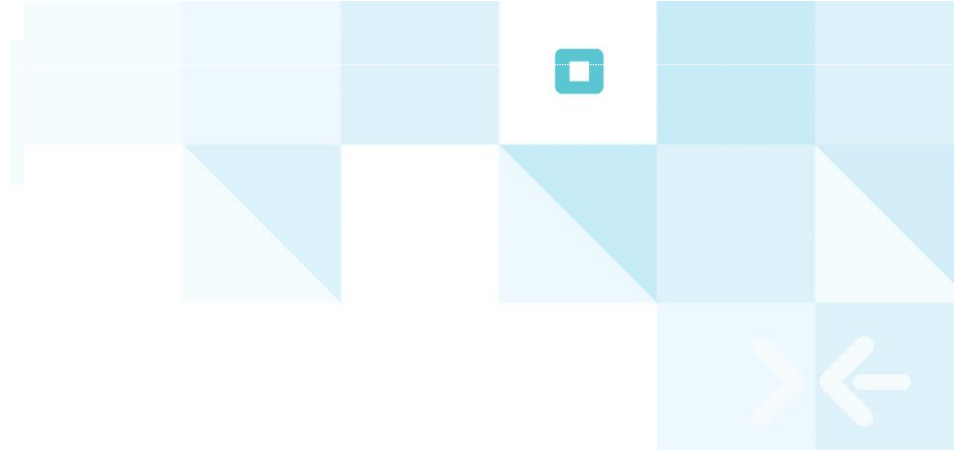




EInvoice Payments Service

(Version v01)

Technical Specification

Versions

Version	Description of Change	Date
v01	Initial Version	21 August 2020

Related Documents

Document Name	Description

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1. Introduction

This document provides technical specification for the EInvoice Payment Service version 1.

Files containing definitions of XML schema are shown as annexes at the end of the document.

1.1 ABBREVIATIONS

Abbreviation	Description	Terminology used in the Law (if it is different)
CA	Certificate Authority	-
FIC	Fiscal Identification Code (generated at server side after successful verification of the invoice)	UII – Unique invoice identifier
GUID	Global Unique Identifier	-
NUIS	National Unique Identification Number	NUIS/NIPT
OCSP	On-Line Certificate Status Protocol	-
SOAP	Message exchange protocol for XML messages as specified at: https://www.w3.org/TR/soap/	-
UUID	Universally Unique Identifier	-
WSDL	Web Services Description Language –XML-based language for description of functions offered by a WWW service as specified at http://www.w3.org/TR/wsdl	-
XML Schema	A XML-based language intended for definition of XML document structure as specified at http://www.w3.org/TR/xmlschema11-1/ and https://www.w3.org/TR/xmlschema11-2/	-
Term	Definition	Terminology used in the Law (if it is different)
Response data message	A data structure in a defined format prescribed by the financial authority, which contains the Fiscal Identification Code (FIC) and is used as acknowledgement of invoice and formal correctness of the registered invoice data message sent.	A data structure in a defined format prescribed by the financial authority, which contains Unique invoice identifier (UII) and is used as acknowledgement of invoice and formal correctness of the registered invoice data message sent.
Error Data Message	A data structure in a defined format prescribed by the financial authority, which contains an error code and its text description as a reaction to a registered invoice data message received containing critical errors preventing it from being processed, or when another error occurs which prevents the message being processed at the tax authority's side.	-

2. Environments

The government will publish Web service addresses for two types of environments: production environment and one or more test environments:

- **Non-production environment** will be used solely by software developers (developing software for cash registers), not by end users.
- **Production environment** is intended for the users and will be used for routine operations.

Endpoints:

- Test environment:
 - To be published in technical specifications for EInvoice
- Production environment:
 - To be published in technical specifications for EInvoice

2.1 TOPOLOGY

Users access by initiating 1-way TLS connection. Data exchange is synchronous, meaning access point answers on user's request immediately. Request and response messages formats are specified through XML schema.

2.1.1 SECURITY PRECONDITIONS

All communication is protected by 1-way TLS encryption at the transport layer. In production environment system presents itself to client with a TLS certificate issued by NAIS production CA, while in test environment the certificate is issued by NAIS test CA.

Protection at the transport layer	HTTPS (TLS v1.1 and v1.2, AES_256 encryption at least)
Certificates for the electronic signing	Certificate type: application digital certificate for fiscalization

2.1.2 APPLICATION PRECONDITIONS

Functionality is available to its clients using web-service technology. For that reason, client's application (or infrastructure, depending on realization) needs to fulfil these preconditions:

Client creation standards	WS-1
Service type	Document-literal
Application protocol	SOAP/HTTPS (SOAP 1.1)
Code site of the request message XML	UTF-8

3. Interface

3.1 PAYMENT ORDER

3.1.1 PAYMENT ORDER REQUEST DATA MESSAGE

Name	Field type	Occurrence [Min, Max]	Description
PaymentOrderRequest	Element	[1, 1]	Root XML element representing request for payment order.
Id	Attribute	[1, 1]	Attribute used for signature creation and verification. Fixed value "Request".
Version	Attribute	[1,1]	Attribute used to specify compliance with XSD schema. For this version fixed value is "1".
Header	Element	[1, 1]	XML element representing header...
UUID	Attribute	[1, 1]	ID of the message.
SendDateTime	Attribute	[1, 1]	Date and time of sending the message to the Tax administration.
Signature	Element	[1, 1]	XML element with digital signature.

Table 1

3.1.1.1 Header

Element representing the header of the request data message.

3.1.1.2 Header UUID

Element generated by the service. It uniquely identifies the request message. UUID should be constructed according to the RFC4122 version 4.

Data type	string
Length	36 characters
Pattern	[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[1-5][0-9a-fA-F]{3}-[89abAB][0-9a-fA-F]{3}-[0-9a-fA-F]{12}
Example	58e0a7d7-eebc-41d8-9669-0800200c9a66 58E0A7D7-EEBC-41D8-9669-0800200C9A66

Table 2

3.1.1.3 Header SendDateTime

Element represents date and time of sending the request message to the CIS. Date and time should be in ISO 8601 format.

Data type	dateTime
Pattern	[0-9]{4}-[0-9]{2}-[0-9]{2}T[0-9]{2}:[0-9]{2}:[0-9]{2}[+-][0-9]{2}:[0-9]{2}
Example	2020-03-21T14:25:23+01:00

Table 3

3.1.1.4 Signature

XML element stores enveloped digital signature described in chapter 4.1.

3.1.2 PAYMENT ORDER XML REQUEST

```
<?xml version="1.0" encoding="UTF-8"?>
<GetPaymentOrderRequest xmlns="https://Einvoice.tatime.gov.al/EinvoiceBankService/schema" Id="Request"
Version="1">
  <Header UUID="1985dab2-b5c4-44bc-9aea-94656b423026" SendDateTime="2020-03-21T14:25:23+01:00" />
  <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="#Request">
        <Transforms>
          <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature"
/>
            <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
          </Transforms>
          <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256" />
          <DigestValue>MXYlWA4aM6uHd7UNT0AYSdIP9bN95Tk/7WhZVSFrDdY=</DigestValue>
        </Reference>
      </SignedInfo>
      <SignatureValue>LkYz3tG8UJZgT858yixDuV/fEewCrk6PelXGD1Fkzs43CZy3MyDoghiKNfKba4dGn7/ykj
4xaYkUE4s+KfCUUvtSD2pEAF4pQwure6NZPX5LPxo6XVfVNEz/8wBTy/vkk1TVOVstY8U3eTqssGCtGdPL+uPo
kXDuMkX6u4MeyishkSf8gOVxr2b4EtVwI4Hz7a+3DWG/JOtGYPJN9tdc1CiwX8HTNDlsyUnd/uiBiLkyct61zSQ+j
awHoYrM5RBI7zY4eV1OgQ4ueBXqZS1IauLF/ljZqqvp2v7Va/VmVjToU93p0BEhguzOHFjlgbU4OeaFhiyAtXMC5I
wsxOQ==</SignatureValue>
      <KeyInfo>
        <X509Data>
          <X509Certificate>MIIFXTCCBEWgAwIBAgIKQ0H0ET0Y7QmR/zANBgkqhkiG9w0BAQsFADBLMQswCQYDVQQG
EwJBTDENMAsGA1UEChMETkFJUzEtMCsGA1UEAxMkTkFJUyBDbGFzcyAzIENlcnRpZmljYXRpb24gQXV0aG9yaX
R5MB4XDTE5MTAxMDA3NDMzMVowXDTIwMTAwOTA3NDMzMVowb2ELMAkGA1UEBhMCQWwDjAMBGNVBAc
TBUvtcmNIMRYwFAYDVQQKEw1EQUITWSBhbmQgRVRNMSMwIQYDVQQDEExpEQUITWSBhbmQgRVRNIEZpc2t
hbGl6aW1pMTETMBEGA1UEBBMKTDA0ODIwMDAxTjCCASlWdQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBA
LbmlgXO51GFkGxBrm0FWsetkuP6z9OIEzste+zGzeqgKWmgG4KizbODv7Sk6bDS5D63aFkGADJWE30018osDqee
95GW2/ERT9Nwg2lLk4dHdoCyxOj2efq7eKhNvvA5R3wQxu9CINIQ1aaKCKClissOcamaUPeu9nVAU48zH5DEkMF
NBIL1VXcVjw+MaSP5UzXBTAasyaOk47n97SebLdMrCqnE8x9ML0Y6zKK5Y+llhpH44utCng108uPb+fa1vCEUDKb
UcCWPs1B9dz7gZs1pYPbNKrcaBhwd6+9Hgqf17UUAoUW7eEm2ru8eUTmYssicrRdk/pfRoLpIzGkGevIECAwEAA
aOCAh0wggIZMGYGCCsGAQUFBwEBBFowWDAAkBggrBgEFBQcwAYYYaHR0cDovL29jc3AuYWtzaGkuZ292LmFs
MDAGCCsGAQUFBzAChiRodHRwOi8vY2VydHMUyWtzaGkuZ292LmFsL2NsYXNzMy5jcnQwDgYDVROPAQH/BAQ
DAgTwMB8GA1UdIwQYMBAAFIcmqPvbK1GbOdCY1vTGM1ZHXNgFMB0GA1UdDgQWBBTunUEmzf/HFOIgeIyFfj
RxQ6ESZTBLBgNVHSAERDBCMEEAGDCsGAQQBgrFsCgEBAzAwMC4GCCsGAQUFBwIBFiJodHRwOi8vd3d3LmFrc
2hpLmdvdi5hbC9yZXBvc2l0b3J5MIGnBgNVHR8EGZ8wgZwwgZmZgZaggZOGImh0dHA6Ly9jcmwuYWtzaGkuZ29
2LmFsL2NsYXNzMy5jcmYGBWxkYXA6Ly9sZGFwLmFrc2hpLmdvdi5hbC9DTj10QUITIENsYXNzIDMgQ2VydGlma
WNhdGlviBBdXR0b3JpdHksTz10QUITLTM9QUw/Y2VydGlmaWNhdGVSSXZvY2F0aW9uTGldZDdiaW5hcnkwSQ
YDVRORBELwQKAmBgorBgEEAYI3FAIDBgMFmFkaW5lcGV0cm10aUB5YWhvby5jb22BFmFkaW5lcGV0cm10aU
B5YWhvby5jb20wHQYDVROlBBYwFAYIKwYBBQUHAIwGCCsGAQUFBwMEMA0GCCsGSIb3DQEBcwUAA4IBAQB
MrzlClFZRZE39ADKyoXFcdijvaOIXj1k0NhPbZMCqSnTVMgPiI53HvLZ54A/RExf1ki+oS75cef+1K8vGLp916Abdh
DfAykTfsNtzDSWAupi6A23XzWzyLrmPhlobQrCEoW5gj4p2J8fo7+BRmgBGEBW7CKBayGdZZ5Xna6ZM68dB0i4c
BgGOGjkod4Dk+XQs2yAkiVXEw54RAuwUUYteEwzK7si3dLcCBAlWhwHLWvnbduzaLncvV9hYIDPV2kuPlqzL
sljKmhXAC3K7k9wDeg1j6wDTslj14MZUubgXqDqZGbNWSh5sVMBaXNUomzi9YgB5FUndXwx+7sB</X509Cert
ificate>
        </X509Data>
      </KeyInfo>
    </Signature>
  </GetPaymentOrderRequest>
```

