavista.xsd).
- To transfer AMAI specific information, "Amai" element of the "Extension" element in the "Header" section is used.
- Having received a request in Citadele Online Banking or in the External system, the following verifcations should be performed:
-       XML signature verification;
-       If the difference between the value indicated in the "Timestamp" element and current time exceeds 15 minutes, the request is not processed;
-       If during last 15 minutes a request with the value indicated in the "RequestUID" element had been already registered, the request is not processed.
- When creating a request in Citadele Online Banking, information in the "Timestamp" element is written just before XML signing and sending to the External system. Signature is placed in the "SignatureData" element.

8. DIGI:LINK VERSION 6.0CA (Company Access)

8.1. Authorisation request (AUTHREQ) XML example

```
<?xml version="1.0" encoding="UTF-8"?>
<FIDAVISTA xmlns="http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2
http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2/fidavista.xsd">
  <Header>
    <Timestamp>20200312092108000</Timestamp>
    <From>11111</From>
    <Extension>
      <Amai xmlns="http://online.citadele.lv/XMLSchemas/amai/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://online.citadele.lv/XMLSchemas/amai/
http://online.citadele.lv/XMLSchemas/amai/amai.xsd">
        <Request>AUTHREQ</Request>
        <RequestUID>e117041c-2a5d-476e-a6f4-2ee3948fe678</RequestUID>
        <Version>6.0CA</Version>
        <Language>LV</Language>
        <ReturnURL>http://www.torts.lv/XMLProcessingServlet</ReturnURL>
        <Location>LV</Location>
        <SignatureData>
          <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
            <SignedInfo>
              <CanonicalizationMethod Algorithm="http://www.w3.org/TR/2001/REC-xml-c14n-20010315"/>
              <SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#rsa-sha256"/>
              <Reference URI="">
                <Transforms>
                  <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature"/>
                </Transforms>
                <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256"/>
                <DigestValue>…</DigestValue>
              </Reference>
            </SignedInfo>
            <SignatureValue>...</SignatureValue>
            <KeyInfo>
              <X509Data>
                <X509SubjectName>…</X509SubjectName>
                <X509Certificate>...</X509Certificate>
              </X509Data>
            </KeyInfo>
```

```
            </Signature>
          </SignatureData>
        </Amai>
      </Extension>
    </Header>
</FIDAVISTA>
```

| N | Field name | Length | | Mandatory | Symbols allowed | Description |
		Min	Max			
1	Timestamp	17	17	Y	0-9	Date and time of creation the " YYYYMMDDHHNNSSsss" format
2	From	5	5	Y	0-9	Partner contract identifier
3	Request	7	7	Y	**AUTHREQ**	Request type
4	RequestUID	5	36	Y	0-9|a-z|A-Z|-	Request type identificator
5	Version	3	5	Y	**6.0CA**	Authorisation version
6	Language	2	2	Y	**LV|LT|ET|EN|RU**	User interface language
7	ReturnURL	1	254	Y	All URL supported symbols	Partner return URL
8	Location	2	2	Y	**LV|LT|EE**	Current partner location
9	SignatureData			Y		Element for placing a signature

8.2. Successful response (AUTHRESP) XML example

```
<?xml version="1.0" encoding="UTF-8"?>
<FIDAVISTA xmlns="http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2
http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2/fidavista.xsd">
  <Header>
    <Timestamp>20200312092108000</Timestamp>
    <From>10000</From>
    <Extension>
      <Amai xmlns="http://online.citadele.lv/XMLSchemas/amai/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
        <Request>AUTHRESP</Request>
        <RequestUID>e117041c-2a5d-476e-a6f4-2ee3948fe678</RequestUID>
        <Version>6.0CA</Version>
        <Language>LV</Language>
        <PersonCode>18041150002</PersonCode>
      <PersonCountry>LV</PersonCountry>
        <Person>ANREJS TORTS</Person>
        <FName>ANREJS</FName>
        <LName>TORTS</LName>
        <LegalId>1234567890</LegalId>
        <CounrtyId>LV</CounrtyId>
        <CompanyName>Torts Company</CompanyName>
        <Code>100</Code>
        <SignatureData>
          <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
            <SignedInfo>
```

```
                <CanonicalizationMethod Algorithm="http://www.w3.org/TR/2001/REC-xml-c14n-20010315"/>
                <SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#rsa-sha256"/>
                <Reference URI="">
                  <Transforms>
                    <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature"/>
                  </Transforms>
                  <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256"/>
                  <DigestValue>...</DigestValue>
                </Reference>
              </SignedInfo>
              <SignatureValue>...</SignatureValue>
              <KeyInfo>
                <X509Data>
                  <X509SubjectName>...</X509SubjectName>
                  <X509Certificate>...</X509Certificate>
                </X509Data>
              </KeyInfo>
            </Signature>
          </SignatureData>
        </Amai>
      </Extension>
    </Header>
  </FIDAVISTA>
```

