



# E-Invoice Bank Service

(Version v02)

**Technical Specification**

**Versions**

Version	Date	Description of Change
v01	28.10.2020	Initial Version
V02	11.02.2021	Updated with XML requests and responses

## CONTENTS

<b>1. INTRODUCTION.....</b>	<b>4</b>
1.1 ABBREVIATIONS .....	4
<b>2. ENVIRONMENTS .....</b>	<b>5</b>
2.1 TOPOLOGY .....	5
2.1.1 Security preconditions .....	5
2.1.2 Application preconditions.....	5
<b>3. INTERFACE .....</b>	<b>6</b>
3.1 PAYMENT ORDER.....	6
3.1.1 Payment order request data message .....	6
3.1.2 Payment order XML request.....	7
3.1.3 Payment order response data message .....	7
3.1.4 Payment order XML response .....	14
3.2 PAYMENT NOTIFICATIONS.....	15
3.2.1 Payment notification request data message.....	15
3.2.2 Payment notification XML request .....	19
3.2.3 Payment notification response data message .....	20
3.2.4 Payment notification XML response.....	22
<b>4. SECURITY .....</b>	<b>23</b>
4.1 CALCULATED DIGITAL SIGNATURE.....	23
4.2 CALCULATED DIGEST.....	23
<b>5. ANNEX – XSD VERSION 1 .....</b>	<b>24</b>
<b>6. ANNEX – WSDL VERSION 1 .....</b>	<b>33</b>

# 1. Introduction

This document provides technical specification for the EInvoice Bank service. 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: <a href="https://www.w3.org/TR/soap/">https://www.w3.org/TR/soap/</a>	-
UUID	Universally Unique Identifier	-
WSDL	Web Services Description Language –XML-based language for description of functions offered by a WWW service as specified at <a href="http://www.w3.org/TR/wsdl">http://www.w3.org/TR/wsdl</a>	-
XML Schema	A XML-based language intended for definition of XML document structure as specified at <a href="http://www.w3.org/TR/xmlschema11-1/">http://www.w3.org/TR/xmlschema11-1/</a> and <a href="https://www.w3.org/TR/xmlschema11-2/">https://www.w3.org/TR/xmlschema11-2/</a>	-
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:

- o Test environment:
  - o <https://invoice-test.tatime.gov.al/EinvoiceBankService-v1/EinvoiceBankService.wsdl>
- o Production environment:
  - o <https://invoice.tatime.gov.al/EinvoiceBankService-v1/EinvoiceBankService.wsdl>

### 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.



	EinDatTim	Attribute	[1,1]	Date and time of the invoice.
	EinNum	Attribute	[1,1]	Ordinal number of the invoice.
	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.
	PymtRecBAN	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}\V[0-9]{4}

<b>Example</b>	1/2020
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Table 7

### 3.1.3.7 PymtOrds PymtOrd PymtOrdDatTimSend

Date and time of sending an order.

<b>Data type</b>	dateTime
<b>Pattern</b>	[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}
<b>Example</b>	2020-03-21T14:25:23+01:00

Table 8

### 3.1.3.8 PymtOrds PymtOrd PayerNipt

NUIS of the payer.

<b>Data type</b>	string
<b>Length</b>	10 characters
<b>Pattern</b>	[A-Z]{1}[0-9]{8}[A-Z]{1}
<b>Example</b>	112345678Q

Table 9

### 3.1.3.9 PymtOrds PymtOrd PayerName

Payer's full name.

<b>Data type</b>	string
<b>Length</b>	100 characters
<b>Example</b>	Name Surname

Table 10

### 3.1.3.10 PymtOrds PymtOrd PayerAddr

Payer's full address.

<b>Data type</b>	string
<b>Length</b>	200 characters
<b>Example</b>	Full address

Table 11

### 3.1.3.11 PymtOrds PymtOrd PayerBnkCode

Code of the payer's bank.

<b>Data type</b>	string
<b>Length</b>	30 characters
<b>Example</b>	ALLBPLPW

Table 12

### 3.1.3.12 PymtOrds PymtOrd PayerBnkName

Full name of the payer's bank.

<b>Data type</b>	string
<b>Length</b>	200 characters
<b>Example</b>	Bank full name

Table 13

### 3.1.3.13 PymtOrds PymtOrd StatusOrd

Status of the order.

<b>Data type</b>	string
<b>Values</b>	Enumeration, described in the table below.
<b>Example</b>	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 PymtOrdl

XML element representing a single payment order item.