3.1.3 PAYMENT ORDER RESPONSE DATA MESSAGE

Name				Field type	Occurrence [Min, Max]	Description
PaymentOrderResponse				Element	[1, 1]	Root XML element representing response for payment order.
	Id			Attribute	[1, 1]	Attribute used for signature creation and verification. Fixed value "Request".
	Version			Attribute	[1,1]	Attribute used to specify compliance with XSD schema. For this version fixed value is "1".
	Header			Element	[1, 1]	XML element representing header...
		UUID		Attribute	[1, 1]	ID of the message.
		SendDateTime		Attribute	[1, 1]	Date and time of sending the message to the Tax administration.
	PymtOrds			Element	[1,1]	List of all orders on the einvoice
		PymtOrd		Element	[1,100]	Details of one order
			PymtOrdNum	Attribute	[1,1]	Order number in ordinal number / year format.
			PymtOrdDatTimSend	Attribute	[1,1]	Date and time of sending the message.
			PayerNipt	Attribute	[1,1]	NIPT of the payer.
			PayerName	Attribute	[1,1]	Payer full name.
			PayerAddr	Attribute	[0,1]	Payer full address.
			PayerBnkCode	Attribute	[1,1]	Payer's bank code.
			PayerBnkName	Attribute	[1,1]	Payer's bank full name.
			StatusOrd	Attribute	[0,1]	Status of the order.
			PymtOrdIts	Element	[1,1]	List of items of a single order.
			PymtOrdIt	Element	[1,100]	Single item of an order.
			EinFic	Attribute	[1,1]	FIC of the einvoice in question.
			EinDatTim	Attribute	[1,1]	Date and time of the einvoice.
			EinNum	Attribute	[1,1]	Ordinal number of the einvoice.
			EinPymtRefNum	Attribute	[0,1]	Reference to the payment.
			EinAmt	Attribute	[1,1]	Amount on the invoice.
			EinCur	Attribute	[1,1]	Currency used on the invoice.
			EinPymtDesc	Attribute	[1,1]	Description of the payment.
			PymtRecNipt	Attribute	[1,1]	NIPT of the recipient.
			PymtRecName	Attribute	[1,1]	Recipient name.
			PymtRecAddr	Attribute	[1,1]	Recipient address.
			PymtRecIBAN	Attribute	[1,1]	Recipient IBAN.
			PayerIBAN	Attribute	[1,1]	Payer IBAN.
			DatTimPymt	Attribute	[1,1]	Payment date and time.
			AmtToBePaid	Attribute	[1,1]	Amount of the invoice.
			CurToBePaid	Attribute	[1,1]	Currency that invoice is paid in.

Signature	Element	[1, 1]	XML element with digital signature.
-----------	---------	--------	-------------------------------------

Table 4

3.1.3.1 Header

3.1.3.2 Header UUID

Data type	string
Length	36 characters
Pattern	[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[1-5][0-9a-fA-F]{3}-[89abAB][0-9a-fA-F]{3}-[0-9a-fA-F]{12}
Example	58e0a7d7-eebc-41d8-9669-0800200c9a66 58E0A7D7-EEBC-41D8-9669-0800200C9A66

Table 5

3.1.3.3 Header SendDateTime

Data type	dateTime
Pattern	[0-9]{4}-[0-9]{2}-[0-9]{2}T[0-9]{2}:[0-9]{2}:[0-9]{2}[+-][0-9]{2}:[0-9]{2}
Example	2020-03-21T14:25:23+01:00

Table 6

3.1.3.4 PymtOrds

XML element representing a list of payment orders

3.1.3.5 PymtOrds PymtOrd

XML element representing a sing payment order.

3.1.3.6 PymtOrds PymtOrd PymtOrdNum

Payment order number composed of ordinal number and calendar year.

Data type	string
Length	30 characters
Pattern	[1-9]{1}[0-9]{0,14}\/[0-9]{4}
Example	1/2020

Table 7

3.1.3.7 PymtOrds PymtOrd PymtOrdDatTimSend

Date and time of sending an order.

Data type	dateTime
Pattern	[0-9]{4}-[0-9]{2}-[0-9]{2}T[0-9]{2}:[0-9]{2}:[0-9]{2}[+-][0-9]{2}:[0-9]{2}
Example	2020-03-21T14:25:23+01:00

Table 8

3.1.3.8 PymtOrds PymtOrd PayerNipt

NUIS of the payer.

Data type	string
Length	10 characters

Pattern	[A-Z]{1}[0-9]{8}[A-Z]{1}
Example	I12345678Q

Table 9

3.1.3.9 PymtOrds PymtOrd PayerName

Payer's full name.

Data type	string
Length	100 characters
Example	Name Surname

Table 10

3.1.3.10 PymtOrds PymtOrd PayerAddr

Payer's full address.

Data type	string
Length	200 characters
Example	Full address

Table 11

3.1.3.11 PymtOrds PymtOrd PayerBnkCode

Code of the payer's bank.

Data type	string
Length	30 characters
Example	ALLBPLPW

Table 12

3.1.3.12 PymtOrds PymtOrd PayerBnkName

Full name of the payer's bank.

Data type	string
Length	200 characters
Example	Bank full name

Table 13

3.1.3.13 PymtOrds PymtOrd StatusOrd

Status of the order.

Data type	string
Values	Enumeration, described in the table below.
Example	REGULAR

Table 14

Following table shows the list of allowed values inside of the StatusOrd attribute:

Value	Description
REGULAR	Order is regular.

URGENT	Order is urgent.
--------	------------------

Table 15

3.1.3.14 PymtOrds PymtOrd PymtOrdIs

XML element representing a list of payment order items.

3.1.3.15 PymtOrds PymtOrd PymtOrdIs PymtOrdI

XML element representing a single payment order item.

3.1.3.16 PymtOrds PymtOrd PymtOrdIs PymtOrdI EinvFic

Invoice FIC.

Data type	string
Length	36 characters
Pattern	[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[1-5][0-9a-fA-F]{3}-[89abAB][0-9a-fA-F]{3}-[0-9a-fA-F]{12}
Example	58e0a7d7-eebc-41d8-9669-0800200c9a66 58E0A7D7-EEBC-41D8-9669-0800200C9A66

Table 16

3.1.3.17 PymtOrds PymtOrd PymtOrdIs PymtOrdI EinDatTim

Date and time of the invoice.

Data type	dateTime
Pattern	[0-9]{4}-[0-9]{2}-[0-9]{2}T[0-9]{2}:[0-9]{2}:[0-9]{2}[+-][0-9]{2}:[0-9]{2}
Example	2020-03-21T14:25:23+01:00

Table 17

3.1.3.18 PymtOrds PymtOrd PymtOrdIs PymtOrdI EinNum

Number of the invoice.

Data type	string
Length	30 characters
Example	10

Table 18

3.1.3.19 PymtOrds PymtOrd PymtOrdIs PymtOrdI EinPymtRefNum

Invoice payment reference number.

Data type	string
Length	30 characters
Example	15

Table 19

3.1.3.20 PymtOrds PymtOrd PymtOrdIs PymtOrdI EinAmt

Amount of the invoice.

Data type	decimal
Length	20 characters

Pattern	<code>([1-9][0-9]* 0)\.[0-9]{2} 0"</code>
Example	10.50 -10.50

Table 20

3.1.3.21 PymtOrds PymtOrd PymtOrdIs PymtOrdI EinCur

Currency of the invoice payment.

Data type	string
Constraint	Enumeration, described in the table below.
Example	EUR

Table 21

Enumeration values for currencies are shown in table below. Full list of currencies can be found in chapter 4.

Value	Description
ALL	Albanian lek
EUR	Euro
GRD	Greek drachma
MKD	Macedonian denar
TRY	Turkish lira
BGN	Bulgarian lev
BAM	Bosnia and Herzegovina convertible mark
HRK	Croatian kuna
...	...

Table 22

3.1.3.22 PymtOrds PymtOrd PymtOrdIs PymtOrdI EinPymtDesc

Description of the invoice payment.

Data type	string
Length	1000 characters
Example	This is the invoice payment description.

Table 23

3.1.3.23 PymtOrds PymtOrd PymtOrdIs PymtOrdI PymtRecNipt

NUI5 of the payment recipient.

Data type	string
Length	10 characters
Pattern	<code>[A-Z]{1}[0-9]{8}[A-Z]{1}</code>
Example	I12345678Q

Table 24

3.1.3.24 PymtOrds PymtOrd PymtOrdIs PymtOrdI PymtRecName

Name of the payment recipient.

Data type	string
------------------	--------

Length	100 characters
Example	Recipient name

Table 25

3.1.3.25 PymtOrds PymtOrd PymtOrdIs PymtOrdI PymtRecipAddr

Address of the payment recipient.

Data type	string
Length	200 characters
Example	Recipient address

Table 26

3.1.3.26 PymtOrds PymtOrd PymtOrdIs PymtOrdI PymtRecipIBAN

IBAN of the payment recipient.

Data type	string
Length	28 characters
Pattern	AL[0-9]{10}[0-9A-Z]{16}
Example	AL35202111090000000001234567

Table 27

3.1.3.27 PymtOrds PymtOrd PymtOrdIs PymtOrdI PayerIBAN

IBAN of the payer.

Data type	string
Length	28 characters
Pattern	AL[0-9]{10}[0-9A-Z]{16}
Example	AL35202111090000000001234567

Table 28

3.1.3.28 PymtOrds PymtOrd PymtOrdIs PymtOrdI DatTimPymt

Date and time of the payment.

Data type	dateTime
Pattern	[0-9]{4}-[0-9]{2}-[0-9]{2}T[0-9]{2}:[0-9]{2}:[0-9]{2}[+-][0-9]{2}:[0-9]{2}
Example	2020-03-21T14:25:23+01:00

Table 29

3.1.3.29 PymtOrds PymtOrd PymtOrdIs PymtOrdI AmtToBePaid

Amount that needs to be paid.

Data type	decimal
Length	20 characters
Pattern	([1-9][0-9]*[0])\.[0-9]{2} 0"
Example	10.50 -10.50

Table 30

3.1.3.30 PymtOrds PymtOrd PymtOrdIs PymtOrdI CurToBePaid

Currency that will be used for paying the invoice.

Data type	string
Constraint	Enumeration, described in the table below.
Example	EUR

Table 31

Enumeration values for currencies are shown in table below. Full list of currencies can be found in chapter 4.

Value	Description
ALL	Albanian lek
EUR	Euro
GRD	Greek drachma
MKD	Macedonian denar
TRY	Turkish lira
BGN	Bulgarian lev
BAM	Bosnia and Herzegovina convertible mark
HRK	Croatian kuna
...	...

Table 32

3.1.3.31 Signature

XML element stores enveloped digital signature described in chapter 4.1.

