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Functional Specifications of Latvijas Banka's Instant Verification Service

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The "Functional Specifications of Latvijas Banka's Instant Verification Service" (hereinafter, the Specifications) establishes the indications for generating the messages to be processed by the Instant Verification Service of Latvijas Banka (hereinafter, the IVS) depending on the IVS option chosen by the IVS user.

Unless otherwise specified, the terms used in the Specifications are consistent with the terms used in Appendix 1 "Rules for the Use of the Instant Verification Service" to Procedure No. 519/1 "Latvijas Banka's Procedure for the Use of the Instant Verification Service" of the Council of Latvijas Banka of 25 August 2025 (hereinafter, Rules for the Use of the IVS) and their explanations.

The process flows and their descriptions have been included in the present Specifications for reference only.

The indicators used in message and file descriptions are as follows:

a) field status indicators:

M - mandatory

O – optional;

C – conditional;

b) types:

ISODate – a particular point in the progression of time in a calendar year expressed in the YYYY-MM-DD format.

ISODateTime – a valid ISO 8601 timestamp string, expressed in either UTC time format (YYYY-MM-DDThh:mm:ss.sssZ) or local time with UTC offset format (YYYY-MM-DDThh:mm:ss.sss+/-hh:mm), milliseconds included with the last digit different from zero, as defined in "XML Schema Part 2: Datatypes Second Edition - W3C Recommendation 28 October 2004" (https://www.w3.org/TR/xmlschema-2/).

Examples:

Examples.						
Timestamps compliant with the	Timestamps non-compliant with the					
standard	standard					
10:10:55.035'						
10:10:55.24'	10:10:55.24 <mark>0</mark> '					
10:10:55.3'	10:10:55.3 <mark>00</mark> '					
10:10:55'	10:10:55.000'					

BICFI: BICFIIdentifier Pattern: [A-Z]{4}[A-Z]{2}[A-Z0-9]{2}([A-Z0-9]{3}

IBAN : IBAN2007Identifier Pattern: [A-Z]{2}[0-9]{2}[A-Z0-9]{1,30}

LEI: LEIIdentifier as defined in ISO 17442 "Financial Services - Legal Entity Identifier (LEI)" Pattern: [A-Z0-9]{4}[A-Z0-9]{14}[0-9]{2}

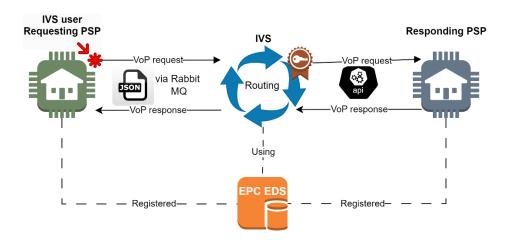
UUID pattern: $[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}$

- c) field format indicators:
- n numerical field;
- a alphabetical character;
- c capital letters of the Latin alphabet and numbers,
- x any UTF-8 character compliant with the requirements of Paragraph 5.1 herein.

1. IVS high-level description

The IVS is provided to payment service providers which applied for using the IVS and received consent of Latvijas Banka in compliance with the procedure established by the Rules for the Use of the IVS. The IVS offers a solution for the verification of the payee's IBAN against the provided name or identifier. This verification must be completed before a customer authorises a SEPA payment, as mandated by the European Parliament and Council Regulation (EU) 2024/886 and in accordance with the Verification of Payee Scheme (hereinafter – the VOP Scheme) Rulebook approved by the European Payments Council (hereinafter, the EPC).

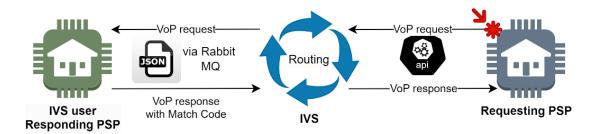
Routing of outgoing IVS requests sent by the IVS user in the role of requesting payment service provider (hereinafter – Requesting PSP) is the default service provided to all IVS users. The EPC Directory Service data are used to determine the route of the request and certificate to be used. Exchange of information between the IVS user and the IVS is performed in JSON format via Rabbit message queues.



In the role of the Responding PSP users may opt in for one of three IVS options.

Option 1: Routing only

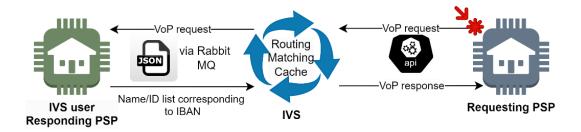
- ✓ The IVS routes incoming VOP request received from the Requesting PSP to the IVS user
- ✓ The IVS user generates VOP response
- ✓ The IVS routes VOP response to the Requesting PSP



Option 2: Routing and Matching based on the immediate response from the IVS user

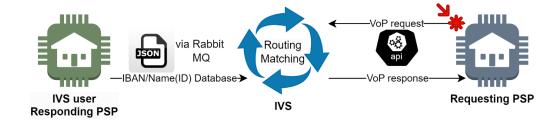
✓ The IVS routes incoming VOP request received from the Requesting PSP to the IVS user

- ✓ The IVS user provides the IVS with the list of names related to the IBAN stated in the VOP request
- ✓ The IVS service:
 - o runs matching process in accordance with the provisions of Chapter 3 herein
 - o generates and sends VOP response on behalf of the IVS user
 - (optional) caches name information until the end of the calendar day
 (UTC time) to respond to further requests related to the same IBAN without forwarding VOP requests to the IVS user