| N | Field name | Length | | Mandatory | Symbols allowed | Description |
		Min	Max			
1	Timestamp	17	17	Y	0-9	Date and time of creation the " YYYYMMDDHHNNSSsss" format
2	From	5	5	Y	0-9	Bank contract identifier
3	Request	7	7	Y	**AUTHRESP**	Request type
4	RequestUID	5	36	Y	0-9|a-z|A-Z|-	Request type identificator from AUHTREQ
5	Version	3	5	Y	**6.0CA**	Authorisation version
6	PersonCode	11	20	Y	0-9	Personal code without dash.
7	PersonCountry	2	2	Y	Two-letter country code in ISO format	Country of passport issue
8	Person	1	210	Y	All English, Latvian, Estonian, Lithuanian characters and dash	Person first and last name
9	FName	1	100	Y	All English, Latvian, Estonian, Lithuanian characters and dash	Person first name separately
10	LName	1	100	Y	All English, Latvian, Estonian, Lithuanian characters and dash	Person last name separately
11	Code	3	3	Y	**100**	Successful authorisation code
12	LegalId	11	20	Y	0-9	Company legal id

N	Field name	Length		Mandatory	Symbols allowed	Description
		Min	Max			
13	CounrtyId	2	2	Y	**LV|LT|EE**	Country, where company is registered
14	CompanyName	1	210	Y	All English, Latvian, Estonian, Lithuanian characters|-&	Company name
15	SignatureData			Y		Element for placing a signature

8.3. Unsuccessful response (AUTHRESP) XML example

```xml
<?xml version="1.0" encoding="UTF-8"?>
<FIDAVISTA xmlns="http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xsi:schemaLocation="http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2
http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2/fidavista.xsd">
   <Header>
      <Timestamp>20200312092108000</Timestamp>
      <From>10000</From>
      <Extension>
        <Amai xmlns="http://online.citadele.lv/XMLSchemas/amai/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
         <Request>AUTHRESP</Request>
         <RequestUID>e117041c-2a5d-476e-a6f4-2ee3948fe678</RequestUID>
         <Version>6.0CA</Version>
         <Code>200</Code>
        <Message>Error message</Message>
        <SignatureData>
           <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
             <SignedInfo>
               <CanonicalizationMethod Algorithm="http://www.w3.org/TR/2001/REC-xml-c14n-20010315"/>
               <SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#rsa-sha256"/>
               <Reference URI="">
                 <Transforms>
                   <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature"/>
                 </Transforms>
                 <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256"/>
                 <DigestValue>...</DigestValue>
               </Reference>
             </SignedInfo>
             <SignatureValue>...</SignatureValue>
             <KeyInfo>
               <X509Data>
                 <X509SubjectName>...</X509SubjectName>
                 <X509Certificate>...</X509Certificate>
               </X509Data>
             </KeyInfo>
           </Signature>
        </SignatureData>
      </Amai>
    </Extension>
  </Header>
</FIDAVISTA>
```

N	Field name	Length		Mandatory	Symbols allowed	Description
		Min	Max			
1	Timestamp	17	17	Y	0-9	Date and time of creation the " YYYYMMDDHHNNSSsss" format
2	From	5	5	Y	0-9	Bank contract identifier
3	Request	7	7	Y	**AUTHRESP**	Request type
4	RequestUID	5	36	Y	0-9|a-z|A-Z|-	Request type identificator from AURTREQ
5	Version	3	5	Y	**6.0CA**	Authorisation version
6	Code	3	3	Y	**200** – user pressed cancel **201** – incorrect user legal id **203** – problem with certificate **300** – runtime error **400** – service downtime	Unsuccessful authorisation code
7	Message	1	210	N	0-9|a-z|A-Z	Additional information about error
8	SignatureData			Y		Element for placing a signature