3.1.4 PAYMENT ORDER XML RESPONSE

```
<?xml version="1.0" encoding="UTF-8"?>
<GetPaymentOrderResponse xmlns="https://Einvoice.tatime.gov.al/EinvoiceBankService/schema"
Id="Response" Version="1">
<Header UUID="1985dab2-b5c4-44bc-9aea-94656b423026" RequestUUID="1985dab2-b5c4-44bc-9aea-
94656b423026" SendDateTime="2020-03-21T14:25:23+01:00" />
<PymtOrds>
  <PymtOrd
    PymtOrdNum="1/2020"
    PymtOrdDatTimSend="2020-03-21T14:25:23+01:00"
    PayerNipt="I12345678Q"
    PayerName="Name surname"
    PayerAddr="Payer full address"
    PayerBnkCode="ALLBPLPW"
    PayerBnkName="Bank full name"
    StatusOrd="REGULAR">
      <PymtOrdIts>
        <PymtOrdIt
          EinFic="1985dab2-b5c4-44bc-9aea-94656b423026"
          EinDatTim="2020-03-21T14:25:23+01:00"
          EinNum="10"
          EinPymtRefNum="15"
          EinAmt="10.50"
          EinCur="EUR"
```

```

        EinPymtDesc="Desc"
        PymtRecNipt="I12345678Q"
        PymtRecName="Recipient name"
        PymtRecAddr="Recipient address"
        PymtRecIBAN="AL35202111090000000001234567"
        PayerIBAN="AL35202111090000000001234567"
        DatTimPymt="2020-03-21T14:25:23+01:00"
        AmtToBePaid="10.50"
        CurToBePaid="EUR">
    </PymtOrdIt>
</PymtOrdIts>
</PymtOrd>
</PymtOrds>
<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="#Response">
            <Transforms>
                <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature" />
                <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
            </Transforms>
            <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256" />
            <DigestValue>FLk4uFp8XclUNLCRPJbj15lQgGDiv+sYPOfWM7HLelM=</DigestValue>
        </Reference>
    </SignedInfo>

    <SignatureValue>mPX/qAi/hD/eL90skSBQmrSk+sztzWysWCqornF2CcPpFL1G0SbFPvoYcK1lj367COYczl/ISsTI
    WlFTpg1iOWKeUXSjKevzh8hUsp+AcQ1JUjIDbgOggHLkoQJZmzaPXmrNUcKzPnkaVeouxM7fj6z9
    XBJviQo45uhfL1idfU8LWcySSlsS85dLinXZ5DWb8jLU3YeoE5MgTdF7MIeh2FXa/Tbo3Kwmj9F
    z9fwl1QntWOJFQtXjp5Mj8AcorCG6hW5HqAvQ3vAK/g1yXcm0U2rH9orCxcg/BkVNVQHGcwhnxPL
    FVtB+XYSOxXlZYfFsWHP4y0cXrlePg5pVAwuZw==</SignatureValue>

    <KeyInfo>
        <X509Data>

<X509Certificate>MIIFRzCCBC+gAwIBAgIKQ3usFHZueA3xODANBgqhkiG9w0BAQsFADBLMQswCQYDVQQGEw
JBTDEN
MAsGA1UEChMETkFJUZEtMCsGA1UEAxMkTkFJUyBDdGFzcyAzIENlcnRpZmljYXRpb24gQXV0aG9y
aXR5MB4XDTEwMDIxMjA4Mjc1NFoXDTEwMDIxMTA4Mjc1NFowazELMAkGA1UEBhMCUwxDzANBgNV
BAcTBIRpcmFuZTEEMMAoGA1UEChMDR0RUMQ0wCwYDVQQMEwREZW1vMRkwFwYDVQQDExBHRFQgZUZp
c2thbG16aW1pMRMwEQYDVQQEEwpjMDAwMDAwMDBJMIIIBjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIB
CgKCAQEAA9MenARDp1jxNbJldvG/VZSMfYNe5fjZq6qZoswFIRAvbi2fUfUonY7xZvJvH81/eWHqT
/YeF0fgSLampo3tJePADkhW94WPQN5t9CvKNSrd3vYW/+xDYlOblyFTfkp1rSLuIsbMknznNfnV
lLqjsuH/VceFNvKF+NrFaxhmks8w2uBQiIeVLRUhiutu6yLoc76CukACiWK6Et53xiKL/X8pAsR
5M8oeCitUsL8+k1XYiHzOVidX0waNohFH9T916UU3shhYRKlCX/eyC6EvUB7kJyE4NuQmx4GidY
hPYwdg+XcW3MatX3+B7wJpml2aknDZA2uLjSiH3xlEX+qQIDAQABo4ICczCCAgcwZgYIKwYBBQUH
AQEEWjBYMCQGCCsGAQUFBzABhhhodHRwOi8vb2Nzc5ha3NoaS5nb3YuYWwwMAYIKwYBBQUHMAKG
JGh0dHA6Ly9jZXJ0cy5ha3NoaS5nb3YuYWwwY2xhc3MzMmNydDAOBgNVHQ8BAf8EBAMCBPAwHwYD
VR0jBBgwFoAUhyao+9srUZs50JjW9MYzVkdC2AUwHQYDVRO0BBYEFDOFw9CjLlJd45hXejB9DKB
YkCGMEsGA1UdIAREMEIwQAYMKwYBBAGCsWwKAQEDMDAwLgYIKwYBBQUHAgEWImh0dHA6Ly93d3cu
YWtzaGkuZ292LmFsL3JlcG9zaXRvcnkkgacGA1UdHwSBnzCBnDcBmaCBk4YiaHR0cDovL2Ny
bC5ha3NoaS5nb3YuYWwwY2xhc3MzMmNybIZtbGRhcDovL2xkYXAuYWtzaGkuZ292LmFsL0NOPU5B
SVMgQ2xhc3MgMyBDZXJ0aWZpY2F0aW9uIEF1dGhvcml0eSxPPU5BSVMsQz1BTD9jZXJ0aWZpY2F0
ZVJldm9jYXRpb25MaXN0O2JpbmFyeTA3BgNVHREEMDAuoB0GCisGAQQBgjcUAgoDwwNaW5mb0Bz
Z24udGVzdIEaW5mb0BzZ24udGVzdDAdBgNVHSUEFjAUBgggrBgEFBQcDAgYIKwYBBQUHAWQwDQYJ
KoZlHvcNAQELBQADggEBAH6lp0sph1jPCof00LwOskr9jmOLKZ+ufBvgOIffDxiT93pF58hesmnN
qcReSkQNHsj6viNEVISLJR3xk40BOQij1g8/RL6gxQPr00TnXl76OJR8KGA7x0QalYEgPataVRi
rBs45TEICwbJWLXiq4GTgaxyRgxtzI2FY4C0lTk1pu/7m4ipEY7v8cC6oOCX9xH4GoM5Zl05n0kq

```

```
+c0coyopjzY9Gjv9aRo/+CbfMsFWrZGsis/WCwEfjzglhcvYCi2qHKav7Pknrc08JURxK1hgqVpX
Px3v1bDy56SkTizpvPWUVM6oXcZTaqb6RD+GgzHcFfWiaTGDHt6qiDOcjSY=</X509Certificate>
  </X509Data>
  </KeyInfo>
</Signature>
</GetPaymentOrderResponse>
```

3.2 PAYMENT NOTIFICATIONS

3.2.1 PAYMENT NOTIFICATION REQUEST DATA MESSAGE

Name		Field type	Occurrence [Min, Max]	Description
PaymentNotificationRequest		Element	[1, 1]	Root XML element representing request for payment order.
	Id	Attribute	[1, 1]	Attribute used for signature creation and verification. Fixed value "Request".
	Version	Attribute	[1,1]	Attribute used to specify compliance with XSD schema. For this version fixed value is "1".
	Header	Element	[1, 1]	XML element representing header...
	UUID	Attribute	[1, 1]	ID of the message.
	SendDateTime	Attribute	[1, 1]	Date and time of sending the message to the Tax administration.
	PymtNots	Element	[1, 1]	XML element representing a list of notifications.
	PymtNot	Element	[1, 100]	XML element representing a single notification.
	RefCode	Attribute	[1, 1]	Notification reference code.
	DatTimSend	Attribute	[1, 1]	Date and time of sending.
	BankNipt	Attribute	[1, 1]	Bank NIPT.
	PymtOrdNum	Attribute	[0,1]	Payment order number.
	PayerNipt	Attribute	[1, 1]	Payer NIPT.
	PymtNotIts	Element	[1, 1]	XML element representing a list of notification items.
	PymtNotIt	Element	[1, 100]	XML element representing a single notification item.
	EinFic	Attribute	[1, 1]	Invoice FIC.
	PymtDatTim	Attribute	[1, 1]	Date and time of payment.
	PaidAmt	Attribute	[1, 1]	Amount of payment.
	PaidCur	Attribute	[1, 1]	Currency of paying.
	PymtType	Attribute	[1, 1]	Type of payment.
	PymtStatus	Attribute	[1, 1]	Status of payment.
	Signature	Element	[1, 1]	XML element with digital signature.

Table 33

3.2.1.1 Header

Element representing the header of the request data message.

3.2.1.2 Header UUID

Element generated by the service. It uniquely identifies the request message. UUID should be constructed according to the RFC4122 version 4.

Data type	string
Length	36 characters
Pattern	[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[1-5][0-9a-fA-F]{3}-[89abAB][0-9a-fA-F]{3}-[0-9a-fA-F]{12}
Example	58e0a7d7-eebc-41d8-9669-0800200c9a66 58E0A7D7-EEBC-41D8-9669-0800200C9A66

Table 34

3.2.1.3 Header SendDateTime

Element represents date and time of sending the request message to the CIS. Date and time should be in ISO 8601 format.

Data type	dateTime
Pattern	[0-9]{4}-[0-9]{2}-[0-9]{2}T[0-9]{2}:[0-9]{2}:[0-9]{2}[+-][0-9]{2}:[0-9]{2}
Example	2020-03-21T14:25:23+01:00

Table 35

3.2.1.4 PymtNots

XML element representing a list of payment notifications.

3.2.1.5 PymtNots PymtNot

XML element representing a single payment notification.

3.2.1.6 PymtNots PymtNot RefCode

Reference code of the payment note.

Data type	string
Length	30 characters
Example	ALLBPLPW

Table 36

3.2.1.7 PymtNots PymtNot DatTimSend

Date and time of sending the payment note.

Data type	dateTime
Pattern	[0-9]{4}-[0-9]{2}-[0-9]{2}T[0-9]{2}:[0-9]{2}:[0-9]{2}[+-][0-9]{2}:[0-9]{2}
Example	2020-03-21T14:25:23+01:00

Table 37

3.2.1.8 PymtNots PymtNot BankNipt

Data type	string
Length	10 characters
Pattern	[A-Z]{1}[0-9]{8}[A-Z]{1}
Example	I12345678Q

Table 38

3.2.1.9 PymtNots PymtNot PymtOrdNum

Data type	string
Length	30 characters
Pattern	[1-9]{1}[0-9]{0,14}\/[0-9]{4}
Example	1/2020

Table 39

3.2.1.10 PymtNots PymtNot PayerNipt

Data type	string
Length	10 characters
Pattern	[A-Z]{1}[0-9]{8}[A-Z]{1}
Example	I12345678Q

Table 40

3.2.1.11 PymtNots PymtNot PymtNotIts

XML element representing a list of payment notification items.

3.2.1.12 PymtNots PymtNot PymtNotIts PymtNotIt

XML element representing a single payment notification item.

3.2.1.1 PymtNots PymtNot PymtNotIts PymtNotIt EinFic

FIC of the invoice.

Data type	string
Length	36 characters
Pattern	[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[1-5][0-9a-fA-F]{3}-[89abAB][0-9a-fA-F]{3}-[0-9a-fA-F]{12}
Example	58e0a7d7-eebc-41d8-9669-0800200c9a66 58E0A7D7-EEBC-41D8-9669-0800200C9A66

Table 41

3.2.1.1 PymtNots PymtNot PymtNotIts PymtNotIt PymtDatTim

Date and time of payment.

Data type	dateTime
Pattern	[0-9]{4}-[0-9]{2}-[0-9]{2}T[0-9]{2}:[0-9]{2}:[0-9]{2}[+-][0-9]{2}:[0-9]{2}
Example	2020-03-21T14:25:23+01:00

Table 42

3.2.1.2 PymtNots PymtNot PymtNotIts PymtNotIt PaidAmt

Data type	decimal
Length	20 characters
Pattern	([1-9][0-9]*[0])\.[0-9]{2} 0"
Example	10.50 -10.50

Table 43

3.2.1.3 PymtNots PymtNot PymtNotIts PymtNotIt PaidCur

Data type	string
Constraint	Enumeration, described in the table below.
Example	EUR

Table 44

Enumeration values for currencies are shown in table below. Full list of currencies can be found in chapter 4.

Value	Description
ALL	Albanian lek
EUR	Euro
GRD	Greek drachma
MKD	Macedonian denar
TRY	Turkish lira
BGN	Bulgarian lev
BAM	Bosnia and Herzegovina convertible mark
HRK	Croatian kuna
...	...

Table 45

3.2.1.4 PymtNots PymtNot PymtNotIts PymtNotIt PymtType

Type of the payment.

Data type	string
Constraint	Enumeration, described in the table below.
Example	CASH

Table 46

Enumeration values for payment types are shown in table below.

Value	Description
CASH	Payment in cash.
NON_CASH	Payment in all but cash.

Table 47

3.2.1.5 PymtNots PymtNot PymtNotIts PymtNotIt PymtStatus

Status of the payment.

Data type	string
Constraint	Enumeration, described in the table below.
Example	PAYMENT

Table 48

Enumeration values for payment types are shown in table below.

Value	Description
PAYMENT	Payment is going to be payment.
CORRECTION	Payment is corrected.
CANCELLATION	Payment is cancelled.
ACCEPTED	Payment is accepted.
REFUSED	Payment is refused.

Table 49

3.2.1.6 Signature

XML element stores enveloped digital signature described in chapter 4.1.