Option 3: Routing and Matching based on IVS database

- ✓ The IVS user provides the IVS service with the IVS database and regularly updates it
- ✓ IVS service:
 - o receives incoming VOP request from the Requesting PSP
 - runs matching process in accordance with the provisions of Chapter 3 herein
 - o generates and sends VOP response on behalf of the IVS user



2. Message and file exchange in the IVS

2.1. Message and file exchange

Messages and files between IVS users and the IVS are exchanged using the Advanced Message Queuing Protocol (AMQP) - message exchange protocol ensuring high-performance, safe and guaranteed delivery of messages to recipients. AMQP is an open standard protocol with publicly available specifications; therefore, it is a platform independent solution enabling messaging between client applications based on various operating systems and written in various programming languages.

The TLS protocol is used for secure data transmission. TLS certificate created via <u>ds.bank.lv</u> by the IVS user's supervisor is used to ensure the security of the message exchange channel.

Access to the IVS infrastructure is allowed only from IP addresses registered via <u>ds.bank.lv</u> by the IVS user's supervisor. In addition, Latvijas Banka provides the IVS user with the access rights of RabbitMQ users.

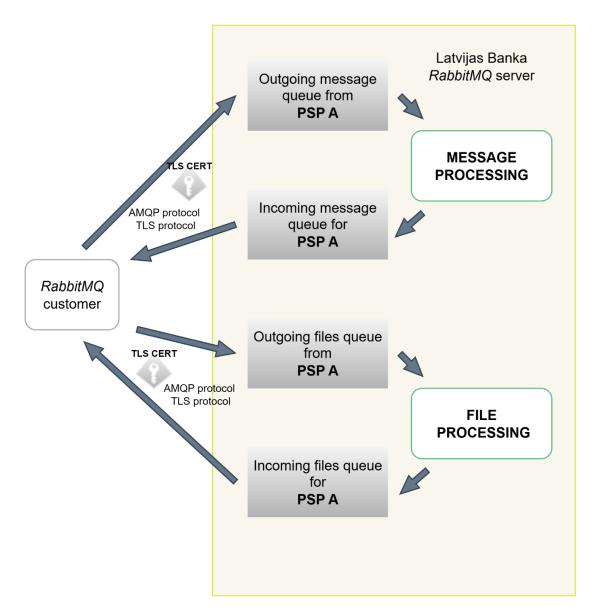


Chart 1. Message and file exchange

To ensure high system availability, the IVS uses a RabbitMQ server cluster consisting of 3 server instances. In case one of the instances is not available, the IVS user can send the message to another instance of the cluster. The IVS user's application must be able to provide a connection with another instance of the cluster in case of unavailability.

The IVS infrastructure intended for testing is separated from the infrastructure of the production environment. Separate instances are created and used for testing, separate message queues are configured, and TLS certificates for testing purposes are created. The IVS user's configuration parameters for each of the environments are communicated to the IVS user before the start of the tests in the test environment and before the start of using the IVS in the production environment.

Latvijas Banka recommends choosing a higher-level client library based on the official RabbitMQ libraries, which would be able to automatically restore a terminated connection to one of several defined server cluster addresses. Information about other clients is available here: https://www.rabbitmq.com/.

2.2. Configuration of queues

Each message and file shall be sent separately. Message exchange between the IVS user and the IVS shall be separated for each individual registered BIC.

The names of IVS users' message/file queues and message/file exchange are created according to the following rules:

<type E or Q>.<4 symbols from user BIC>_<user's identifier assigned by Latvijas Banka
in the system>

For example: E.BIC4 1234

The IVS user's identifier is communicated to the IVS user before testing starts in the test environment and before the IVS user connects to the production environment.

For message exchange following queues configuration shall be used:

Name	Value	Comment
RabbitMQ server instance	Test: at-rabbit1.bank.lv, at-rabbit2.bank.lv at-rabbit3.bank.lv Production: e-rabbit1.bank.lv, e-rabbit2.bank.lv,	
	e-rabbit3.bank.lv	
Authentication type	EXTERNAL	IVS user's authentication certificate must be provided upon connecting
VirtalHost	VOP	_
Port	15701	

Sending messages	Exchange: E.<4 symbols from user BIC>_ <user's identifier=""> routingKey: REQUEST RESPONSE DB</user's>	Messages are sent specifying the relevant routingKey
Receiving messages	Queues: Q.<4 symbols from user BIC>_ <user's identifier="">.REQUEST Q.<4 symbols from user BIC>_ <user's identifier="">.RESPONSE Q.<4 symbols from user BIC>_ <user's identifier="">.DB</user's></user's></user's>	Messages are received by reading the respective queue
Sending files	Exchange: E.<4 symbols from user BIC>_ <user's identifier=""> FILE</user's>	Files are sent specifying the relevant routingKey
Receiving files	Queues: Q.<4 symbols from user BIC>_ <user's identifier="">.FILES</user's>	Files are received by reading the respective queue

2.3. Message and file exchange

To send a message to the IVS, the IVS user:

- 1) Prepares the message in compliance with the Specifications;
 - 2) Publishes the message to the RabbitMQ server, specifying the exchange name and the routing key (RoutingKey).