### 3.1.3.16 PymtOrds PymtOrd PymtOrdis PymtOrdl EinvFic

Invoice FIC.

<b>Data type</b>	string
<b>Length</b>	36 characters
<b>Pattern</b>	[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}
<b>Example</b>	58e0a7d7-eebc-41d8-9669-0800200c9a66 58E0A7D7-EEBC-41D8-9669-0800200C9A66

Table 16

### 3.1.3.17 PymtOrds PymtOrd PymtOrdis PymtOrdl EinDatTim

Date and time of the invoice.

<b>Data type</b>	dateTime
<b>Pattern</b>	[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}
<b>Example</b>	2020-03-21T14:25:23+01:00

Table 17

### 3.1.3.18 PymtOrds PymtOrd PymtOrdis PymtOrdl EinNum

Number of the invoice.

<b>Data type</b>	string
<b>Length</b>	30 characters
<b>Example</b>	10

Table 18

### 3.1.3.19 PymtOrds PymtOrd PymtOrdIs PymtOrdI EinPymtRefNum

Invoice payment reference number.

<b>Data type</b>	string
<b>Length</b>	30 characters
<b>Example</b>	15

Table 19

### 3.1.3.20 PymtOrds PymtOrd PymtOrdIs PymtOrdI EinAmt

Amount of the invoice.

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

Table 20

### 3.1.3.21 PymtOrds PymtOrd PymtOrdIs PymtOrdI EinCur

Currency of the invoice payment.

<b>Data type</b>	string
<b>Constraint</b>	Enumeration, described in the table below.
<b>Example</b>	EUR

Table 21

Enumeration values for currencies are shown in table below.

Value	Description
ALL	Leku Shqiptar
EUR	Euro
USD	Dollari Amerikan
MKD	Dinari Maqedonas
TRY	Lira Turke
HRK	Kuna Kroate
...	...

Table 22

### 3.1.3.22 PymtOrds PymtOrd PymtOrdIs PymtOrdI EinPymtDesc

Description of the invoice payment.

<b>Data type</b>	string
------------------	--------

<b>Length</b>	1000 characters
<b>Example</b>	This is the invoice payment description.

Table 23

### 3.1.3.23 PymtOrds PymtOrd PymtOrdIs PymtOrdI PymtRecNipt

NUIS of the payment recipient.

<b>Data type</b>	string
<b>Length</b>	10 characters
<b>Pattern</b>	[A-Z]{1}[0-9]{8}[A-Z]{1}
<b>Example</b>	112345678Q

Table 24

### 3.1.3.24 PymtOrds PymtOrd PymtOrdIs PymtOrdI PymtRecName

Name of the payment recipient.

<b>Data type</b>	string
<b>Length</b>	100 characters
<b>Example</b>	Recipient name

Table 25

### 3.1.3.25 PymtOrds PymtOrd PymtOrdIs PymtOrdI PymtRecipAddr

Address of the payment recipient.

<b>Data type</b>	string
<b>Length</b>	200 characters
<b>Example</b>	Recipient address

Table 26

### 3.1.3.26 PymtOrds PymtOrd PymtOrdIs PymtOrdI PymtRecipIBAN

IBAN of the payment recipient.

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

Table 27

### 3.1.3.27 PymtOrds PymtOrd PymtOrdIs PymtOrdI PayerIBAN

IBAN of the payer.

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

Table 28

**3.1.3.28 PymtOrds PymtOrd PymtOrds PymtOrdl DatTimPymt**

Date and time of the payment.

<b>Data type</b>	dateTime
<b>Pattern</b>	[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}
<b>Example</b>	2020-03-21T14:25:23+01:00

Table 29

**3.1.3.29 PymtOrds PymtOrd PymtOrds PymtOrdl AmtToBePaid**

Amount that needs to be paid.

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

Table 30

**3.1.3.30 PymtOrds PymtOrd PymtOrds PymtOrdl CurToBePaid**

Currency that will be used for paying the invoice.

<b>Data type</b>	string
<b>Constraint</b>	Enumeration, described in the table below.
<b>Example</b>	EUR

Table 31

Enumeration values for currencies are shown in table below.

Value	Description
ALL	Leku Shqiptar
EUR	Euro
USD	Dollari Amerikan
MKD	Dinari Maqedonas
TRY	Lira Turke
HRK	Kuna Kroate
...	...

Table 32

**3.1.3.31 Signature**

XML element stores enveloped digital signature described in chapter 4.1.



## 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.
PymtNotes	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	112345678Q

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

<b>Pattern</b>	[A-Z]{1}[0-9]{8}[A-Z]{1}
<b>Example</b>	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.