9. DIGI:LINK E-SERVICE 6.0CA Access

9.1. Authorisation request (ESERVICEREQ) XML example

```
<?xml version="1.0" encoding="UTF-8"?>
<FIDAVISTA xmlns="http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2
http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2/fidavista.xsd">
  <Header>
    <Timestamp>20200312092108000</Timestamp>
    <From>10000</From>
    <Extension>
      <Amai xmlns="http://online.citadele.lv/XMLSchemas/amai/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
        <Request>ESERVICEREQ</Request>
        <RequestUID>e117041c-2a5d-476e-a6f4-2ee3948fe678</RequestUID>
        <Target>420</Target>
        <Version>6.0CA</Version>
        <Language>LV</Language>
        <PersonCode>18041150002</PersonCode>
       <PersonCountry>LV</PersonCountry>
        <Person>ANREJS TORTS</Person>
        <FName>ANREJS</FName>
        <LName>TORTS</LName>
        <LegalId>1234567890</LegalId>
        <CounrtyId>LV</CounrtyId>
        <CompanyName>Torts Company</CompanyName>
        <SignatureData>
          <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
            <SignedInfo>
              <CanonicalizationMethod Algorithm="http://www.w3.org/TR/2001/REC-xml-c14n-20010315"/>
```

```
            <SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#rsa-sha256"/>
            <Reference URI="">
              <Transforms>
                <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature"/>
              </Transforms>
              <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256"/>
              <DigestValue>...</DigestValue>
            </Reference>
          </SignedInfo>
          <SignatureValue>...</SignatureValue>
          <KeyInfo>
            <X509Data>
              <X509SubjectName>...</X509SubjectName>
              <X509Certificate>...</X509Certificate>
            </X509Data>
          </KeyInfo>
        </Signature>
      </SignatureData>
    </Amai>
  </Extension>
 </Header>
</FIDAVISTA>
```

| N | Field name | Length | | Mandatory | Symbols allowed | Description |
		Min	Max			
1	Timestamp	17	17	Y	0-9	Date and time of creation the " YYYYMMDDHHNNSSsss" format
2	From	5	5	Y	0-9	Partner contract identifier
3	Request	7	7	Y	**ESERVICEREQ**	Request type
4	RequestUID	5	36	Y	0-9|a-z|A-Z|-	Request type identificator
5	Target	5	5	Y	0-9	Partner contract identifier
6	Version	3	5	Y	**6.0CA**	Authorisation version
7	Language	2	2	Y	**LV|LT|ET|EN|RU**	User interface language
8	PersonCode	11	20	Y	0-9	Personal code without dash
	PersonCountry	2	2	Y	Two-letter country code in ISO format	Country of passport issue
9	Person	1	210	Y	All English, Latvian, Estonian, Lithuanian characters and dash	Person first and last name
10	FName	1	100	Y	All English, Latvian, Estonian, Lithuanian characters and dash	Person first name separately
11	LName	1	100	Y	All English, Latvian, Estonian, Lithuanian characters and dash	Person last name separately
12	LegalId	11	20	Y	0-9	Company legal id

| N | Field name | Length | | Mandatory | Symbols allowed | Description |
		Min	Max			
13	CounrtyId	2	2	Y	**LV|LT|EE**	Country, where company is registered
14	CompanyName	1	210	Y	All English, Latvian, Estonian, Lithuanian characters|-&	Company name

10. DIGI:LINK VERSION 6.0

10.1. Authorisation request (AUTHREQ) XML example

```xml
<?xml version="1.0" encoding="UTF-8"?>
<FIDAVISTA xmlns="http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2
http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2/fidavista.xsd">
  <Header>
    <Timestamp>20200312092108000</Timestamp>
    <From>11111</From>
    <Extension>
      <Amai xmlns="http://online.citadele.lv/XMLSchemas/amai/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://online.citadele.lv/XMLSchemas/amai/
http://online.citadele.lv/XMLSchemas/amai/amai.xsd">
        <Request>AUTHREQ</Request>
        <RequestUID>e117041c-2a5d-476e-a6f4-2ee3948fe678</RequestUID>
        <Version>6.0</Version>
        <Language>LV</Language>
        <ReturnURL>http://localhost:8080/PartnerPortalEmulator/XMLProcessingServlet</ReturnURL>
        <Location>LV</Location>
        <SignatureData>
          <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
            <SignedInfo>
              <CanonicalizationMethod Algorithm="http://www.w3.org/TR/2001/REC-xml-c14n-20010315"/>
              <SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#rsa-sha256"/>
              <Reference URI="">
                <Transforms>
                  <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature"/>
                </Transforms>
                <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256"/>
                <DigestValue>…</DigestValue>
              </Reference>
            </SignedInfo>
            <SignatureValue>...</SignatureValue>
            <KeyInfo>
              <X509Data>
                <X509SubjectName>…</X509SubjectName>
                <X509Certificate>...</X509Certificate>
              </X509Data>
            </KeyInfo>
          </Signature>
        </SignatureData>
      </Amai>
    </Extension>
  </Header>
</FIDAVISTA>
```

