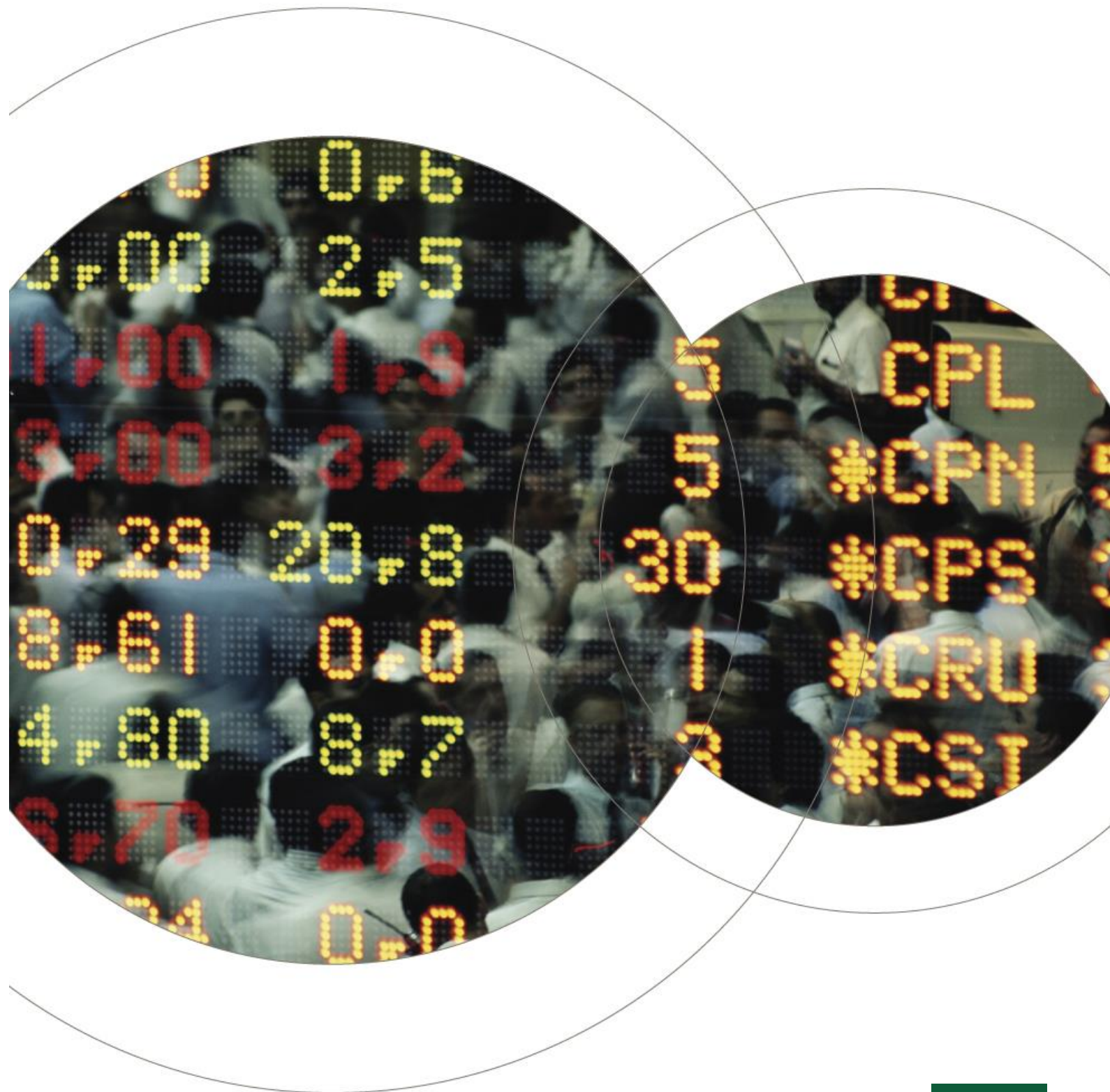


Account Verification Service
Real time host-to-host user
manual



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Account Verification Service host-to-host