<b>Data type</b>	string
<b>Length</b>	36 characters
<b>Pattern</b>	[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}
<b>Example</b>	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.

<b>Data type</b>	dateTime
<b>Pattern</b>	[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}
<b>Example</b>	2020-03-21T14:25:23+01:00

Table 42

#### 3.2.1.2 PymtNots PymtNot PymtNotIts PymtNotIt PaidAmt

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

Table 43

#### 3.2.1.3 PymtNots PymtNot PymtNotIts PymtNotIt PaidCur

<b>Data type</b>	string
<b>Constraint</b>	Enumeration, described in the table below.
<b>Example</b>	EUR

Table 44

Enumeration values for currencies are shown in table below.

Value	Description
ALL	Leku Shqiptar

EUR	Euro
USD	Dollari Amerikan
MKD	Dinari Maqedonas
TRY	Lira Turke
HRK	Kuna Kroate
...	...

Table 45

### 3.2.1.4 PymtNots PymtNot PymtNotIts PymtNotIt PymtType

Type of the payment.

<b>Data type</b>	string
<b>Constraint</b>	Enumeration, described in the table below.
<b>Example</b>	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.

<b>Data type</b>	string
<b>Constraint</b>	Enumeration, described in the table below.
<b>Example</b>	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.



### 3.2.3 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.

<b>Data type</b>	string
<b>Constraint</b>	Enumeration, described in the table below.
<b>Example</b>	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>Success</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/xmenc#sha256" />
        <DigestValue>FLk4uFp8XcIUNLCRPJbj15lQgGD1v+sYPOfWM7HLe1M=</DigestValue>
      </Reference>
    </SignedInfo>
    <SignatureValue>mPX/qAi/hD/eL90skSBQmrSk+sztzWysWCqornF2CcPpFL1G0SbFPvoYcK1Ij367COYczI/ISsTI
WlFTpg1iOWKeUXsJkeVzH8hUsp+AcQ1JjIDbgOgqHLkoQJZmzaPXmrNUckZPnkaVeouxM7fj6z9
XBjVlQo45uhfIL1idfU8LwcySS1s85dLinxZ5Dwb8jLU3YeoE5MgTdF7MIeh2FXa/Tbo3Kwmj9F
z9FwI1QntW0JfQtJXjp5Mj8AcorCG6hw5HqAvQ3vAK/g1yXcm0U2rH9orCxcg/BkVNVQHGcwhnxPL
FvTB+XYSoXlZyFfSwhP4y0cXrIePg5pVAwuzw=</SignatureValue>
  <KeyInfo>
    <X509Data>
      <X509Certificate>MIIFRzCCBC+gAwIBAgIKQ3usFHZueA3x0DANBgkqhkiG9w0BAQsFADBLMQswCQYDVQQGEwJBTDEN
MAsGA1UECHMETkFJUzEtMmcsGA1UEAxBkFJUzEtMmcsGA1UEAxBkFJUzEtMmcsGA1UEAxBkFJUzEtMmcsGA1UEAxBkFJUzEtMmcs
aXR5MB4XDTEwMDIxMjA4Mjc1NFoXDTEwMDIxMjA4Mjc1NFowazELMAkGA1UEBhMCUWxDzANBgNV
BACzB1R3cmFuZTEEMAoGA1UECjR0RUMQ0wCwYDVQQMEwREZW1vMRkwFwYDVQQDEXBHRFQgZUZp
c2thbG16aW1pMRMwEQYDVQQEEwpmJMDAwMDAwMDBJMIIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIB
CgKCAQEAMenARDp1jXNbJ1dvG/VZSMFYNe5fjZq6qZoswF1RAvbi2FUfUonY7xZvJvH81/eWHqT
/YeF0fgSLampo3tJePADkhW94WPQN5t9CvKNsrd3vYw/+xDY10bIyFTfKp1rSLuIsbMknznFNv
1LqjsuH/VceFNwKF+Nrfaxhmkcs8w2uBQiIeVLRUhiutu6yLoc76CukACiWk6Et53xiKL/X8pAsr
5M8oeCitUsL8+k1XYiHz0VidX0waNohFH9T916UU3shhYRK1CX/eyC6cEvUB7kJyE4NuQmx46idY
hPYwdg+XcW3MATX3+B7wJpmI2aknDZA2uLJSiH3x1EX+qQIDAQABo4ICCzCCAgcwZgYIKwYBBQUH
AQEEWjBYMCQGCCsGAQUBzABhhodHRwOi8vb2Nzc3ha3Noa55nb3YuYwWwMAYIKwYBBQUHMAKG
JGh0dHA6Ly9jZjZ0cy5ha3Noa55nb3YuYwWwY2xhc3MzLmNyDA0BgNVHQ8BAf8EBAMCBPAwHwYD
VR0tBBGwFoUhyao+9srUZs50Jjw9MYzVkdC2AUwHQYDVRR0BBYEFDFw9CjlljD45hXeJB9DKB
YkCGMESGA1UdIAREMEIwQAYMKwYBBAGCSwwKAQEDMDAwLgYIKwYBBQUHAGewImh0dHA6Ly93d3cu
YWtzaGkuZ292LmFsL3JlCG9zaXRvcnkwaGcGA1UdHwSBnzCBnDCBmaCB1qCBk4YiaHR0cDovL2Ny
bC3ha3Noa55nb3YuYwWwY2xhc3MzLmNyZTbGRhcDovL2xkYXAUwYwYwYwYwYwYwYwYwYwYwYwYw
Z24udGVzdIENaw5mb0BzZ24udGVzdDAdBgNVHSUEFjAUBgggrBgEFBQcDAGYIKwYBBQUHAWQDQYJ