3.2.2 PAYMENT NOTIFICATION XML REQUEST

```
<?xml version="1.0" encoding="UTF-8"?>
<SetPaymentNotificationRequest xmlns="https://Einvoice.tatime.gov.al/EinvoiceBankService/schema"
Id="Request" Version="1">
<Header UUID="1985dab2-b5c4-44bc-9aea-94656b423026" SendDateTime="2020-03-21T14:25:23+01:00" />
<PymtNots>
  <PymtNot
    RefCode="Bank code xx"
    DatTimSend="2020-03-21T14:25:23+01:00"
    BankNipt="I12345678Q"
    PymtOrdNum="1/2020"
    PayerNipt="I12345678Q" >
      <PymtNotIts>
        <PymtNotIt
          EinFic="1985dab2-b5c4-44bc-9aea-94656b423026"
          PymtDatTim="2020-03-21T14:25:23+01:00"
          PaidAmt="10.50"
          PaidCur="EUR"
          PymtType="CASH"
          PymtStatus="PAYMENT">
            </PymtNotIt>
          </PymtNotIts>
        </PymtNot>
      </PymtNots>
    <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="#Request">
          <Transforms>
            <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature"
              />
            <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
          </Transforms>
          <DigestMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#sha256" />
          <DigestValue>MXYIWA4aM6uHd7UNT0AYSdiP9bN95Tk/7WhZVSFrDdY=</DigestValue>
        </Reference>
      </SignedInfo>
      <SignatureValue>LkYz3tG8UJZgT858yixDuV/fEewCrk6PelXGD1Fkzs43CZy3MyDoghiKNfKba4dGn7/ykj
4xaYkUE4s+KfCUUUvtSD2pEAF4pQwure6NZPX5LpXo6XVFvNEz/8wBTy/vkk1TVOVstY8U3eTqssGcTgDPL+uPo
kXDuMkX6u4MeyishkSf8gOVxr2b4EtVwI4Hz7a+3DWG/JOtGyLpJN9tdc1CiwX8HTNDlsyIUnd/uiibiLkcyct61zSQ+j
awHoYrM5RBI7zY4eV10gQ4ueBXqZS1IauLF/IjZqqvp2v7Va/VmVjToU93p0BEhguzOHfJlgBU4OeaFhiyAtXMC5I
wsxOQ==</SignatureValue>
      <KeyInfo>
        <X509Data>
          <X509Certificate>MIIFXTCCBEWgAwIBAgIKQ0H0EToY7QmR/zANBgkqhkiG9w0BAQsFADBLMQswCQYDVQQG
EwJBTDENMAsGA1UEChMETkFJUZEtMCsGA1UEAxMkTkFJUYyBDbGFzcyAzIENlcuRpbZmljYXRpb24gQXV0aG9yaX
R5MB4XDTE5MTAxMDA3NDMzMVoXDTIwMTAwOTA3NDMzMVowb3ZELMAkGA1UEBhMCQWwxDjAMBGNVBAc
TBUTvcmNIMRYwFAYDVQQKEw1EQULTWBSBhbmQgRVRNMSMwIQYDVQQDEExpEQULTWBSBhbmQgRVRNIEZpc2t
hbGl6aW1pMTETMBEGA1UEBBMKTDA0ODIwMDAxTjCCASlwdQYJYKozIhvcNAQEBBQADggEPADCCAQoCggEBA
LbmlgXO51GFkGxBrm0FWsetkuP6z9OIEzste+zGzeqgKWmgG4KizbODv7Sk6bDS5D63aFkGADJWE30018osDqee
95GW2/ERT9Nwg2lIk4dHdoCyxOj2efq7eKhNvvA5R3wQxu9CINIq1aaKCKClissOcamaUPeu9nVAU48zH5DEkMF
NBIL1VXcVjw+MaSP5UzXBTAsyaOk47n97SebLdMrCqnE8x9ML0Y6zKK5Y+llhpH44utCng108uPb+fa1vCEUDKb
```

```

UcCWPs1B9dz7gZs1pYPbNKrcaBhwd6+9Hgqf17UUAoUW7eEm2ru8eUTmYssicrRDk/pfRoLplzGkGevIECAwEAA
aOCAh0wggIZMGYGCCsGAQUFBwEBBFowWDAkBggrBgEFBQcwAYYYaHR0cDovL29jc3AuYWtzaGkuZ292LmFs
MDAGCCsGAQUFBzACHiRodHRwOi8vY2VydHMuYWtzaGkuZ292LmFsL2NsYXNzMy5jcnQwDgYDVROPAQH/BAQ
DAgTwMB8GA1UdIwQYMBaAFIcmqPvbK1GbOdCY1vTGM1ZHXNgFMB0GA1UdDgQWBBTunUEmzf/HFOIgeIyFfj
RxQ6ESZTBLBgNVHSAERDBCMEEAGDCsGAQQBgrFscGEBAzAwMC4GCCsGAQUFBwIBFiJodHRwOi8vd3d3LmFrc
2hpLmdvdi5hbC9yZXBvc2l0b3J5MIGnBgNVHR8EgZ8wgZwwgZm9zZG90cDovL29jc3AuYWtzaGkuZ292LmFs
2LmFsL2NsYXNzMy5jcmYGBWxkYXA6Ly9sZGFwLmFrc2hpLmdvdi5hbC9DTj10QUITIENsYXNzIDMgQ2VydGlma
WNhdGlviBBdXRob3JpdHksTz10QUITLEM9QUw/Y2VydGlmaWNhdGVScXZvY2F0aW9uTGldZDdiaW5hcnkwSQ
YDVRORBElwQKAmBgorBgEEAYI3FAIDoBgMFmFkaW5lcGV0cml0aUB5YWhvby5jb22BFmFkaW5lcGV0cml0aU
B5YWhvby5jb20wHQYDVROIBBYwFAYIKwYBBQUHAIwGCCsGAQUFBwMEMA0GCSqGSIb3DQEBEwUAA4IBAQB
MrzIClFZRZE39ADKyoXFcdjvaOIXj1k0NhPbZMCqSnTVMgPiI53HvLZ54A/RExf1kiI+oS75cef+1K8vGLp916Abdh
DfAykTfsNtzDSWAupi6A23XzWzyLrmPhlobQrCEoW5gj4p2J8fo7+BRmgBGEBW7CKBayGdZZ5Xna6ZM68dB0i4c
BgG0GJkod4Dk+XQs2yAkiVXEw54RAuwUUYteEwzK7si3dLcCBAlWhwHLWvnbduzaLNCvnV9hYIDPV2kuPlqzL
slJKmhXAC3K7k9wDeg1j6wDTslj14MZUubgXqDqZGbNWSh5sVMBaXNUomzI9YgB5FUndXwx+7sB</X509Cert
ificate>
    </X509Data>
  </KeyInfo>
</Signature>
</SetPaymentNotificationRequest>

```

3.2.3 PAYMENT NOTIFICATION RESPONSE DATA MESSAGE

Name	Field type	Occurrence [Min, Max]	Description
PaymentNotificationResponse	Element	[1, 1]	Root XML element representing request for payment order.
Id	Attribute	[1, 1]	Attribute used for signature creation and verification. Fixed value "Request".
Version	Attribute	[1,1]	Attribute used to specify compliance with XSD schema. For this version fixed value is "1".
Header	Element	[1, 1]	XML element representing header...
UUID	Attribute	[1, 1]	ID of the message.
SendDateTime	Attribute	[1, 1]	Date and time of sending the message to the Tax administration.
Message	Attribute	[1,1]	Message on notification success.
Code	Attribute	[1,1]	Code representing notification status.
Signature	Element	[1, 1]	XML element with digital signature.

Table 50

3.2.3.1 Header

Element representing the header of the request data message.

3.2.3.2 Header UUID

Element generated by the service. It uniquely identifies the request message. UUID should be constructed according to the RFC4122 version 4.

Data type	string
Length	36 characters
Pattern	[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[1-5][0-9a-fA-F]{3}-[89abAB][0-9a-fA-F]{3}-[0-9a-fA-F]{12}
Example	58e0a7d7-eebc-41d8-9669-0800200c9a66 58E0A7D7-EEBC-41D8-9669-0800200C9A66

Table 51

3.2.3.3 Header SendDateTime

Element represents date and time of sending the request message to the CIS. Date and time should be in ISO 8601 format.

Data type	dateTime
Pattern	[0-9]{4}-[0-9]{2}-[0-9]{2}T[0-9]{2}:[0-9]{2}:[0-9]{2}[+-][0-9]{2}:[0-9]{2}
Example	2020-03-21T14:25:23+01:00

Table 52

3.2.3.4 Message

Message that is shown along with notification.

Data type	string
Length	30 characters
Example	Success

Table 53

3.2.3.5 Code

Code that goes with message.

Data type	string
Constraint	Enumeration, described in the table below.
Example	ACCEPTED

Table 54

Enumeration values for message code are shown in table below.

Value	Description
ACCEPTED	Payment is accepted.
REFUSED	Payment is refused.
VALIDATION_FAILED	Payment validation failed.
INTERNAL_ERROR	Internal error occurred.

Table 55

3.2.3.6 Signature

XML element stores enveloped digital signature described in chapter 4.1.

3.2.4 PAYMENT NOTIFICATION XML RESPONSE

```
<?xml version="1.0" encoding="UTF-8"?>
<SetPaymentNotificationResponse xmlns="https://Einvoice.tatime.gov.al/EinvoiceBankService/schema"
Id="Response" Version="1">
<Header UUID="1985dab2-b5c4-44bc-9aea-94656b423026" RequestUUID="1985dab2-b5c4-44bc-9aea-
94656b423026" SendDateTime="2020-03-21T14:25:23+01:00" />
<Message>Sucess</Message>
```

```

<Code>ACCEPTED</Code>
<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="#Response">
      <Transforms>
        <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature" />
        <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
      </Transforms>
      <DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256" />
      <DigestValue>FLk4uFp8XcIUNLCRPJbj15lQgGDiv+sYPOfWM7HLeIM=</DigestValue>
    </Reference>
  </SignedInfo>

  <SignatureValue>mPX/qAi/hD/eL90skSBQmrSk+sztzWysWCqornF2CcPpFL1G0SbFPvoYcK1Ij367COYczl/ISsTI
  WlFTpg1iOWKeUXsjKevzH8hUsp+AcQ1JUjIDbgOggHLkoQJZmzaPXmrNUcKzPnkaVeouxM7fj6z9
  XBJvIQo45uhfLL1idfU8LWcySSlsS85dLinXZ5DWb8jLU3YeoE5MgTdF7Mleh2FXa/Tbo3Kwmj9F
  z9fwI1QntWOJFQtJxp5Mj8AcorCG6hW5HqAvQ3vAK/g1yXcm0U2rH9orCxcg/BkVNVQHGCwhnxPL
  FVtB+XYSOxXlZYfFsWHP4y0cXrlePg5pVAwuZw==</SignatureValue>

  <KeyInfo>
    <X509Data>

    <X509Certificate>MIIFRzCCBC+gAwIBAgIKQ3usFHZueA3xODANBgkqhkiG9w0BAQsFAADBLMQswCQYDVQQGEw
    JBTDEN
    MAsGA1UEChMETkFJUZEtMCsGA1UEAxMkTkFJUyBDbGFzcyAzIENlcnRpZmljYXRpb24gQXV0aG9y
    aXR5MB4XDTEwMDIxMjA4Mjc1NFoXDTEwMDIxMTA4Mjc1NFowazELMAkGA1UEBhMCQUwxdzANBgNV
    BAcTBIRpcmFuZTEEMMAoGA1UEChMDR0RUMQ0wCwYDVQQMEwREZW1vMRkwFwYDVQQDEExBHRFQgZUZp
    c2thbGl6aW1pMRMwEQYDVQEEwPjMDAwMDAwMDBJMIIIBjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIB
    CgKCAQEA9MenARDp1jxNbJldvG/VZSMfYNe5fjZq6qZoswFIRAvbi2fUfUonY7xZvJvH81/eWHqT
    /YeF0fgSLampo3tJePADkhW94WPQN5t9CvKNSrd3vYW/+xDYlOblyFTfkp1rSLuIsbMknznNfNV
    lLqjsuH/VceFNvKF+NrFaxhmks8w2uBQiLeVLRUhiutu6yLoc76CukACiWK6Et53xiKL/X8pAsR
    5M8oeCitUsL8+k1XYiHz0VidX0waNohFH9T916UU3shhYRKlCX/eyC6cEvUB7kJyE4NuQmx4GidY
    hPYwdg+XcW3MatX3+B7wjpmI2aknDZA2uLJsiH3xlEX+qQIDAQABo4ICCzCCAgcwZgYIKwYBBQUH
    AQEEWjBYMCGGCCsGAQUFBzABhhodHRwOi8vb2Nzc5ha3NoaS5nb3YuYWwwMAYIKwYBBQUHMAKG
    JGh0dHA6Ly9jZXJ0cy5ha3NoaS5nb3YuYWwwY2xhc3MzMmNydDA0BgNVHQ8BAf8EBAMCBPAwHwYD
    VR0jBBGwFoAUhyao+9srUZs50JjW9MYzVkdC2AUwHQYDVR0OBBYEFDOFw9CjLlJd45hXejB9DKB
    YkCGMEsGA1UdIAREMEIwQAYMKwYBBAGCsWwKAQEDMDAwLgYIKwYBBQUHAgEWIImh0dHA6Ly93d3cu
    YWtzaGkuZ292LmFsL3JlcG9zaXRvcnkkgacGA1UdHwSBnzcBnDCBmaCBk4YiaHR0cDovL2Ny
    bC5ha3NoaS5nb3YuYWwwY2xhc3MzMmNyblZtbGRhcDovL2xkYXAuYWtzaGkuZ292LmFsL0NOPU5B
    SVMgQ2xhc3MgMyBDZXJ0aWZpY2F0aW9uIEF1dGhvcml0eSxPPU5BSVMsQz1BTD9jZXJ0aWZpY2F0
    ZVJldm9jYXRpb25MaXN0O2JpbmFyeTA3BgNVHREEMDAuoB0GCisGAQQBgjcUAgoDwwNaW5mb0Bz
    Z24udGVzdIEaW5mb0BzZ24udGVzdDAdBgNVHSUEFjAUBgggrBgEFBQcDQAgYIKwYBBQUHAgwQwDQYJ
    KoZlhcNAQELBQADggEBAH6lp0sph1jPCof0OLwOskr9jmOLKZ+ufBvgOIffDxiT93pF58hesmnN
    qcReSkQNHsju6viNEVISLJR3xk4OBOQij1g8/RI6gxQPr00TnXl76OJR8KGA7xOQalYEgPataVRi
    rBs45TEICwbJWLXiq4GTgaxyRgxtzI2FY4C0lTk1pu/7m4ipEY7v8cC6oOCX9xH4GoM5Zl05n0kq
    +c0coyopjzY9Gjv9aRo/+CbfMsFWrZGsis/WCwEfjzghcvYCi2qHKav7Pknrc08JURxK1hgqVpX
    Px3v1bDy56SkTizpvPWUVM6oXcZTaqb6RD+GgzHcFfWiaTGDHt6qiDOcjSY=</X509Certificate>
    </X509Data>
  </KeyInfo>
</Signature>
</SetPaymentNotificationResponse>

```

4. Security

Following chapter shows calculated digital signature and its MD5 digest value (only examples are shown).