To receive a message from the IVS, the IVS user reads the message from the queue.

If the IVS database contains more than $100\ 000$ records, it must be divided into several files with $100\ 000$ records each. In the SegmentCount parameter specify the total number of files (indicate 1 if messages count < or = $100\ 000$) and in the SegmentNumber parameter specify the current file number.

To send a file to the IVS, the IVS user:

- 1) Prepares the file and compresses it using gzip;
- 2) Prepares a RabbitMQ message, specifying the prepared file converted to a byte array as the content;
- 3) Specifies in the parameters of each message file:
 - a. FileName the name of the file;
 - b. SegmentCount the total number of file segments;
 - c. SegmentNumber the sequence number of the respective file segment;
- 4) Publishes the message to the RabbitMQ server, specifying the exchange name and the routing key (RoutingKey).

To receive a file from the IVS, the IVS user:

- 1) Reads the message from the queue;
- 2) Reads attributes of the message:
 - a. FileName the name of the file;
 - b. SegmentCount the total number of file segments (indicate =1);
 - c. SegmentNumber the sequence number of the respective file segment (indicate =1);

3) Saves the content of the report to the disk as a file with the name specified in the FileName parameter.

2.4. Authentication and authorisation of EPC VOP requests

According to EPC API Security Framework, the Requesting PSP must authenticate using a QWAC certificate – Qualified Web Authentication Certificate issued for use in the PSD2 Open Banking context. To ensure that IVS is able to send EPC VOP requests on behalf of the IVS user when Responding PSP does not use IVS of Latvijas Banka, the IVS user shall request creation of a dedicated QWAC certificate from one of the providers included in the list of eIDAS compliant trust service providers and along with the private key shall hand it over to Latvijas Banka by uploading it to ds.bank.lv. QWAC certificate used for VOP purposes has to have the role other than "Payment Initiation" (PSP PI).

The IVS user and Latvijas Banka shall ensure that QWAC certificate of the IVS user is used solely for the purposes of signing EPC VOP requests.

For VOP requests sent by the IVS user

- 1. The IVS user in the role of Requesting PSP prepares an IVS VOP request message and sends it to the IVS using Rabbit MQ.
- 2. If the Responding PSP uses the IVS, the IVS routes the IVS VOP request message to the Responding PSP using Rabbit MQ.
- 3. If the Responding PSP is not an IVS user, the IVS:
 - a) based on the data from the EDS, calls Responding PSP's API endpoint and performs authentication verifying EV TLS server certificate of the Responding PSP and presenting QWAC certificate of the IVS user.
 - b) if the process fails and rejection is received, the IVS forwards rejection information to the IVS user;
 - c) if authentication process is successful, via API sends EPC VOP request message using the IVS user's QWAC certificate.

For VOP requests received on behalf of the IVS user

- 1. If the Requesting PSP uses the IVS, the IVS receives an IVS VOP request message via Rabbit MQ.
- 2. If the Requesting PSP is not an IVS user, the IVS before processing the request:
 - a) performs authentication of the Requesting PSP verifying and checking validity of its QWAC certificate and presenting to the Requesting PSP the EV TLS server certificate of the IVS;
 - b) verifies the identity of the Requesting PSP indicated in the EPC VOP request message against the EDS data and the BIC corresponding to the certificate used when sending the request;
 - c) if step a) or b) fails, the IVS shall reject the incoming request.
- 3. If the IVS option chosen by the IVS user foresees forwarding the message to the IVS user, the IVS routes IVS VOP request message to the IVS user, using Rabbit MQ.

3. Matching Algorithm ensured by the IVS

3.1. Pre-processing and normalisation

Prior to running the matching process, pre-processing and normalisation shall be performed by the IVS to reduce false negative matches, namely:

- Ignoring upper / lower case;
- Removing leading or trailing spaces;
- Removing special characters (e.g, $\sim @ \# \% ^ \& * + = | \setminus \{ \} [] : ; "' <>,.?);$
- Removing titles and legal forms: dr, mr, ms, mrs, miss, prof, as, sia, a/s, aas, bo, kks, pu, so, vas, zs, ik, ks, oü, tü, uü, mtü, fie, uab, ab, mb, iį, llc, jsc, kub, fia, tub, a.s., s.r.o., szčo, d.o.o., d.d., s.p., k.d., akciju sabiedrība, sabiedrība ar ierobežotu atbildību, individuālais komersants, limited liability company, osaühing, uždaroji akcinė bendrovė, akcinė bendrovė, mažoji bendrija, aktsiaselts, füüsilisest isikust ettevõtja, gmbh, ltd, llp, inc, s.r.l., s.a., b.v., īpašnieku koorperatīvā sabiedrība, OOO, UADBB, zvērinātu advokātu birojs, open joint-stock company, LLP, PLC, PSC, ZAO, S.L., CO, AG, CORP, JSC, OJSC, SAS, SAP, PJSC, AG, IPAS, S.R.O., zvērināts advokāts;
- Changing diacritics/accents as part of normalisation process as per the <u>Unicode</u> standard. This process returns one binary representation when given any of the equivalent binary representations of a character.