KoZIHvNAQELBQAGggEBAH61p0sPh1jPCoFOOLwOskr9jmOLKZ+ufBvgOiffDxiT93pF58hesmnN
qcReSkQNHsju6vineVLSLJR3xk40B0Qij1g8/R16gxQPr00TnXl760JR8KGA7x0Qa1YEgPataVRi
rBs45TEICwbJWLXiq4GTgaxyRgxtzI2FY4C01Tk1pu/7m4ipEY7v8cC600CX9xH4G0M5Z105n0kq
+c0coyopjzY9Gjv9aRo/+CbFMsFwrZGsIs/WCwEfjzGhcvYCi2qHKav7Pknrc08JURxk1hgqVpX
Px3v1bdY56SK1zppWUVM6oXcZtaqb6RD+GgzHcFw1aTGDht6qID0cjsY=</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
MAsGA1UEChMETkFJUzEtMCsGA1UEAxMkTkFJUyBDbGFzcyAzIENlcnRpZmljYXRpb24gQXV0aG9y
aXR5MB4XDTIwMDIxMjA4Mjc1NFoXDTIxMDIxMjA4Mjc1NFowazELMAkGA1UEBhMCUwxDzANBgNV
BACTB1RpcmFuZTEEMMAoGA1UEChMDR0RUMQ0wCwYDVQQMEwREZW1vMRkwFwYDVQQDExBHRFQgZUZp
c2t0bG16aW1pMRMwEQYDVQEEwJMDAwMDAwMDBJMIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIB
CgKCAQEAA9MenARDp1jxNbJ1dvG/VZSMfYNe5fjZq6qZoswF1RAvbi2fUfUonY7xZvJvH81/eWHqT
/YeF0fgSLampo3tJePADkhW94WPQN5t9CvKNSsrd3vYW/+xDY10bIyFTfkp1rSLuIsbMknznNfNV
lLqjsuH/VceFNvKF+NrFaxhmkcs8w2uBQiIeVLRUhiutu6yLoc76CukACiWK6Et53xiKL/X8pAsR
5M8oeCitUsL8+k1XYiHzOvidX0waNohFH9T916UU3shhYRK1CX/eyC6cEvUB7kJyE4NuQmx4GidY
hPYwdg+Xcw3MATX3+B7wJpmI2aknDZA2uLJSiH3x1EX+qQIDAQABO4ICCCzCCAgcwZgYIKwYBBQUH
AQEEWjBYMCQGCCsGAQUFBzABhhodHRwOi8vb2Nzc5ha3NoaS5nb3YuYwYwMAYIKwYBBQUHMAKG
JGh0dHA6Ly9jZXJ0cy5ha3NoaS5nb3YuYwYwY2xhc3MzLmNydDA0BGNVHQ8BAf8EBAMCBPAwHwYD
VR0jBBgwFoAUhyao+9srUZs50JjW9MYzVkdC2AUwHQYDVR00BBYEFDOFw9CjL1JjD45hXeJb9DKB
YkCGMEsGA1UdIAREMEIwQAYMKwYBBAGCswwKAQEDMDAwLgYIKwYBBQUHAgEwImh0dHA6Ly93d3cu
YWtzaGkuZ292LmFSL3JlCG9zaXRvcnkwaGcGA1UdHwSbnzCBnDCBmaCB1qCBk4YiaHR0cDovL2Ny
bC5ha3NoaS5nb3YuYwYwY2xhc3MzLmNybIZtZGRhcDovL2xkYXAuYWtzaGkuZ292LmFSL0N0PU5B
SVMgQ2xhc3MgMyBDZXJ0aWZpY2F0aW9uIEF1dGhvcml0eSxPPU5BSVMsQz1BTD9jZXJ0aWZpY2F0
ZVJ1dm9jYXRpb25MaXN002JpbmFyeTA3BgNVHREEMDAuoB0GCisGAQQBgjcUAQOgDwwNaw5mb0Bz
Z24udGVzdIENaw5mb0BzZ24udGVzdDAdBgNVHSUEfjAUBggrBgEFBQcDAGYIKwYBBQUHAWQwDQYJ
KoZIHvcNAQELBQADggEBAH61p0sph1jPcOf00Lw0skr9jm0LKZ+ufBvg0IffDxiT93pF58hesmnN
qcReSkQNHsju6viNEV1SLJR3xk40B0QiJ1g8/R16gxQPr00TnX1760JR8KGA7x0Qa1YEgPataVRi
rBs45TEICwbJWLXi4GTgaxyRgxtzI2FY4C01Tk1pu/7m4ipEY7v8cC6o0CX9xH4GoM5Z105n0kq
+c0coyopjzY9Gjv9aRo/+CbFMsFwrZGsis/WCwEfjzGihcvYCi2qHKav7Pknrc08JURxK1hgqVpX
Px3v1bDy56SkTizpvPWUVM6oXcZTaqb6RD+GgzHcFfwiaTGDHt6qiD0cjSY=-----END RSA
PRIVATE KEY-----
```

Resulting signature value is:

- mPX/qAi/hD/eL90skSBQmrSk+sztzWysWCqornF2CcPpFL1G0SbFPvoYcK1lj367COYczl/ISsTI  
WIFTpg1iOWKeUXsjKevzH8hUsp+AcQ1JUjIDbgOgqHLkoQJZmzaPXmrNUckzPnkaVeouxM7fj6z9  
XBJvIQo45uhfL1idfU8LWcySSlsS85dLinXZ5DWb8jLU3YeoE5MgTdF7Mleh2FXa/Tbo3Kwmj9F  
z9fw1QntWOJFQtJXjp5Mj8AcorCG6hW5HqAvQ3vAK/g1yXcm0U2rH9orCxcg/BkVNVQHGcwhnxPL  
FvTB+XYSOxXIZYfFsWHP4y0cXrlePg5pVAwuZw==

### 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://Invoice.tatime.gov.al/InvoiceBankService/schema"
xmlns:al="https://Invoice.tatime.gov.al/InvoiceBankService/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>
<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:ResponseCodeType" 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>Invoice fic selected for payment.</documentation>
        </annotation>
      </attribute>
      <attribute name="EinDatTim" type="al:UTCSType" use="required">
        <annotation>
          <documentation>Invoice date time.</documentation>
        </annotation>
      </attribute>
      <attribute name="EinNum" type="al:String100SType" use="required">
        <annotation>
          <documentation>Invoice number.</documentation>
        </annotation>
      </attribute>
    </extension>
  </simpleContent>
</complexType>