N	Field name	Length		Mandatory	Symbols allowed	Description
		Min	Max			
1	Timestamp	17	17	Y	0-9	Date and time of creation the " YYYYMMDDHHNNSSsss" format
2	From	5	5	Y	0-9	Partner contract identifier
3	Request	7	7	Y	**AUTHREQ**	Request type
4	RequestUID	5	36	Y	0-9|a-z|A-Z|-	Request type identificator
5	Version	3	5	Y	**6.0**	Authorisation version
6	Language	2	2	Y	**LV|LT|ET|EN|RU**	User interface language
7	ReturnURL	1	254	Y	All URL supported symbols	Partner return URL
8	Location	2	2	Y	**LV|LT|EE**	Current partner location
9	SignatureData			Y		Element for placing a signature

10.2. Successful response (AUTHRESP) XML example

```xml
<?xml version="1.0" encoding="UTF-8"?>
<FIDAVISTA xmlns="http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2
http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2/fidavista.xsd">
   <Header>
      <Timestamp>20200312092108000</Timestamp>
      <From>10000</From>
      <Extension>
        <Amai xmlns="http://online.citadele.lv/XMLSchemas/amai/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
          <Request>AUTHRESP</Request>
          <RequestUID>ac516c33-8d69-4a2f-993d-93155a0337a8</RequestUID>
          <Version>6.0</Version>
          <Language>LV</Language>
          <PersonCode>18041150002</PersonCode>
        <PersonCountry>LV</PersonCountry>
          <Person>ANREJS TORTS</Person>
          <FName>ANREJS</FName>
          <LName>TORTS</LName>
          <Code>100</Code>
          <SignatureData>
            <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
              <SignedInfo>
                <CanonicalizationMethod Algorithm="http://www.w3.org/TR/2001/REC-xml-c14n-20010315"/>
                <SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#rsa-sha256"/>
                <Reference URI="">
                  <Transforms>
                    <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature"/>
                  </Transforms>
                  <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256"/>
                  <DigestValue>...</DigestValue>
                </Reference>
              </SignedInfo>
              <SignatureValue>...</SignatureValue>
```

```
            <KeyInfo>
              <X509Data>
                <X509SubjectName>...</X509SubjectName>
                <X509Certificate>...</X509Certificate>
              </X509Data>
            </KeyInfo>
          </Signature>
        </SignatureData>
      </Amai>
    </Extension>
  </Header>
</FIDAVISTA>
```

N	Field name	Length		Mandatory	Symbols allowed	Description
		Min	Max			
1	Timestamp	17	17	Y	0-9	Date and time of creation the " YYYYMMDDHHNNSSsss" format
2	From	5	5	Y	0-9	Bank contract identifier
3	Request	7	7	Y	**AUTHRESP**	Request type
4	RequestUID	5	36	Y	0-9|a-z|A-Z|-	Request type identificator from AUHTREQ
5	Version	3	5	Y	**6.0**	Authorisation version
6	PersonCode	11	20	Y	0-9	Personal code without dash
7	PersonCountry	2	2	Y	Two-letter country code in ISO format	Country of passport issue
8	Person	1	210	Y	All English, Latvian, Estonian, Lithuanian characters and dash	Person first and last name
9	FName	1	100	Y	All English, Latvian, Estonian, Lithuanian characters and dash	Person first name separately
10	LName	1	100	Y	All English, Latvian, Estonian, Lithuanian characters and dash	Person last name separately
11	Code	3	3	Y	**100**	Successful authorisation code
12	SignatureData			Y		Element for placing a signature

10.3. Unsuccessful response (AUTHRESP) XML example

```xml
<?xml version="1.0" encoding="UTF-8"?>
<FIDAVISTA xmlns="http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xsi:schemaLocation="http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2
http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2/fidavista.xsd">
  <Header>
     <Timestamp>20200312092108000</Timestamp>
     <From>10000</From>
     <Extension>
        <Amai xmlns="http://online.citadele.lv/XMLSchemas/amai/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
          <Request>AUTHRESP</Request>
          <RequestUID>6e78d4a2-091a-41ed-bc28-618844147214</RequestUID>
          <Version>6.0</Version>
          <Code>200</Code>
         <Message>Error message</Message>
         <SignatureData>
            <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
              <SignedInfo>
                 <CanonicalizationMethod Algorithm="http://www.w3.org/TR/2001/REC-xml-c14n-20010315"/>
                 <SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#rsa-sha256"/>
                 <Reference URI="">
                   <Transforms>
                      <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature"/>
                   </Transforms>
                   <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256"/>
                   <DigestValue>...</DigestValue>
                 </Reference>
              </SignedInfo>
              <SignatureValue>...</SignatureValue>
              <KeyInfo>
                 <X509Data>
                   <X509SubjectName>...</X509SubjectName>
                   <X509Certificate>...</X509Certificate>
                 </X509Data>
              </KeyInfo>
            </Signature>
         </SignatureData>
        </Amai>
     </Extension>
  </Header>
</FIDAVISTA>
```