3.2. Matching process

The IVS performs matching of an IBAN in combination with the name or the identifier indicated in the IVS VOP request message or the EPC VOP request message against the data for the respective IBAN provided by an IVS user to the IVS in the form of an IVS VOP response message or via the IVS database, depending on the option chosen by the IVS user. The IVS user may provide the IVS with as many payee names or identifiers (for legal persons) matching the particular IBAN as he deems necessary. If an IVS user supports the verification of a legal person's IBAN against the identifier, it shall provide information on accepted identifier types to Latvijas Banka in the Static Data Registration Form. Latvijas Banka shall enter respective changes in EDS on behalf of the IVS user, thereby informing the Requesting PSPs of this option. Where the IVS receives incoming EPC VOP request message or IVS VOP request message with an identifier addressed to an IVS user which has not marked particular identifier type in the Static Data Registration Form, the IVS shall reject such a message.

If an IVS user selects Option 2 and opts to cache the payee data provided for the respective IBAN in response to the first incoming VOP request of the day, subsequent VOP requests will not be routed to the IVS user until 23:59 UTC.

3.3. Match

The following scenario will be considered as a Match by the IVS.

The name of the payee in the VOP request after pre-processing and normalisation (in the unstructured name string) must exactly match (i.e. no deviation at all) at least one record corresponding to the respective IBAN provided by the IVS user.

If any deviation is detected, the IVS performs analysis to decide whether it can be treated as a Close Match.

3.4. Close Match

To account for minor typos or variations while still ensuring a high level of accuracy in the matching process, the IVS will accept the following inconsistencies detected during the matching process and treat them as a Close Match:

- no more than two spelling mistakes in the name string are detected during applying the Levenshtein distance algorithm;
- two letters in the name string have been inverted.

The Close Match scenario is not possible for the IBAN combination with the identifier.

Along with the Close Match response, the IVS shall provide the name of the payee as provided by the IVS user. Where the IVS user has listed several names corresponding to the respective IBAN, the IVS shall indicate the one which generated the Close Match result. As soon as the Close Match is identified for one of the names provided, matching process stops and a VOP response is generated, i.e. no matching of remaining records is performed.

For example, when the IVS receives a VOP request with the name 'T Kanliņš", it compares this name to the list provided by the IVS user, checking each entry individually. As soon as either "Match" or "Close Match" is identified, the IVS stops matching process:

Name in the IVS database	Matching is performed	Result	Name added to the Close Match response
Talis Kalnins	Yes	No Match	-
Kalnins Talis	Yes	No Match	
Tālis Kalniņš	Yes	No Match	
Kalniņš Tālis	Yes	No Match	
T Kalnins	Yes	Close Match	T Kalnins
Kalnins T	No		
T Kalniņš	No		
Kalniņš T	No		

It is recommended to include in an IVS VOP response message and in the IVS database the name of the payee without diacritic marks to ensure that only characters stated in Paragraph 5.1 herein are used in the Close Match responses generated by the IVS based on the payee name data provided by an IVS user to the IVS.

3.5. No Match

Situation whereby the matching result meets neither the Match, nor the Close Match scenarios is treated as the No Match.

4. EPC Directory Service (the EDS)

The EDS stores and maintains all operational data about the VOP Scheme participants.

The IVS user is required to store the local copy of the EDS and, before sending an IVS VOP request message, must verify the Responding PSP's participation in the VOP Scheme. If an IVS user plans to provide an option to verify an IBAN against payee's identifier, it must first check the EDS to confirm whether the Responding PSP supports this option and which identifier's types are valid for verification.

The IVS shall send EDS local file data to IVS users via RabbitMQ on a daily basis in json format. File name EDS-VOP-Vn-F-YYYY-MM-DD-JSON.gz in the FileName parameter consists of the following elements:

No	Position	Symbols	Description
1.	1-8	EDS-VOP-	Constant code indicating the name of the file
2.	9-11	Vn-	Version number, where "V" is a constant code and "n" – is variable figure indicating the number of the version
3.	12-13	F-	Constant code indicating that this is a full version of the file
4.	14-24	YYYY-MM-DD-	The publication date
5.	25-28	JSON	Constant code indicating format of the file
6.			

Specifications and examples of the EDS local file are available <u>at the EPC webpage</u>. For outgoing EPC VOP request messages, the IVS will use the EDS to retrieve the routing data required to send the EPC VOP request message to the Responding PSP. For incoming EPC VOP request messages, the IVS will use the EDS to verify the Requesting PSP's participation in the VOP Scheme.

5. Message and file structure

5.1. General instructions for generating messages and files

The IVS user and the IVS exchange data based on ISO standards applied in a RESTful JSON format. Every message is validated against the schema for the IVS published at <u>Latvijas Banka's website</u>. If the validation fails, the IVS user receives an IVS database management status message message, providing details about the error.

According to <u>Verification Of Payee API Specifications</u>, the character set for parameters transported in HTTP bodies is UTF-8 encoded.

IVS users shall accept at least the following set of UTF-8 characters:

- capital letters of the Latin alphabet (from A to Z);
- small letters of the Latin alphabet (from a to z);
- digits;
- characters '/', '-', '?', ':', '(', ')', '.', ',', "", '+';
- space.