```

```

        </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>
<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>Invoice 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 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>
  </restriction>
</simpleType>

```



```

<enumeration value="RWF"><annotation><documentation>Rwanda Franc</documentation></annotation></enumeration>
<enumeration value="SAR"><annotation><documentation>Saudi Arabia Riyal</documentation></annotation></enumeration>
<enumeration value="SBD"><annotation><documentation>Solomon Islands Dollar</documentation></annotation></enumeration>
<enumeration value="SCR"><annotation><documentation>Seychelles Rupee</documentation></annotation></enumeration>
<enumeration value="SDG"><annotation><documentation>Sudan Pound</documentation></annotation></enumeration>
<enumeration value="SEK"><annotation><documentation>Sweden Krona</documentation></annotation></enumeration>
<enumeration value="SGD"><annotation><documentation>Singapore Dollar</documentation></annotation></enumeration>
<enumeration value="SHP"><annotation><documentation>Saint Helena Pound</documentation></annotation></enumeration>
<enumeration value="SLL"><annotation><documentation>Sierra Leone Leone</documentation></annotation></enumeration>
<enumeration value="SOS"><annotation><documentation>Somalia Shilling</documentation></annotation></enumeration>
<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>eSwatini 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="TWD"><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="ZND"><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>

```

```
    </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>
    <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>
```