User manual

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Appendix A

Definition of terms/abbreviations/acronyms




Term/Abbreviation/Acronym	Definition
ACK	A control code that acknowledges the error-free transmission of previously sent data.
ACK message file	An acknowledgement message file sent to or received from another system. It indicates that the file sent or received was valid for processing.
Active account	The state of an account when it shows frequent or regular client-initiated credit/debit transactions.
Account Verification Service (AVS)	A service that verifies that a current and/or savings account belongs to the correct individual/company before paying into or collecting from the account.
Account Verification Service near-real time (AVS batch)	A service that verifies that a current and/or savings account belongs to the correct individual/company before paying into or collecting from the account in near-real time (up to 2,5 hours).
Account Verification Service real time (AVS-R)	A service that verifies that a current and/or savings account belongs to the correct individual/company before paying into or collecting from the account in real time.
BankServ	The switch between the originating bank (ie the bank that sent an AVS request) and the responding bank (ie the bank that responds to the verification request).
Byte	A computer storage unit/computer memory needed to store a single character.
CMA countries	Countries situated in the common monetary area (CMA).
Connect:Direct (C:D)	A file transfer mechanism that sends and receives data between two line-of-business (LOB) systems securely.
Comma-separated values (CSV) file	A CSV file consists of any number of records, separated by line breaks of some kind. Each record consists of fields separated by a character or string, most commonly a comma or tab.
Corporate Payment System (CPS)	Nedbank's high- and low-volume transacting service that enables an organisation to make payments to and collections from any participating banks in South Africa and the CMA countries.
Cutoff time	The deadline or latest time by which you must authorise a transaction for processing during the usual timeframe. For example, if you want a payment to be processed with today's date, you must authorise the payment before the normal daily cutoff times. Cutoff times are different for the different types of services provided and are specified in this manual.
Dormant account	An account that has had no transactional activity in the past three months.
DMZ	Demilitarised zone which functions as a buffer zone between the organisation's network and the public internet.
Header	The first record in the CSV files preceding the detail record. It contains information common to the file.
Host-to-host (as in host-to-host environment)	A secure method of direct data interchanges between the organisation's host (mainframe) system and Nedbank's host (mainframe) system.
IDE	Integrated Development Environment
Lead time	The minimum time required to effect a transaction.
Line-of-business (LOB) system	A core system run and maintained by the organisation to process generic and financial transactions.
Middleware	The software and hardware through which the frontend systems interface with the host system.
MIS	Management Information System.
MQ	An IBM message protocol that is a secure Nedbank-approved method of communication between Nedbank and the organisation's LOB system.

NACK	A control code that communicates errors detected in transmitted data. The receiving system sends a negative acknowledgement (NACK) to the organisation.
NACK message file	A non-acknowledged message file sent to or received from another system. It indicates that the file sent or received was invalid for processing.
NetBank Business	Nedbank's internet banking platform for its business and corporate clients.
Organisation	For the purposes of this manual 'organisation' refers to an AVS user or client.
Quality assurance (QA)	A 'mirror' of the production environment used for integrated system testing. It is the last step in the testing cycle before promoting any applications into the production environment.
Real-time payment	A payment that is processed immediately.
Service level agreement (SLA)	The participating banks' agreed maximum response time, ie not exceeding 2,5 hours for near-real-time and 60 seconds for real-time transactions, subject to the cut-off times specified in the manual.
Trailer	The last record in the CSV files succeeding the detail record. It contains information common to the file.
Us-on-them	A transaction verification request originating from a Nedbank account directed to another financial institution's account.
Us-on-us	A transaction verification request directed from one Nedbank account to another Nedbank account.
Web service	A way of communication between two electronic devices over the worldwide web.
Web services description language (WSDL) file	This provides a machine-readable description of how the service can be called, what parameters it expects and what data structures it returns. Therefore, it serves a purpose that corresponds generally with a method signature in a programming language.
XSD (XML Schema Definition) file	An Extensible Markup Language (XML) Schema Definition (XSD) file is used to define the contents of the XML output file generated from a test run. The following code fragment shows the contents of an example XSD file: <pre><BankEnquiryRq> <BankIdentifier>1</BankIdentifier> </BankEnquiryRq></pre>

Using the manual

This manual describes the high-level and technical processes involved when setting up the real-time functionality for the AVS host-to-host environment between Nedbank and the organisation.

Each section of this manual uses icons to highlight information items or tasks that must be completed by the organisation, Nedbank or both. These icons are depicted and defined below:

Icon	Description
	Client
	Nedbank
	Critical point/Important item to remember

1 Introduction

Nedbank has an Account Verification Service (AVS), which can be done in:

- near-real time; or
- real time.

These are managed in host-to-host environments and on NetBank Business. This user manual is aimed at new and existing clients who would like to use AVS-R functionality in a host-to-host environment. The manual explains the service and its different functionalities. It provides documented processes that take you through the steps when setting up, testing and using the real-time functionality in the host-to-host environment.

2 Overview

2.1 What is Account Verification Service?

AVS is a solution that allows you to verify that a current and/or savings account belongs to the correct individual/company and provides the organisation with other key information shown in 2.2. This confirmation ensures that the correct account will be debited or credited. AVS is an industry-wide solution that allows the organisation to verify account details across participating banks shown in 3.2.1.