The IVS transmits all UTF-8 characters without verifying which sets of characters are supported by each participant. An IVS user is allowed to reject requests where the characters not listed in this Paragraph have been used, if an IVS user has not agreed to their processing. The IVS transmits all UTF-8 characters when provides the Close Match response on behalf of an IVS user utilizing Option 2 and Option 3. In these cases, the IVS indicates the name that generated the Close Match result exactly as it appears in the list provided by the IVS user, including special characters and diacritic marks, without verifying whether the Requesting PSP supports such characters.

5.2. Messages and files exchanged with the IVS depending on the option chosen by the IVS user

Message/file name	Option 1 Routing only	Option 2 Routing and matching based on the immediate response from the IVS user	Option 3 Routing and Matching based on IVS database
Messages			
Outgoing IVS VOP request message	X	X	X
<u>Incoming IVS VOP response message</u>	X	X	X
Incoming IVS VOP request message	X	X	-
Outgoing IVS VOP response message	X	X	-
Outgoing IVS VOP response message	-	X	-
with data for matching			
New IVS database record submission	-	-	X
message (outgoing)			
IVS database record removal request	-	-	X
message (outgoing)			
IVS database management status	-	-	X
message (incoming)			
Files			
IVS database (outgoing)	-		X
IVS report (incoming)	X	X	X
EDS local file (incoming)	X	X	X

5.3. Outgoing IVS VOP request message (relevant for all IVS users) Incoming IVS VOP request message (relevant for Option 1 and Option 2 users)

Header

Attribute	Type	Status	Description The Requesting PSP's identifier of the IVS VOP Request	
X-Request-ID	UUID	M		
X-Request-Timestamp ISODateTime M Time Stamp of the IVS VOP Reque		M	Time Stamp of the IVS VOP Request	

Body

Attribute	Type	Status	Description	
party	Set of elements	M	Identification of the payee. According to EPC VOP API Specifications:	
			1) For a natural person – combination of name and IBAN shall be indicated;	
			2) For a legal entity – combination of name and IBAN or combination of identifier and IBAN shall be	
			indicated	
+ name	140x	{Or	Name of the payee. Mandatory for natural person	
+ identification	Set of elements	Or}	Identifier of the payee. Can be used for identification of a legal entity and only when Responding PSP supports this data element in its system, according to EDS data. Cannot be used for identification of a natural person	
++ organisationId	Set of elements	M	Legal entity identifier	
+++ lei	LEI	{Or	LEI code. According to EPC VOP API Specifications, cannot be used at the same time as <anybic> or <others></others></anybic>	
+++ anyBIC	BICFI	Or BIC code. According to EPC VOP API Specifications, cannot be used at the same time or BIC code. According to EPC VOP API Specifications, cannot be used at the same time org/10.1007/journal.com/		
+++ others	Set of elements Or}		Other type of identification. According to EPC VOP API Specifications, cannot be used at the same t as <lei> or <anybic>. If this type of identification is chosen, the use of either <schemenamecode> of eschemeNameProprietary is mandatory</schemenamecode></anybic></lei>	
++++ identification	256x	M	Identifier	
++++ schemeNameCode	Code	{Or	Only ISO 20022 ExternalOrganisationIdentification1Code codes are allowed. Cannot be used at the same time as <prtry></prtry>	
++++ schemeNameProprietary	35x	Or}	Cannot be used at the same time as <cd></cd>	
++++ issuer	35x	О	Entity that assigns the identification	
partyAccount	Set of elements	M	Account of the payee	
+ iban	IBAN	M	Account of the payee in IBAN format	
partyAgent	Set of elements	M	Identification of the Responding PSP	
+ financialInstitutionId	Set of elements	lements M Financial institution identification		
++ bicfi	BICFI	M	BIC code	
unstructuredRemittanceInformation 140x O Additional information about the account.		Additional information about the account.		
requestingAgent	Set of elements M Identification of the Requesting PSP			
+ financialInstitutionId	Set of elements	ts M Financial institution identification		
++ bicfi	BICFI	M	BIC code	

5.4. Incoming IVS VOP response message (relevant for all IVS users)

Outgoing IVS VOP response message (relevant for Option 1 users and for Option 2 users in case of NOAP response)

Header

Attribute	Type	Status	Description	
X-Request-ID	UUID	M	The Requesting PSP's identifier of the IVS VOP Request	
X-Response-Timestamp ISODateTime M		M	Time Stamp of the VOP Response	

Body in case request has reached the Responding PSP and was successfully processed

Attribute	Type	Status	Description		
partyNameMatch	Code	{Or	This attribute is used when responding to an IVS request message containing a combination of a name and an IBAN. Only following Party Name Match Codes are allowed:		
			Code Description		
			MTCH Match		
			NMTC No Match		
			CMTC Close Match		
			NOAP Verification check is not possible/applicable for the responding application for any reason		
			According to EPC VOP API Specifications, cannot be used at the same time as <partyidmatch>.</partyidmatch>		
partyIdMatch	Set of elements	Or}	This attribute is used when responding to an IVS request message containing a combination of an identifier and an IBAN. Only following Party Identification Match Codes are allowed: Code Description		
			Code Description MTCH Match		
			NMTC No Match		
			NOAP Identification code is not supported/known by the Responding PSP or verification check is not possible/applicable. According to EPC VOP API Specifications, this code has to be used with an HTTP 200 response when the identification code is supported at the EDS level but is not available for the payee concerned. (ii) if the identification code is not supported at the EDS level, then a HTTP 400 error (bad request) code response should be used.		
			According to EPC VOP API Specifications, cannot be used at the same time as <partynamematch>.</partynamematch>		
matchedName	140x	С	Mandatory when code "CMTC" is indicated in the <partynamematch> field. Not allowed in other cases.</partynamematch>		