4.1 CALCULATED DIGITAL SIGNATURE

The signature value shown below is hashed with SHA256 algorithm and then signed with RSA algorithm and issuer's private key.

- PEM encoded private key:

```
-----BEGIN RSA PRIVATE KEY-----
MIIFRzCCBC+gAwIBAgIKQ3usFHZueA3xODANBgkqhkiG9w0BAQsFADBLMQswCQYDVQQGEwJBTDEN
MAsGA1UEChMETkFJUzEtMCsGA1UEAxMkTkFJUyBDbGFzcyAzIENlcnRpZm1jYXRpb24gQXV0aG9y
aXR5MB4XDTIwMDIxMjc1NFoXDTIwMDIxMTA4Mjc1NFowazELMAkGA1UEBhMCUWxDZANBgNV
BACeTB1RpcmFuZTEMMMAoGA1UEChMDR0RUMQ0wCwYDVQQMEwREZW1vMRkwFwYDVQQDExBHRFQgZUZp
c2thbG16aW1pMRMwEQYDVQQEEwpmJMDAwMDAwMDBJMIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIB
CgKCAQEAA9MenARDp1jxNbJldvG/VZSMfYNe5fjZq6qZoswFlRAvbi2fUfUonY7xZvJvH81/eWHqT
/YeF0fgSLampo3tJePADkhW94WPQN5t9CvKNSsrd3vYW/+xDYl0bIyFTfkp1rSLuIsbMknznNfNV
lLqjsuH/VceFNvKF+NrFaxhmkcs8w2uBQiIeVLRUhiutu6yLoc76CukACiWK6Et53xiKL/X8pAsR
5M8oeCitUsL8+k1XYiHzOvidX0waNohFH9T916UU3shhYRK1CX/eyC6cEvUB7kJyE4NuQmx4GidY
hPYwdg+XcW3MAtX3+B7wJpmI2aknDZA2uLJSiH3x1EX+qQIDAQABo4ICCzCCAgcwZgYIKwYBBQUH
AQEEWjBYMCQGCGCsGAQUFBzABhhhodHRwOi8vb2Nzc5ha3NoaS5nb3YuYWwwMAYIKwYBBQUHMAKG
JGh0dHA6Ly9jZXJ0cy5ha3NoaS5nb3YuYWwwY2xhc3MzMmNyYDA0BGNVHQ8BAf8EBAMCBPAwHwYD
VR0jBBgwFoAUhyao+9srUZs50JjW9MYzVkdC2AUwHQYDVR0OBBYEFDOFw9CjL1JjD45hXeJB9DKB
YkCGMESGA1UdIAREMEIwQAYMKwYBBAGCSwwKAQEDMDAwLgYIKwYBBQUHAgEwImh0dHA6Ly93d3cu
YWtzaGkuZ292LmFsL3JlcG9zaXRvcnkwaGacGA1UdHwSBnzCBnDCBmaCB1qCBk4YiaHR0cDovL2Ny
bC5ha3NoaS5nb3YuYWwwY2xhc3MzMmNyYbIZtbGRhcDovL2xkYXAuYWtzaGkuZ292LmFsL0NOPU5B
SVMgQ2xhc3MgMyBDZXJ0awZpY2F0aw9uIEF1dGhvcml0eSxPPU5BSVMsQz1BTD9jZXJ0awZpY2F0
ZVJldm9jYXRpb25MaXN002JpbmFyeTA3BgNVHREEMDAuoB0GCisGAQQBgjcUAgoGdWwNaW5mb0Bz
Z24udGVzdIENaw5mb0BzZ24udGVzdDAdBgNVHSUEFjAUBggrBgEFBQcDAgYIKwYBBQUHAWQwDQYJ
KoZIHcNAQELBQADggEBAH6lp0sph1jPCoF00LwOskr9jmOLKZ+ufBvg0IFFDxiT93pF58hesmnN
qcReSkQNHSju6viNEV1SLJR3xk40B0Q1j1g8/R16gxQPr00TnX1760JR8KGA7x0Qa1YEGPataVRi
rBs45TEICwbJWLXi4GTgaxyRgxtzI2FY4C01Tk1pu/7m4ipEY7v8cC6oOCX9xH4GoM5Z105n0kq
+c0c0yopjzY9Gjv9aRo/+CbFmsFwrZGsis/WCwEfjzjIhcvYC12qHKav7Pknrc08JURxK1hgqVpX
Px3v1bDy56SkTizpvPWUVM6oXcZTaqb6RD+GgzHcFfWiaTGDHt6qiD0cjSY=-----END RSA
PRIVATE KEY-----
```

Resulting signature value is:

- mPX/qAi/hD/eL90skSBQmrSk+sztzWysWCqornF2CcPpFL1G0SbFPvoYcK1Ij367COYczI/ISsTI
WlFTpg1iOWKeUXsjKevzH8hUsp+AcQ1JUjIDbgOgqHLkoQJZmzaPXmrNUcKzPnkaVeouxM7fj6z9
XBJvIqo45uhfL1idfU8LWcySSlsS85dLinxZ5DWb8jLU3YeoE5MgTdF7Mleh2FXa/Tbo3Kwmj9F
z9fwI1QntWojFQtJxp5Mj8AcorCG6hW5HqAvQ3vAK/g1yXcm0U2rH9orCxcg/BkVNVQHGCwhnxPL
FvTB+XYSOXIZYffsWHP4y0cXrIePg5pVAwuZw==

4.2 CALCULATED DIGEST

After the signing, resulting value is hashed with a MD5 algorithm.

For example, for a signature value from previous chapter the MD5 digest value is:

- FLk4uFp8XclUNLCRPJbj15lQgGDiv+sYPOfWM7HLeIM=

5. Annex – XSD version 1

```
<?xml version="1.0" encoding="UTF-8"?>
<schema
  targetNamespace="https://Einvoice.tatime.gov.al/EinvoiceBankService/schema"
  xmlns:al="https://Einvoice.tatime.gov.al/EinvoiceBankService/schema"
  xmlns="http://www.w3.org/2001/XMLSchema"
  xmlns:ds="http://www.w3.org/2000/09/xmldsig#"
  xmlns:vc="http://www.w3.org/2007/XMLSchema-versioning"
  elementFormDefault="qualified"
  vc:minVersion="1.1">

  <import namespace="http://www.w3.org/2000/09/xmldsig#" schemaLocation="xmldsig-core-schema.xsd"/>

  <element name="GetPaymentOrderRequest">
    <annotation>
      <documentation>Root XML element representing get payment order request message. Banks call Einvoice for payment orders.</documentation>
    </annotation>
    <complexType>
      <all minOccurs="1" maxOccurs="1">
        <element name="Header" type="al:GetPaymentOrderRequestHeaderType" minOccurs="1" maxOccurs="1">
          <annotation>
            <documentation>XML element representing header containing data about the message (request) sent.</documentation>
          </annotation>
        </element>
        <element ref="ds:Signature" minOccurs="1" maxOccurs="1">
          <annotation>
            <documentation>XML element representing signature for request from banks.</documentation>
          </annotation>
        </element>
      </all>
      <attribute name="Id" type="string" use="required" fixed="Request">
        <annotation>
          <documentation>Attribute used for signature creation and verification.</documentation>
        </annotation>
      </attribute>
      <attribute name="Version" type="al:IntSType" use="required" fixed="1">
        <annotation>
          <documentation>Attribute used to specify compliance with XSD schema.</documentation>
        </annotation>
      </attribute>
    </complexType>
  </element>

  <element name="GetPaymentOrderResponse">
    <annotation>
      <documentation>Root XML element representing get payment order response message.</documentation>
    </annotation>
    <complexType>
      <all>
        <element name="Header" type="al:GetPaymentOrderResponseHeaderType" minOccurs="1" maxOccurs="1">
          <annotation>
            <documentation>XML element representing header containing data about the message (response) sent.</documentation>
          </annotation>
        </element>
        <element name="PymtOrds" type="al:PaymentOrdersType" minOccurs="1" maxOccurs="1">
          <annotation>
            <documentation>XML element representing payment orders.</documentation>
          </annotation>
        </element>
        <element ref="ds:Signature" minOccurs="1" maxOccurs="1"/>
      </all>
      <attribute name="Id" type="string" use="required" fixed="Response">
        <annotation>
          <documentation>Identification of the response, used to reference a signature.</documentation>
        </annotation>
      </attribute>
      <attribute name="Version" type="al:IntSType" use="required" fixed="1">
        <annotation>
          <documentation>Identification of the schema version.</documentation>
        </annotation>
      </attribute>
    </complexType>
  </element>

  <element name="SetPaymentNotificationRequest">
    <annotation>
      <documentation>Root XML element representing payment notification request message. Banks send notification to Einvoice.</documentation>
    </annotation>
    <complexType>
      <all minOccurs="1" maxOccurs="1">
        <element name="Header" type="al:SetPaymentNotificationRequestHeaderType" minOccurs="1" maxOccurs="1">
          <annotation>
            <documentation>XML element representing header containing data about the message (request) sent.</documentation>
          </annotation>
        </element>
        <element name="PymtNots" type="al:PaymentNotificationsType" minOccurs="1" maxOccurs="1">
          <annotation>
            <documentation>XML element representing payment notifications.</documentation>
          </annotation>
        </element>
        <element ref="ds:Signature" minOccurs="1" maxOccurs="1">
          <annotation>
            <documentation>XML element representing signature for request from banks.</documentation>
          </annotation>
        </element>
      </all>
      <attribute name="Id" type="string" use="required" fixed="Request">
        <annotation>
          <documentation>Attribute used for signature creation and verification.</documentation>
        </annotation>
      </attribute>
      <attribute name="Version" type="al:IntSType" use="required" fixed="1">
        <annotation>
          <documentation>Attribute used to specify compliance with XSD schema.</documentation>
        </annotation>
      </attribute>
    </complexType>
  </element>
```

```

        <annotation>
            <documentation>XML element representing signature for request from banks.</documentation>
        </annotation>
    </element>
</all>
<attribute name="Id" type="string" use="required" fixed="Request">
    <annotation>
        <documentation>Attribute used for signature creation and verification.</documentation>
    </annotation>
</attribute>
<attribute name="Version" type="al:IntSType" use="required" fixed="1">
    <annotation>
        <documentation>Attribute used to specify compliance with XSD schema.</documentation>
    </annotation>
</attribute>
</complexType>
</element>

<element name="SetPaymentNotificationResponse">
    <annotation>
        <documentation>Root XML element representing get payment notification response message.</documentation>
    </annotation>
    <complexType>
        <all>
            <element name="Header" type="al:SetPaymentNotificationResponseHeaderType" minOccurs="1" maxOccurs="1">
                <annotation>
                    <documentation>XML element representing header containing data about the message (response)
sent.</documentation>
                </annotation>
            </element>
            <element name="Message" type="al:String100SType" minOccurs="1" maxOccurs="1">
                <annotation>
                    <documentation>Response message.</documentation>
                </annotation>
            </element>
            <element name="Code" type="al:ResponseType" minOccurs="1" maxOccurs="1">
                <annotation>
                    <documentation>Response code.</documentation>
                </annotation>
            </element>
            <element ref="ds:Signature" minOccurs="1" maxOccurs="1"/>
        </all>
        <attribute name="Id" type="string" use="required" fixed="Response">
            <annotation>
                <documentation>Identification of the response, used to reference a signature.</documentation>
            </annotation>
        </attribute>
        <attribute name="Version" type="al:IntSType" use="required" fixed="1">
            <annotation>
                <documentation>Identification of the schema version.</documentation>
            </annotation>
        </attribute>
    </complexType>
</element>

    <complexType name="GetPaymentOrderRequestHeaderType">
        <attribute name="UUID" type="al:UUIDSType" use="required">
            <annotation>
                <documentation>UUID generated by banks for every request.</documentation>
            </annotation>
        </attribute>
        <attribute name="SendDateTime" type="al:UTCSType" use="required">
            <annotation>
                <documentation>Date and time of sending the request message.</documentation>
            </annotation>
        </attribute>
    </complexType>

    <complexType name="GetPaymentOrderResponseHeaderType">
        <attribute name="UUID" type="al:UUIDSType" use="required">
            <annotation>
                <documentation>Element generated by Einvoice for every message sent to banks. It uniquely identifies the message sent
to banks.</documentation>
            </annotation>
        </attribute>
        <attribute name="RequestUUID" type="al:UUIDSType" use="required">
            <annotation>
                <documentation>Element generated by banks in request. It uniquely identifies the request message for which response
message was sent.</documentation>
            </annotation>
        </attribute>
        <attribute name="SendDateTime" type="al:UTCSType" use="required">
            <annotation>
                <documentation>Element represents date and time of sending the response message. </documentation>
            </annotation>
        </attribute>
    </complexType>

    <complexType name="SetPaymentNotificationRequestHeaderType">
        <attribute name="UUID" type="al:UUIDSType" use="required">
            <annotation>
                <documentation>UUID generated by banks for every request.</documentation>
            </annotation>
        </attribute>
        <attribute name="SendDateTime" type="al:UTCSType" use="required">
            <annotation>
                <documentation>Date and time of sending the request message.</documentation>
            </annotation>
        </attribute>
    </complexType>