N	Field name	Length		Mandatory	Symbols allowed	Description
		Min	Max			
1	Timestamp	17	17	Y	0-9	Date and time of creation the " YYYYMMDDHHNNSSsss" format
2	From	5	5	Y	0-9	Bank contract identifier
3	Request	7	7	Y	**AUTHRESP**	Request type
4	RequestUID	5	36	Y	0-9|a-z|A-Z|-	Request type identificator from AURTREQ
5	Version	3	5	Y	**6.0**	Authorisation version

| N | Field name | Length | | Mandatory | Symbols allowed | Description |
		Min	Max			
6	Code	3	3	Y	**200** – user pressed cancel **201** – incorrect user legal id **203** – problem with certificate **300** – runtime error **400** – service downtime	Unsuccessful authorisation code
7	Message	1	210	N	0-9|a-z|A-Z	Additional information about error
8	SignatureData			Y		Element for placing a signature

11. DIGI:LINK E-SERVICE Access

11.1. Authorisation request (ESERVICEREQ) XML example

```xml
<?xml version="1.0" encoding="UTF-8"?>
<FIDAVISTA xmlns="http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xsi:schemaLocation="http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2
http://ivis.eps.gov.lv/XMLSchemas/100017/fidavista/v1-2/fidavista.xsd">
  <Header>
    <Timestamp>20200312092108000</Timestamp>
    <From>10000</From>
    <Extension>
      <Amai xmlns="http://online.citadele.lv/XMLSchemas/amai/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
        <Request>ESERVICEREQ</Request>
        <RequestUID>e117041c-2a5d-476e-a6f4-2ee3948fe678</RequestUID>
        <Target>420</Target>
        <Version>6.0</Version>
        <Language>LV</Language>
        <PersonCode>31017511054</PersonCode>
      <PersonCountry>LV</PersonCountry>
      <Person>ANDREJS TORTS</Person>
      <FName>TORTS</FName>
      <LName>ANDREJS</LName>
      <SignatureData>
        <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
          <SignedInfo>
            <CanonicalizationMethod Algorithm="http://www.w3.org/TR/2001/REC-xml-c14n-20010315"/>
            <SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#rsa-sha256"/>
            <Reference URI="">
              <Transforms>
                <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature"/>
              </Transforms>
              <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256"/>
              <DigestValue>...</DigestValue>
            </Reference>
          </SignedInfo>
          <SignatureValue>...</SignatureValue>
          <KeyInfo>
            <X509Data>
              <X509SubjectName>...</X509SubjectName>
              <X509Certificate>...</X509Certificate>
            </X509Data>
```

```
        </KeyInfo>
      </Signature>
    </SignatureData>
   </Amai>
  </Extension>
 </Header>
</FIDAVISTA>
```

N	Field name	Length		Mandatory	Symbols allowed	Description
		Min	Max			
1	Timestamp	17	17	Y	0-9	Date and time of creation the " YYYYMMDDHHNNSSsss" format
2	From	5	5	Y	0-9	Partner contract identifier
3	Request	7	7	Y	**ESERVICEREQ**	Request type
4	RequestUID	5	36	Y	0-9|a-z|A-Z|-	Request type identificator
5	Target	5	5	Y	0-9	Partner contract identifier
6	Version	3	5	Y	**6.0**	Authorisation version
7	Language	2	2	Y	**LV|LT|ET|EN|RU**	User interface language
8	PersonCode	11	20	Y	0-9	Personal code without dash
9	PersonCountry	2	2	Y	Two-letter country code in ISO format	Country of passport issue
	Person	1	210	Y	All English, Latvian, Estonian, Lithuanian characters and dash	Person first and last name
10	FName	1	100	Y	All English, Latvian, Estonian, Lithuanian characters and dash	Person first name separately
11	LName	1	100	Y	All English, Latvian, Estonian, Lithuanian characters and dash	Person last name separately