This message body is used when a VOP request has either not reached the Responding PSP or was rejected prior to the VOP check. (sent only by the IVS)

Attribute	Type	Status	Descript	Description		
status	3n	M	Only following Error Message Codes are allowed:			
			Code Name Description		Description	
			400	Bad Request	Validation error occurred	
			401	Unauthorized	The Requesting's PSP is not correctly authorized to perform the request	
			500	Internal Server Error	The server encountered an unexpected condition which prevented it from fulfilling the request. This error code is reported to the IVS user in cases when request routed by the IVS service failed on Responding PSP side.	
details	500x	О	Error description. When message is not generated by the IVS but received in response to the VOP request, IVS forwards error details as received from the Responding PSP			

5.5. Outgoing IVS VOP response message with data for matching (relevant for Option 2 users)

Header

Attribute	Type	Status	Description
X-Request-ID	UUID	M	The Requesting PSP's identifier of the VOP Request
X-Response-Timestamp	ISODateTime	M	Time Stamp of the VOP Response

Attribute	Type	Status	Description	
partyNameMatch	Code	{Or	Mandatory when responding to an IVS VOP request message containing a combination of a name and an IBAN. Cannot be used at the same time as <partyidmatch>. Only following Party Name Match Code is allowed:</partyidmatch>	
			Code Description	
			VALIDATION Names for matching at the IVS level are provided in the set of elements <pre></pre>	
partyldMatch Set of element		Or}	Mandatory when responding to an IVS VOP request message containing a combination of an identifier and an IBAN. Cannot be used at the same time as <partynamematch>. Only following Party Identification Match Code is allowed:</partynamematch>	
			Code Description	
			VALIDATION Identification code for matching at the IVS level is provided in the set of elements <pre><pre><pre></pre> </pre> <pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre></pre>	
partyNames	Set of elements	{Or	Mandatory when code "VALIDATION" is indicated in the <pre><pre><pre><pre></pre></pre></pre></pre>	
+ name	140x	M	Name, which matches IBAN in the VOP request. As many as required occurrences of this field are allowed.	
partyId	Set of elements	Or}	Mandatory when code "VALIDATION" is indicated in the <pre><pre><pre><pre></pre></pre></pre></pre>	
+ organisationId	Set of elements	M	Legal entity identifier. As many as required occurrences of this field are allowed.	
++ lei	LEI	{Or	LEI code. According to EPC VOP API Specifications, cannot be used at the same time as <anybic> or <others></others></anybic>	
++ anyBIC	BICFI	Or	BIC code. According to EPC VOP API Specifications, cannot be used at the same time as <lei> or <others></others></lei>	
++ others	Set of elements	Or}	Other type of identification. According to EPC VOP API Specifications, cannot be used at the same time as <lei>or <anybic>. If this type of identification is chosen, the use of either <schemenamecode> or <schemenameproprietary> is mandatory</schemenameproprietary></schemenamecode></anybic></lei>	
+++ identification	256x	M	Identifier	
+++ schemeNameCode	Code	{Or	Only ISO 20022 ExternalOrganisationIdentification1Code codes are allowed. Cannot be used at the same time as <pre><pre><pre></pre></pre></pre>	
+++ schemeNameProprietary	35x	Or}	Cannot be used at the same time as <cd></cd>	
+++ issuer	35x	О	Entity that assigns the identification	

5.6. The IVS database management (relevant for Option 3 users)

Option 3 foresee that validation and matching takes place at the IVS level based on the IVS database provided and regularly updated by the IVS user. An IVS user shall ensure that the information provided to the IVS is accurate and true and that the update or deletion of information from the IVS database is requested in a timely manner. Following messages are used to manage database records:

Action	Message/file sent by the IVS user	Response message sent by the IVS service	
Provide or amend the full IVS database	IVS database file	IVS database management status message	
Create new record or amend an existing record		IVS database management status message	
Remove an obsolete record	IVS database record removal request	IVS database management status message	
remove an obsolete record	message	1 v 5 database management status message	

5.6.1 IVS database file

The full IVS database file may only be replaced as agreed upon with Latvijas Banka and at the time instructed by Latvijas Banka. Regular upload of the full database shall not be performed by the IVS user.

Header

Attribute	Туре	Status	Description
X-Request-ID	UUID	M	IVS user's identifier of the file
X-Request-Timestamp	ISODateTime	M	Sending Time Stamp
FileName	35x	M	The name of the file with the following name structure:
			IVS_DB_ <bic6>_YYYYMMDD _<segmentnumber>.json.gz</segmentnumber></bic6>
			For example:
			IVS_DB_LACBLV_20250506_1.json.gz
SegmentCount 1x		M	The total number of file segments. "1" shall be indicated if the IVS database has $<$ or $= 100 000$ records. If the
			IVS database has more than 100 000 records and divided into several segments, the total number of segments
			shall be indicated.
SegmentNumber	1x	M	The current message sequence number."1" shall be indicated if the IVS database has < or = 100 000 records. If
			the IVS database has more than 100 000 records and divided into several segments, the current segment
			sequence number shall be indicated.