```

```

<complexType name="SetPaymentNotificationResponseHeaderType">
  <attribute name="UUID" type="al:UUIDSType" use="required">
    <annotation>
      <documentation>Element generated by Einvoice for every message sent to banks. It uniquely identifies the message sent to banks.</documentation>
    </annotation>
  </attribute>
  <attribute name="RequestUUID" type="al:UUIDSType" use="required">
    <annotation>
      <documentation>Element generated by banks in request. It uniquely identifies the request message for which response message was sent.</documentation>
    </annotation>
  </attribute>
  <attribute name="SendDateTime" type="al:UTCSType" use="required">
    <annotation>
      <documentation>Element represents date and time of sending the response message. </documentation>
    </annotation>
  </attribute>
</complexType>

<complexType name="PaymentOrderType">
  <all>
    <element name="PymtOrdIts" type="al:PaymentOrderItemsType" minOccurs="1" maxOccurs="1">
      <annotation>
        <documentation>Element representing a single payment order items.</documentation>
      </annotation>
    </element>
  </all>
  <attribute name="PymtOrdNum" type="al:PaymentOrderNumberType" use="required" >
    <annotation>
      <documentation>Payment order number composed of ordinal number and calendar year.</documentation>
    </annotation>
  </attribute>
  <attribute name="PymtOrdDatTimSend" type="al:UTCSType" use="required" >
    <annotation>
      <documentation>Date and time when payment order was sent to bank</documentation>
    </annotation>
  </attribute>
  <attribute name="PayerNipt" type="al:NUISType" use="required" >
    <annotation>
      <documentation>Payer NUIS</documentation>
    </annotation>
  </attribute>
  <attribute name="PayerName" type="al:String100SType" use="required" >
    <annotation>
      <documentation>Payer full name</documentation>
    </annotation>
  </attribute>
  <attribute name="PayerAddr" type="al:String100SType" use="optional" >
    <annotation>
      <documentation>Payer full address</documentation>
    </annotation>
  </attribute>
  <attribute name="PayerBnkCode" type="al:BICType" use="required" >
    <annotation>
      <documentation>Payer bank code</documentation>
    </annotation>
  </attribute>
  <attribute name="PayerBnkName" type="al:String100SType" use="required" >
    <annotation>
      <documentation>Payer bank full name</documentation>
    </annotation>
  </attribute>
  <attribute name="StatusOrd" type="al:StatusOfOrderType" use="optional">
    <annotation>
      <documentation>Status of order.</documentation>
    </annotation>
  </attribute>
</complexType>

  <complexType name="PaymentOrdersType">
    <sequence>
      <element name="PymtOrd" type="al:PaymentOrderType" minOccurs="1" maxOccurs="100">
        <annotation>
          <documentation>Element representing a single payment order.</documentation>
        </annotation>
      </element>
    </sequence>
  </complexType>

  <complexType name="PaymentOrderItemType">
    <simpleContent>
      <extension base="string">
        <attribute name="EinFic" type="al:UUIDSType" use="required" >
          <annotation>
            <documentation>Einvoice fic selected for payment.</documentation>
          </annotation>
        </attribute>
        <attribute name="EinDatTim" type="al:UTCSType" use="required" >
          <annotation>
            <documentation>Einvoice date time.</documentation>
          </annotation>
        </attribute>
        <attribute name="EinNum" type="al:String100SType" use="required" >
          <annotation>
            <documentation>Einvoice number.</documentation>
          </annotation>
        </attribute>
        <attribute name="EinPymtRefNum" type="al:String100SType" use="optional" >
          <annotation>

```

```

        <documentation>Invoice payment reference number.</documentation>
      </annotation>
    </attribute>
    <attribute name="EinAmt" type="al:DecimalSType" use="required" >
      <annotation>
        <documentation>Invoice amount.</documentation>
      </annotation>
    </attribute>
    <attribute name="EinCur" type="al:CurrencyCodeType" use="required" >
      <annotation>
        <documentation>Invoice currency code.</documentation>
      </annotation>
    </attribute>
    <attribute name="EinPymtDesc" type="al:String100SType" use="required" >
      <annotation>
        <documentation>Invoice payment description.</documentation>
      </annotation>
    </attribute>
    <attribute name="PymtRecNipt" type="al:NUISType" use="required" >
      <annotation>
        <documentation>Payment recipient NUIS.</documentation>
      </annotation>
    </attribute>
    <attribute name="PymtRecName" type="al:String100SType" use="required" >
      <annotation>
        <documentation>Payment recipient name and surname.</documentation>
      </annotation>
    </attribute>
    <attribute name="PymtRecAddr" type="al:String100SType" use="required" >
      <annotation>
        <documentation>Payment recipient address.</documentation>
      </annotation>
    </attribute>
    <attribute name="PymtRecIBAN" type="al:IBANType" use="required" >
      <annotation>
        <documentation>Payment recipient IBAN.</documentation>
      </annotation>
    </attribute>
    <attribute name="PayerIBAN" type="al:IBANType" use="required" >
      <annotation>
        <documentation>Payer IBAN</documentation>
      </annotation>
    </attribute>
    <attribute name="DatTimPymt" type="al:UTCSType" use="required" >
      <annotation>
        <documentation>Date and time of payment</documentation>
      </annotation>
    </attribute>
    <attribute name="AmtToBePaid" type="al:DecimalSType" use="required" >
      <annotation>
        <documentation>Amount to be paid for Invoice</documentation>
      </annotation>
    </attribute>
    <attribute name="CurToBePaid" type="al:CurrencyCodeType" use="required" >
      <annotation>
        <documentation>Currency code to be paid for Invoice</documentation>
      </annotation>
    </attribute>
  </extension>
</simpleContent>
</complexType>

<complexType name="PaymentOrderItemsType">
  <sequence>
    <element name="PymtOrdIt" type="al:PaymentOrderItemType" minOccurs="1" maxOccurs="100">
      <annotation>
        <documentation>Element representing a single payment order item.</documentation>
      </annotation>
    </element>
  </sequence>
</complexType>

<complexType name="PaymentNotificationType">
  <all>
    <element name="PymtNotIts" type="al:PaymentNotificationItemsType" minOccurs="1" maxOccurs="1">
      <annotation>
        <documentation>Element representing a single payment notification items.</documentation>
      </annotation>
    </element>
  </all>
  <attribute name="RefCode" type="al:String100SType" use="required" >
    <annotation>
      <documentation>Reference code from bank system.</documentation>
    </annotation>
  </attribute>
  <attribute name="DatTimSend" type="al:UTCSType" use="required" >
    <annotation>
      <documentation>Date and time when payment order was sent to bank</documentation>
    </annotation>
  </attribute>
  <attribute name="BankNipt" type="al:NUISType" use="required" >
    <annotation>
      <documentation>Bank NUIS</documentation>
    </annotation>
  </attribute>
  <attribute name="PymtOrdNum" type="al:PaymentOrderNumberType" use="optional" >
    <annotation>
      <documentation>Payment order number</documentation>
    </annotation>
  </attribute>
  <attribute name="PayerNipt" type="al:NUISType" use="required" >

```

```

        <annotation>
          <documentation>Payer NUIS</documentation>
        </annotation>
      </attribute>
    </complexType>

    <complexType name="PaymentNotificationsType">
      <sequence>
        <element name="PymtNot" type="al:PaymentNotificationType" minOccurs="1" maxOccurs="100">
          <annotation>
            <documentation>Element representing a single payment notification.</documentation>
          </annotation>
        </element>
      </sequence>
    </complexType>

    <complexType name="PaymentNotificationItemType">
      <simpleContent>
        <extension base="string">
          <attribute name="EinFic" type="al:UUIDSType" use="required" >
            <annotation>
              <documentation>Einvoice fic for payment.</documentation>
            </annotation>
          </attribute>
          <attribute name="PymtDatTim" type="al:UTCSType" use="required" >
            <annotation>
              <documentation>Payment date time.</documentation>
            </annotation>
          </attribute>
          <attribute name="PaidAmt" type="al:DecimalSType" use="required" >
            <annotation>
              <documentation>Paid amount.</documentation>
            </annotation>
          </attribute>
          <attribute name="PaidCur" type="al:CurrencyCodeType" use="required" >
            <annotation>
              <documentation>Paid currency.</documentation>
            </annotation>
          </attribute>
          <attribute name="PymtType" type="al:PaymentTypeType" use="required" >
            <annotation>
              <documentation>Payment type.</documentation>
            </annotation>
          </attribute>
          <attribute name="PymtStatus" type="al:PaymentStatusType" use="required" >
            <annotation>
              <documentation>Payment status.</documentation>
            </annotation>
          </attribute>
        </extension>
      </simpleContent>
    </complexType>

    <complexType name="PaymentNotificationItemsType">
      <sequence>
        <element name="PymtNotIt" type="al:PaymentNotificationItemType" minOccurs="1" maxOccurs="100">
          <annotation>
            <documentation>Element representing a single payment notification item.</documentation>
          </annotation>
        </element>
      </sequence>
    </complexType>

    <simpleType name="String100SType">
      <annotation>
        <documentation>String of up to 100 characters.</documentation>
      </annotation>
      <restriction base="string">
        <minLength value="1"/>
        <maxLength value="100"/>
      </restriction>
    </simpleType>

    <simpleType name="UUIDSType">
      <annotation>
        <documentation>UUID constructed according to the RFC4122
        (https://tools.ietf.org/html/rfc4122).</documentation>
      </annotation>
      <restriction base="string">
        <pattern value="[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[1-5][0-9a-fA-F]{3}-[89abAB][0-9a-fA-F]{3}-[0-9a-fA-
F]{12}"/>
      </restriction>
    </simpleType>

    <simpleType name="UTCSType">
      <annotation>
        <documentation>Date and time represented as UTC time with ISO 8601 format.</documentation>
      </annotation>
      <restriction base="dateTime">
        <pattern value="[0-9]{4}-[0-9]{2}-[0-9]{2}T[0-9]{2}:[0-9]{2}:[0-9]{2}[+-][0-9]{2}:[0-9]{2}"/>
      </restriction>
    </simpleType>

    <simpleType name="IntSType">
      <annotation>
        <documentation>Positive integer.</documentation>
      </annotation>
      <restriction base="int">
        <minExclusive value="0"/>
      </restriction>
    </simpleType>

```

```

</simpleType>

<simpleType name="DecimalSType">
  <annotation>
    <documentation>Decimal number with two numbers after decimal point.</documentation>
  </annotation>
  <restriction base="decimal">
    <pattern value="([1-9][0-9]*|0)\.[0-9]{2}|0"/>
  </restriction>
</simpleType>

<simpleType name="PaymentOrderNumberType">
  <annotation>
    <documentation>Payment order number composed of ordinal number and calendar year.</documentation>
  </annotation>
  <restriction base="string">
    <pattern value="[1-9]{1}[0-9]{0,14}\/[0-9]{4}" />
  </restriction>
</simpleType>

<simpleType name="NUISType">
  <annotation>
    <documentation>NUIS constructed in one letter - eight numbers - one letter pattern, unique.</documentation>
  </annotation>
  <restriction base="string">
    <pattern value="[a-zA-Z]{1}[0-9]{8}[a-zA-Z]{1}" />
  </restriction>
</simpleType>

<simpleType name="BICType">
  <annotation>
    <documentation>Business Identifier Code.</documentation>
  </annotation>
  <restriction base="string">
    <pattern value="([A-Z]{4})([A-Z]{2})([A-Z2-9][A-NP-Z0-9])([A-Z0-9]{3})?" />
  </restriction>
</simpleType>

<simpleType name="IBANType">
  <annotation>
    <documentation>IBAN Albania.</documentation>
  </annotation>
  <restriction base="string">
    <pattern value="AL[0-9]{10}[0-9A-Z]{16}" />
  </restriction>
</simpleType>

<simpleType name="StatusOfOrderType">
  <annotation>
    <documentation>Status of order types.</documentation>
  </annotation>
  <restriction base="string">
    <enumeration value="REGULAR">
      <annotation>
        <documentation>Regular type.</documentation>
      </annotation>
    </enumeration>
    <enumeration value="URGENT">
      <annotation>
        <documentation>Urgent type.</documentation>
      </annotation>
    </enumeration>
  </restriction>
</simpleType>

<simpleType name="CurrencyCodeType">
  <annotation>
    <documentation>Currency codes from ISO 4217 standard</documentation>
  </annotation>
  <restriction base="string">
    <enumeration value="AED"><annotation><documentation>United Arab Emirates
Dirham</documentation></annotation></enumeration>
    <enumeration value="AFN"><annotation><documentation>Afghanistan Afghani</documentation></annotation></enumeration>
    <enumeration value="AMD"><annotation><documentation>Armenia Dram</documentation></annotation></enumeration>
    <enumeration value="ANG"><annotation><documentation>Netherlands Antilles
Guilder</documentation></annotation></enumeration>
    <enumeration value="AOA"><annotation><documentation>Angola Kwanza</documentation></annotation></enumeration>
    <enumeration value="ARS"><annotation><documentation>Argentina Peso</documentation></annotation></enumeration>
    <enumeration value="AUD"><annotation><documentation>Australia Dollar</documentation></annotation></enumeration>
    <enumeration value="AWG"><annotation><documentation>Aruba Guilder</documentation></annotation></enumeration>
    <enumeration value="AZN"><annotation><documentation>Azerbaijan Manat</documentation></annotation></enumeration>
    <enumeration value="BAM"><annotation><documentation>Bosnia and Herzegovina Convertible
Mark</documentation></annotation></enumeration>
    <enumeration value="BBD"><annotation><documentation>Barbados Dollar</documentation></annotation></enumeration>
    <enumeration value="BDT"><annotation><documentation>Bangladesh Taka</documentation></annotation></enumeration>
    <enumeration value="BGN"><annotation><documentation>Bulgaria Lev</documentation></annotation></enumeration>
    <enumeration value="BHD"><annotation><documentation>Bahrain Dinar</documentation></annotation></enumeration>
    <enumeration value="BIF"><annotation><documentation>Burundi Franc</documentation></annotation></enumeration>
    <enumeration value="BMD"><annotation><documentation>Bermuda Dollar</documentation></annotation></enumeration>
    <enumeration value="BND"><annotation><documentation>Brunei Darussalam Dollar</documentation></annotation></enumeration>
    <enumeration value="BOB"><annotation><documentation>Bolivia Boliviano</documentation></annotation></enumeration>
    <enumeration value="BRL"><annotation><documentation>Brazil Real</documentation></annotation></enumeration>
    <enumeration value="BSD"><annotation><documentation>Bahamas Dollar</documentation></annotation></enumeration>
    <enumeration value="CDF"><annotation><documentation>Congo/Kinshasa Franc</documentation></annotation></enumeration>
    <enumeration value="BTN"><annotation><documentation>Bhutan Ngultrum</documentation></annotation></enumeration>
    <enumeration value="BWP"><annotation><documentation>Botswana Pula</documentation></annotation></enumeration>
    <enumeration value="BYN"><annotation><documentation>Belarus Ruble</documentation></annotation></enumeration>
    <enumeration value="BZD"><annotation><documentation>Belize Dollar</documentation></annotation></enumeration>
    <enumeration value="CAD"><annotation><documentation>Canada Dollar</documentation></annotation></enumeration>
    <enumeration value="CDF"><annotation><documentation>Congo/Kinshasa Franc</documentation></annotation></enumeration>
    <enumeration value="CHF"><annotation><documentation>Switzerland Franc</documentation></annotation></enumeration>
    <enumeration value="CLP"><annotation><documentation>Chile Peso</documentation></annotation></enumeration>
  </restriction>
</simpleType>

```

[illegible]

```

        <enumeration value="SPL"><annotation><documentation>Seborga Luigino</documentation></annotation></enumeration>
        <enumeration value="SRD"><annotation><documentation>Suriname Dollar</documentation></annotation></enumeration>
        <enumeration value="STN"><annotation><documentation>Sao Tome and Principe
Dobra</documentation></annotation></enumeration>
        <enumeration value="SVC"><annotation><documentation>El Salvador Colon</documentation></annotation></enumeration>
        <enumeration value="SYP"><annotation><documentation>Syria Pound</documentation></annotation></enumeration>
        <enumeration value="SZL"><annotation><documentation>Swatini Lilangeni</documentation></annotation></enumeration>
        <enumeration value="THB"><annotation><documentation>Thailand Baht</documentation></annotation></enumeration>
        <enumeration value="TJS"><annotation><documentation>Tajikistan Somoni</documentation></annotation></enumeration>
        <enumeration value="TMT"><annotation><documentation>Turkmenistan Manat</documentation></annotation></enumeration>
        <enumeration value="TND"><annotation><documentation>Tunisia Dinar</documentation></annotation></enumeration>
        <enumeration value="TOP"><annotation><documentation>Tonga Pa'anga</documentation></annotation></enumeration>
        <enumeration value="TRY"><annotation><documentation>Turkey Lira</documentation></annotation></enumeration>
        <enumeration value="TTD"><annotation><documentation>Trinidad and Tobago Dollar</documentation></annotation></enumeration>
        <enumeration value="TVD"><annotation><documentation>Tuvalu Dollar</documentation></annotation></enumeration>
        <enumeration value="TWN"><annotation><documentation>Taiwan New Dollar</documentation></annotation></enumeration>
        <enumeration value="TZS"><annotation><documentation>Tanzania Shilling</documentation></annotation></enumeration>
        <enumeration value="UAH"><annotation><documentation>Ukraine Hryvnia</documentation></annotation></enumeration>
        <enumeration value="UGX"><annotation><documentation>Uganda Shilling</documentation></annotation></enumeration>
        <enumeration value="USD"><annotation><documentation>United States Dollar</documentation></annotation></enumeration>
        <enumeration value="UYU"><annotation><documentation>Uruguay Peso</documentation></annotation></enumeration>
        <enumeration value="UZS"><annotation><documentation>Uzbekistan Som</documentation></annotation></enumeration>
        <enumeration value="VEF"><annotation><documentation>Venezuela Bolivar</documentation></annotation></enumeration>
        <enumeration value="VND"><annotation><documentation>Viet Nam Dong</documentation></annotation></enumeration>
        <enumeration value="VUV"><annotation><documentation>Vanuatu Vatu</documentation></annotation></enumeration>
        <enumeration value="WST"><annotation><documentation>Samoa Tala</documentation></annotation></enumeration>
        <enumeration value="XAF"><annotation><documentation>Communaute Financiere Africaine (BEAC) CFA Franc
BEAC</documentation></annotation></enumeration>
        <enumeration value="XCD"><annotation><documentation>East Caribbean Dollar</documentation></annotation></enumeration>
        <enumeration value="XDR"><annotation><documentation>International Monetary Fund (IMF) Special Drawing
Rights</documentation></annotation></enumeration>
        <enumeration value="XOF"><annotation><documentation>Communaute Financiere Africaine (BCEAO)
Franc</documentation></annotation></enumeration>
        <enumeration value="XPF"><annotation><documentation>Comptoirs Francais du Pacifique (CFP)
Franc</documentation></annotation></enumeration>
        <enumeration value="YER"><annotation><documentation>Yemen Rial</documentation></annotation></enumeration>
        <enumeration value="ZAR"><annotation><documentation>South Africa Rand</documentation></annotation></enumeration>
        <enumeration value="ZMW"><annotation><documentation>Zambia Kwacha</documentation></annotation></enumeration>
        <enumeration value="ZWD"><annotation><documentation>Zimbabwe Dollar</documentation></annotation></enumeration>
    </restriction>
</simpleType>

<simpleType name="PaymentTypeType">
    <annotation>
        <documentation>Payment types.</documentation>
    </annotation>
    <restriction base="string">
        <enumeration value="CASH">
            <annotation>
                <documentation>Cash type.</documentation>
            </annotation>
        </enumeration>
        <enumeration value="NON_CASH">
            <annotation>
                <documentation>Non cash type.</documentation>
            </annotation>
        </enumeration>
    </restriction>
</simpleType>

<simpleType name="PaymentStatusType">
    <annotation>
        <documentation>Payment types.</documentation>
    </annotation>
    <restriction base="string">
        <enumeration value="PAYMENT">
            <annotation>
                <documentation>Payment type.</documentation>
            </annotation>
        </enumeration>
        <enumeration value="CORRECTION">
            <annotation>
                <documentation>Correction type.</documentation>
            </annotation>
        </enumeration>
        <enumeration value="CANCELLATION">
            <annotation>
                <documentation>Cancellation type.</documentation>
            </annotation>
        </enumeration>
        <enumeration value="ACCEPTED">
            <annotation>
                <documentation>Accepted type.</documentation>
            </annotation>
        </enumeration>
        <enumeration value="REFUSED">
            <annotation>
                <documentation>Refused type.</documentation>
            </annotation>
        </enumeration>
    </restriction>
</simpleType>

    <simpleType name="ResponseCodeType">
        <annotation>
            <documentation>Response code types.</documentation>
        </annotation>
        <restriction base="string">
            <enumeration value="ACCEPTED">
                <annotation>
                    <documentation>Accepted type.</documentation>
                </annotation>
            </enumeration>
        </restriction>
    </simpleType>

```

```
        </annotation>
      </enumeration>
      <enumeration value="REFUSED">
        <annotation>
          <documentation>Refused type.</documentation>
        </annotation>
      </enumeration>
      <enumeration value="VALIDATION_FAILED">
        <annotation>
          <documentation>Validation failed type.</documentation>
        </annotation>
      </enumeration>
      <enumeration value="INTERNAL_ERROR">
        <annotation>
          <documentation>Internal error type.</documentation>
        </annotation>
      </enumeration>
    </restriction>
  </simpleType>
</schema>
```

6. Annex – WSDL version 1

```
<?xml version="1.0" encoding="UTF-8"?>
<wsdl:definitions
  name="EinvoiceBankService"
  targetNamespace="https://Einvoice.tatime.gov.al/EinvoiceBankService"
  xmlns:al="https://Einvoice.tatime.gov.al/EinvoiceBankService"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
  xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  xmlns:als="https://Einvoice.tatime.gov.al/EinvoiceBankService/schema"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">

  <wsdl:types>
    <xsd:schema>
      <xsd:import namespace="https://Einvoice.tatime.gov.al/EinvoiceBankService/schema"
schemaLocation="einvoice-bank-service.xsd"/>
    </xsd:schema>
  </wsdl:types>

  <wsdl:message name="GetPaymentOrderRequest">
    <wsdl:documentation>Element representing get payment order request message.</wsdl:documentation>
    <wsdl:part element="als:GetPaymentOrderRequest" name="request" />
  </wsdl:message>

  <wsdl:message name="GetPaymentOrderResponse">
    <wsdl:documentation>Element representing get payment order response message.</wsdl:documentation>
    <wsdl:part element="als:GetPaymentOrderResponse" name="response" />
  </wsdl:message>

  <wsdl:message name="SetPaymentNotificationRequest">
    <wsdl:documentation>Element representing payment set notification request
message.</wsdl:documentation>
    <wsdl:part element="als:SetPaymentNotificationRequest" name="request" />
  </wsdl:message>

  <wsdl:message name="SetPaymentNotificationResponse">
    <wsdl:documentation>Element representing payment set notification response
message.</wsdl:documentation>
    <wsdl:part element="als:SetPaymentNotificationResponse" name="response" />
  </wsdl:message>

  <wsdl:portType name="EinvoiceBankServicePortType">
    <wsdl:operation name="getPaymentOrders">
      <wsdl:input message="al:GetPaymentOrderRequest" />
      <wsdl:output message="al:GetPaymentOrderResponse" />
    </wsdl:operation>
    <wsdl:operation name="setPaymentNotifications">
      <wsdl:input message="al:SetPaymentNotificationRequest" />
      <wsdl:output message="al:SetPaymentNotificationResponse" />
    </wsdl:operation>
  </wsdl:portType>

  <wsdl:binding name="EinvoiceBankServiceSoap" type="al:EinvoiceBankServicePortType">
    <soap:binding style="document" transport="http://schemas.xmlsoap.org/soap/http"/>
    <wsdl:operation name="getPaymentOrders">
      <soap:operation soapAction="https://Einvoice.tatime.gov.al/EinvoiceBankService/getPaymentOrders"/>
      <wsdl:input>
```

```

        <soap:body use="literal"/>
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal"/>
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="setPaymentNotifications">
    <soap:operation
soapAction="https://Einvoice.tatime.gov.al/EinvoiceBankService/setPaymentNotifications"/>
    <wsdl:input>
        <soap:body use="literal"/>
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal"/>
    </wsdl:output>
</wsdl:operation>
</wsdl:binding>

<wsdl:service name="EinvoiceBankService">
    <wsdl:port name="EinvoiceBankServicePort" binding="al:EinvoiceBankServiceSoap">
        <soap:address location="https://Einvoice.tatime.gov.al/EinvoiceBankService-v1"/>
    </wsdl:port>
</wsdl:service>
</wsdl:definitions>