 J			
4 4 47 4	an.		
Atribute	Type	Status	Description
i i i i i i i i i i i i i i i i i i i	1 J P C	Status	Description

bicfi	BICFI	М	BIC11 of the IVS user
items	Set of elements	171	List of data to be used by the IVS for validation and matching purposes of VOP requests addressed to the IVS
items	Set of elements		user. Number of records in the IVS database is unlimited
+ iban	IBAN	M	Account number in IBAN format
		+	
+ names	Set of elements	M	List of names corresponding to the IBAN
++ name	140x	M	Name corresponding to the IBAN. As many occurrences as required are allowed
+ partyId	Set of elements	C	Can be used only when code "O" is indicated in the <itemtype> field and is mandatory in case the IVS user</itemtype>
			supports the verification of IBAN against the identifier.
++ organisationId	Set of elements	M	Legal entity identifier corresponding to the IBAN. As many occurrences as required are allowed
+++ lei	LEI	{Or	LEI code. According to EPC VOP API Specifications, cannot be used at the same time as <anybic> or <others></others></anybic>
+++ anyBIC	BICFI	Or	BIC code. According to EPC VOP API Specifications, cannot be used at the same time as <lei> or <others></others></lei>
+++ others	Set of elements	Or}	Other type of identification. According to EPC VOP API Specifications, cannot be used at the same time as
			<lei> or <anybic>. If this type of identification is chosen, the use of either <schemenamecode> or</schemenamecode></anybic></lei>
			<schemenameproprietary> is mandatory</schemenameproprietary>
++++ identification	256x	M	Identifier
+++ +schemeNameCode	Code	{Or	Only ISO 20022 ExternalOrganisationIdentification1Code codes are allowed. Cannot be used at the same time
			as <prtry></prtry>
++++	35x	Or}	Cannot be used at the same time as <cd></cd>
schemeNameProprietary		,	
++++ issuer	35x	О	Entity that assigns the identification
+ itemType	Code	M	Only following codes are allowed:
			- "P" shall be indicated if a record relates to a natural person
			- "O" shall be indicated if a record related to a legal entity
itemsCount	9n	M	Number of items included in the message

5.6.2 New IVS database record submission message

Header

Attribute	Type	Status	Description
X-Request-ID	UUID	M	IVS user's identifier of the message
X-Request-Timestamp	ISODateTime	M	Sending Time Stamp

Atribute	Туре	Statu	Description
	G 1	S	
type	Code	M	Only code "ADD" is allowed
bicfi	BICFI	M	BIC11 of the IVS user
iban	IBAN	M	Account number in IBAN format
+ names	Set of elements	M	List of names corresponding to the IBAN
++ name	140x	M	Name corresponding to the IBAN. As many occurrences as required are allowed
+ partyId	Set of elements	С	Can be used only when code "O" is indicated in the <itemtype> field and is mandatory in case the IVS user</itemtype>
			supports the verification of account number against the identifier.
++ organisationId	Set of elements	M	Legal entity identifier corresponding to the IBAN. As many occurrences as required are allowed
+++ lei	LEI	{Or	LEI code. According to EPC VOP API Specifications, cannot be used at the same time as <anybic> or</anybic>
			<others></others>
+++ anyBIC	BICFI	Or	BIC code. According to EPC VOP API Specifications, cannot be used at the same time as <lei> or <others></others></lei>
+++ others	Set of elements	Or}	Other type of identification. According to EPC VOP API Specifications, cannot be used at the same time as
			<lei> or <anybic>. If this type of identification is chosen, the use of either <schemenamecode> or</schemenamecode></anybic></lei>
			<schemenameproprietary> is mandatory</schemenameproprietary>
++++ identification	256x	M	Identifier
++++ schemeNameCode	Code	{Or	Only ISO 20022 ExternalOrganisationIdentification1 Code codes are allowed. Cannot be used at the same time
			as <prtry></prtry>
++++ schemeNameProprietary	35x	Or}	Cannot be used at the same time as <cd></cd>
++++ issuer	35x	0	Entity that assigns the identification
+ itemType	Code	M	Only following codes are allowed:
			- "P" shall be indicated if a record relates to a natural person
			- "O" shall be indicated if a record related to a legal entity

5.6.3 IVS database record removal request message

Header

Attribute	Type	Status	Description
X-Request-ID	UUID	M	IVS user's identifier of the message
X-Request-Timestamp	ISODateTime	M	Sending Time Stamp

Atribute	Туре	Status	Description
type	Code	M	Only code "DEL" is allowed
bicfi	BICFI	M	BIC11 of the IVS user
iban	IBAN	M	Account number in IBAN format

5.6.4 IVS database management status message

An IVS database management status message is sent only when the processing of the respective incoming message or file is completed. Where the file consists of several segments, the message is sent when the processing of the last segment is completed.