```

7. Annex – XMLDSIG-CORE-SCHEMA version 1

```
<?xml version="1.0" encoding="utf-8"?>
<!-- Schema for XML Signatures
  http://www.w3.org/2000/09/xmldsig#
  $Revision: 1.2 $ on $Date: 2013-04-16 12:48:49 $ by $Author: denis $

  Copyright 2001 The Internet Society and W3C (Massachusetts Institute
  of Technology, Institut National de Recherche en Informatique et en
  Automatique, Keio University). All Rights Reserved.
  http://www.w3.org/Consortium/Legal/

  This document is governed by the W3C Software License [1] as described
  in the FAQ [2].

  [1] http://www.w3.org/Consortium/Legal/copyright-software-19980720
  [2] http://www.w3.org/Consortium/Legal/IPR-FAQ-20000620.html#DTD
-->

<schema xmlns="http://www.w3.org/2001/XMLSchema"
  xmlns:ds="http://www.w3.org/2000/09/xmldsig#"
  targetNamespace="http://www.w3.org/2000/09/xmldsig#"
  version="0.1" elementFormDefault="qualified">

  <!-- Basic Types Defined for Signatures -->

  <simpleType name="CryptoBinary">
    <restriction base="base64Binary">
    </restriction>
  </simpleType>

  <!-- Start Signature -->

  <element name="Signature" type="ds:SignatureType"/>
  <complexType name="SignatureType">
    <sequence>
      <element ref="ds:SignedInfo"/>
      <element ref="ds:SignatureValue"/>
      <element ref="ds:KeyInfo" minOccurs="0"/>
      <element ref="ds:Object" minOccurs="0" maxOccurs="unbounded"/>
    </sequence>
    <attribute name="Id" type="ID" use="optional"/>
  </complexType>

  <element name="SignatureValue" type="ds:SignatureValueType"/>
  <complexType name="SignatureValueType">
    <simpleContent>
      <extension base="base64Binary">
        <attribute name="Id" type="ID" use="optional"/>
      </extension>
    </simpleContent>
  </complexType>

  <!-- Start SignedInfo -->

  <element name="SignedInfo" type="ds:SignedInfoType"/>
  <complexType name="SignedInfoType">
```

```

<sequence>
  <element ref="ds:CanonicalizationMethod"/>
  <element ref="ds:SignatureMethod"/>
  <element ref="ds:Reference" maxOccurs="unbounded"/>
</sequence>
<attribute name="Id" type="ID" use="optional"/>
</complexType>

<element name="CanonicalizationMethod" type="ds:CanonicalizationMethodType"/>
<complexType name="CanonicalizationMethodType" mixed="true">
  <sequence>
    <any namespace="##any" minOccurs="0" maxOccurs="unbounded"/>
    <!-- (0,unbounded) elements from (1,1) namespace -->
  </sequence>
  <attribute name="Algorithm" type="anyURI" use="required"/>
</complexType>

<element name="SignatureMethod" type="ds:SignatureMethodType"/>
<complexType name="SignatureMethodType" mixed="true">
  <sequence>
    <element name="HMACOutputLength" minOccurs="0" type="ds:HMACOutputLengthType"/>
    <any namespace="##other" minOccurs="0" maxOccurs="unbounded"/>
    <!-- (0,unbounded) elements from (1,1) external namespace -->
  </sequence>
  <attribute name="Algorithm" type="anyURI" use="required"/>
</complexType>

<!-- Start Reference -->

<element name="Reference" type="ds:ReferenceType"/>
<complexType name="ReferenceType">
  <sequence>
    <element ref="ds:Transforms" minOccurs="0"/>
    <element ref="ds:DigestMethod"/>
    <element ref="ds:DigestValue"/>
  </sequence>
  <attribute name="Id" type="ID" use="optional"/>
  <attribute name="URI" type="anyURI" use="optional"/>
  <attribute name="Type" type="anyURI" use="optional"/>
</complexType>

<element name="Transforms" type="ds:TransformsType"/>
<complexType name="TransformsType">
  <sequence>
    <element ref="ds:Transform" maxOccurs="unbounded"/>
  </sequence>
</complexType>

<element name="Transform" type="ds:TransformType"/>
<complexType name="TransformType" mixed="true">
  <choice minOccurs="0" maxOccurs="unbounded">
    <any namespace="##other" processContents="lax"/>
    <!-- (1,1) elements from (0,unbounded) namespaces -->
    <element name="XPath" type="string"/>
  </choice>
  <attribute name="Algorithm" type="anyURI" use="required"/>
</complexType>

```

```

<!-- End Reference -->

<element name="DigestMethod" type="ds:DigestMethodType"/>
<complexType name="DigestMethodType" mixed="true">
  <sequence>
    <any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </sequence>
  <attribute name="Algorithm" type="anyURI" use="required"/>
</complexType>

<element name="DigestValue" type="ds:DigestValueType"/>
<simpleType name="DigestValueType">
  <restriction base="base64Binary"/>
</simpleType>

<!-- End SignedInfo -->

<!-- Start KeyInfo -->

<element name="KeyInfo" type="ds:KeyInfoType"/>
<complexType name="KeyInfoType" mixed="true">
  <choice maxOccurs="unbounded">
    <element ref="ds:KeyName"/>
    <element ref="ds:KeyValue"/>
    <element ref="ds:RetrievalMethod"/>
    <element ref="ds:X509Data"/>
    <element ref="ds:PGPData"/>
    <element ref="ds:SPKIData"/>
    <element ref="ds:MgmtData"/>
    <any processContents="lax" namespace="##other"/>
  <!-- (1,1) elements from (0,unbounded) namespaces -->
</choice>
  <attribute name="Id" type="ID" use="optional"/>
</complexType>

<element name="KeyName" type="string"/>
<element name="MgmtData" type="string"/>

<element name="KeyValue" type="ds:KeyValue"/>
<complexType name="KeyValue" mixed="true">
  <choice>
    <element ref="ds:DSAPublicKey"/>
    <element ref="ds:RSAPublicKey"/>
    <any namespace="##other" processContents="lax"/>
  </choice>
</complexType>

<element name="RetrievalMethod" type="ds:RetrievalMethodType"/>
<complexType name="RetrievalMethodType">
  <sequence>
    <element ref="ds:Transforms" minOccurs="0"/>
  </sequence>
  <attribute name="URI" type="anyURI"/>
  <attribute name="Type" type="anyURI" use="optional"/>
</complexType>

<!-- Start X509Data -->

```

```

<element name="X509Data" type="ds:X509DataType"/>
<complexType name="X509DataType">
  <sequence maxOccurs="unbounded">
    <choice>
      <element name="X509IssuerSerial" type="ds:X509IssuerSerialType"/>
      <element name="X509SKI" type="base64Binary"/>
      <element name="X509SubjectName" type="string"/>
      <element name="X509Certificate" type="base64Binary"/>
      <element name="X509CRL" type="base64Binary"/>
      <any namespace="##other" processContents="lax"/>
    </choice>
  </sequence>
</complexType>

<complexType name="X509IssuerSerialType">
  <sequence>
    <element name="X509IssuerName" type="string"/>
    <element name="X509SerialNumber" type="integer"/>
  </sequence>
</complexType>

<!-- End X509Data -->

<!-- Begin PGPDData -->

<element name="PGPDData" type="ds:PGPDDataType"/>
<complexType name="PGPDDataType">
  <choice>
    <sequence>
      <element name="PGPKeyID" type="base64Binary"/>
      <element name="PGPKeyPacket" type="base64Binary" minOccurs="0"/>
      <any namespace="##other" processContents="lax" minOccurs="0"
        maxOccurs="unbounded"/>
    </sequence>
    <sequence>
      <element name="PGPKeyPacket" type="base64Binary"/>
      <any namespace="##other" processContents="lax" minOccurs="0"
        maxOccurs="unbounded"/>
    </sequence>
  </choice>
</complexType>

<!-- End PGPDData -->

<!-- Begin SPKIDData -->

<element name="SPKIDData" type="ds:SPKIDDataType"/>
<complexType name="SPKIDDataType">
  <sequence maxOccurs="unbounded">
    <element name="SPKISexp" type="base64Binary"/>
    <any namespace="##other" processContents="lax" minOccurs="0"/>
  </sequence>
</complexType>

<!-- End SPKIDData -->

<!-- End KeyInfo -->

```

```

<!-- Start Object (Manifest, SignatureProperty) -->

<element name="Object" type="ds:ObjectType"/>
<complexType name="ObjectType" mixed="true">
  <sequence minOccurs="0" maxOccurs="unbounded">
    <any namespace="##any" processContents="lax"/>
  </sequence>
  <attribute name="Id" type="ID" use="optional"/>
  <attribute name="MimeType" type="string" use="optional"/> <!-- add a grep facet -->
  <attribute name="Encoding" type="anyURI" use="optional"/>
</complexType>

<element name="Manifest" type="ds:ManifestType"/>
<complexType name="ManifestType">
  <sequence>
    <element ref="ds:Reference" maxOccurs="unbounded"/>
  </sequence>
  <attribute name="Id" type="ID" use="optional"/>
</complexType>

<element name="SignatureProperties" type="ds:SignaturePropertiesType"/>
<complexType name="SignaturePropertiesType">
  <sequence>
    <element ref="ds:SignatureProperty" maxOccurs="unbounded"/>
  </sequence>
  <attribute name="Id" type="ID" use="optional"/>
</complexType>

  <element name="SignatureProperty" type="ds:SignaturePropertyType"/>
  <complexType name="SignaturePropertyType" mixed="true">
    <choice maxOccurs="unbounded">
      <any namespace="##other" processContents="lax"/>
      <!-- (1,1) elements from (1,unbounded) namespaces -->
    </choice>
    <attribute name="Target" type="anyURI" use="required"/>
    <attribute name="Id" type="ID" use="optional"/>
  </complexType>

<!-- End Object (Manifest, SignatureProperty) -->

<!-- Start Algorithm Parameters -->

<simpleType name="HMACOutputLengthType">
  <restriction base="integer"/>
</simpleType>

<!-- Start KeyValue Element-types -->

<element name="DSAKeyValue" type="ds:DSAKeyValueType"/>
<complexType name="DSAKeyValueType">
  <sequence>
    <sequence minOccurs="0">
      <element name="P" type="ds:CryptoBinary"/>
      <element name="Q" type="ds:CryptoBinary"/>
    </sequence>
    <element name="G" type="ds:CryptoBinary" minOccurs="0"/>
    <element name="Y" type="ds:CryptoBinary"/>
    <element name="J" type="ds:CryptoBinary" minOccurs="0"/>
  </sequence>

```

```
<sequence minOccurs="0">
  <element name="Seed" type="ds:CryptoBinary"/>
  <element name="PgenCounter" type="ds:CryptoBinary"/>
</sequence>
</sequence>
</complexType>

<element name="RSAKeyValue" type="ds:RSAKeyValue"/>
<complexType name="RSAKeyValue">
  <sequence>
    <element name="Modulus" type="ds:CryptoBinary"/>
    <element name="Exponent" type="ds:CryptoBinary"/>
  </sequence>
</complexType>

<!-- End KeyValue Element-types -->

<!-- End Signature -->

</schema>
```