Header

Attribute	Type	Status	Description	
X-Request-ID	UUID	M	Identifier of the message or file this message responds to	
X-Response-Timestamp	ISODateTime	M	Sending Time Stamp	

Attribute	Type	Status	Description	
status	Code	M	Only following codes are allowed:	
			Code Description	
			ACCP Request accepted	
			RJCT Request rejected	
details	500x	С	Mandatory when code "RJCT" is used in <status> field</status>	

5.7. IVS report

The IVS report shall be provided by the IVS to the IVS user after 00:00 (UTC time).

Header

Attribute	Type	Status	Description
X-Request-ID	UUID	M	The IVS's identifier of the file
X-Request-Timestamp	ISODateTime	M	Sending Time Stamp
FileName	35x	M	The name of the file with the following name structure:
			IVS_REPORT_ <bic6>_YYYYMMDD.json.gz</bic6>
			For example:
			IVS_REPORT_LACBLV_20250506.json.gz
SegmentCount	1x	M	The total number of file segments. "1" shall be indicated.
SegmentNumber	1x	M	The current message sequence number."1" shall be indicated.

Atribute	Туре	Status	Description
bicfi	BICFI	M	BIC11 of the IVS user
CreDtTm	ISODateTime	M	The IVS Report creation Time Stamp
FromDtTm	ISODateTime	M	Date and time when reporting period starts
ToDtTm	ISODateTime	M	Date and time when reporting period ends
SentMTCHItemsCount	9n	M	Number of IVS VOP requests sent by the IVS user during the reporting period that resulted in a "Match" response
SentCMTCItemsCount	9n	M	Number of IVS VOP requests sent by the IVS user during the reporting period that resulted in a "Close Match"
SentNMTCItemsCount	9n	M	response Number of IVS VOP requests sent by the IVS user during the reporting period that resulted in a "No Match" response
SentNOAPItemsCount	9n	M	Number of IVS VOP requests sent by the IVS user during the reporting period that resulted in a "Verification check is not possible" response
SentERRItemsCount	9n	M	Number of IVS VOP requests sent by the IVS user during the reporting period that were rejected prior to the VOP check
SentNRSPItemsCount	9n	M	Number of IVS VOP requests sent by the IVS user during the reporting period that received no response
RecMTCHItemsCount	9n	M	Number of VOP requests received by the IVS user or by the IVS on behalf of the IVS user during the reporting period that resulted in a "Match" response
RecCMTCItemsCount	9n	M	Number of VOP requests received by the IVS user or by the IVS on behalf of the IVS user during the reporting period that resulted in a "Close Match" response
RecNMTCItemsCount	9n	M	Number of VOP requests received by the IVS user or by the IVS on behalf of the IVS user during the reporting period that resulted in a "No Match" response
RecNOAPItemsCount	9n	M	Number of VOP requests received by the IVS user or by the IVS on behalf of the IVS user during the reporting period that resulted in a "Verification check is not possible" response
RecERRItemsCount	9n	M	Number of VOP requests during the reporting period that were rejected prior to the VOP check

RecNRSPItemsCount	9n	M	Number of VOP requests during the reporting period that received no response
RecNMTCItems	9n	С	Details of VOP requests received by the IVS user or by the IVS on behalf of the IVS user during the reporting
			period that resulted in a "No Match" response. As many occurrences as required are allowed
+ party	Set of elements		
+ name	140x	M	Name corresponding to the IBAN
+ partyAccount	Set of elements	M	Account of the payee
++ iban	IBAN	M	Account of the payee in IBAN format
+ partyAgent	Set of elements	M	Identification of the Responding PSP
++ financialInstitutionId	Set of elements	M	Financial institution identification
+++ bicfi	BICFI	M	BIC code
+	140x	O	Additional information about the account
unstructuredRemittanceInform			
ation			
+ requestingAgent	Set of elements	M	Identification of the Requesting PSP
++ financialInstitutionId	Set of elements	M	Financial institution identification
+++ bicfi	BICFI	M	BIC code

6. IVS Information Service

Latvijas Banka provides IVS users with access to the IVS Information Service graphical user interface (GUI) accessed via https://ivsdata-test.bank.lv/ in the test environment and via https://ivsdata.bank.lv/ in the production environment. GUI may be used for reconciliation and investigation purposes.

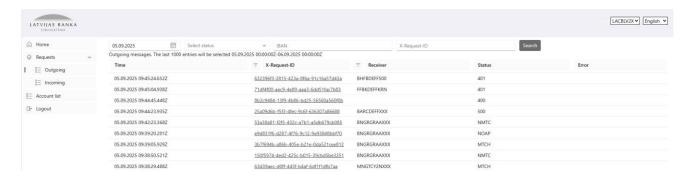
If GUI user is connected to several BICs, it may change the BIC on the right corner of the screen, to access VOP data related to the respective BIC.



Home section provides information on the number of IVS VOP requests sent and received as of 00:00 UTC time on the day when a user accesses the screen.



In the "Requests" section data on individual VOP requests is available. Search may be performed by date, status, transaction identifier and IBAN. Individual VOP request information is available for 14 months following the date of request.



IVS users using Option 3 in the section "Account List" may check the total number of records registered in the IVS database for the respective BIC. Additionally, GUI user can retrieve information about individual records in the IVS database by performing a search using the IBAN.