2.2 How does Account Verification Service work?

AVS is offered through NetBank Business or a direct host-to-host connection between the organisation and Nedbank's systems. The receiving bank will verify the account data that the organisation submits against the bank's FICA records.

2.2.1 Fields the organisation must submit are:

- Mandatory fields
 - Account number
 - Branch code (universal branch codes are preferable – refer to 3.2)
 - Identity/Company registration/Passport number
 - Identification type
- Optional fields
 - Account type (current or savings account)
 - Surname/Company name/Trust name (maximum 60 characters)
 - Initials (only applicable for verification of individual account)
 - Email address
 - Cellphone number
 - Subbilling ID
 - Client user reference 1
 - Client user reference 2

2.2.2 Fields for which the bank will provide a response:

- Has the account been found at the participating bank (determined by the branch code submitted)?
- Does the identity number/company registration number submitted match the bank records for this account?
- Does the data submitted regarding initials match the bank records for this account? (This field is not verified for juristic accounts.)
- Does the surname/company name submitted match the bank records for this account?
- Is the account open?
- Is the account dormant? (Nedbank accounts only.)
- Has the account been open for more than three months?
- Does this account accept debits?
- Does this account accept credits?
- Does the account type match?
- Does the email address match?

- Does the cellphone number match?

2.2.3 Possible bank responses for each field

- **Y** – Yes: The bank confirms that the field value is true.
- **N** – No: The bank confirms that the field value is false.
- **U** – Unprocessed: The bank did not process this field.
 - If a '**U**' is returned in every field, it means that the participating bank did not meet the SLA. The client is not charged for this verification and has the option to resubmit.
 - If you receive a '**Y**' response in the first field (refer to 2.2.2) and a '**U**' is returned in any of the other fields, it means that the participating bank does not verify that specific field.
 - If you receive an '**N**' or '**F**' response in the first field (refer to 2.2.2), a '**U**' response will be populated in all the other fields (eg invalid account number).
- A '**U**' is always returned in a response file in the complete match field for AVS-R. It is up to the client to define what a complete match on his LOB system is.
- **F** – Failed prevalidation: You will receive an '**F**' response in the first field (refer to 2.2.2) if you submit an invalid branch code and/or an account number that fails the Check Digit Validation (CDV) routine check. An invalid branch code can either be a non-participating bank's branch code or a branch code that is not registered with BankServ Africa for the AVS product. An '**F**' response will also be returned if any invalid characters are submitted.

2.3 What are the features of Account Verification Service?

2.3.1 Account Verification Service real time

- The maximum response time is 45 seconds from the time the transaction is received by Nedbank.
- The service is available on a direct host connection to your LOB system using web services.
- The service is available seven days a week from 03:30 to 24:00 (refer to 4).

2.3.2 Other features

- You can opt for subbilling IDs. This enables you to accumulate amounts and bill your organisation for each group, department or area.
- You have the option to insert your own client user references (eg policy number) for each record when submitting an AVS file. The client user references will be returned in the response file for each record.

2.4 Benefits for your business

The key benefit of the AVS product is risk reduction, both on receivables and payments.

2.4.1 Receivables

By verifying that the accountholder and account details match upfront you significantly reduce the risk of processing a debit order against an incorrect account due to the following:

- The accountholder having provided you with incorrect account details, which could result in unpaids and associated charges.
- The accountholder having fraudulently provided you with incorrect account details, which could result in a loss.

2.4.2 Payments

By verifying that the accountholder and account details match upfront you will significantly reduce the risk of making a payment against an incorrect account due to the following:

- The accountholder unwittingly provided you with incorrect account details.
- You processed payment(s) against the incorrect account by entering the wrong account details.
- A fraudster provided you with incorrect account details for processing a payment.

2.5 Pricing

Depending on the delivery protocol selected and infrastructure required, a once-off onboarding fee may apply for host connections. No onboarding fee is applicable to AVS on NBB. The actual fee charged will have to be discussed with your relationship manager/banker/transactional banker. This section will provide you with only an overview of how the fee will be applied.

2.5.1 A fee will be charged for each of the following

- Successful verification – It could either be a positive or negative response, ie the account does or does not match.
- AVS request that failed validation – An AVS request will fail validation if an incorrect branch code (ie not registered with BankServ) or a branch code of a non-participating bank is submitted.
- AVS request that failed prevalidation – An AVS request will fail prevalidation if an incorrect branch code (ie not registered with BankServ) or a branch code of a non-participating bank is submitted.

You will not be charged for unsuccessful verifications, ie verifications that do not meet the agreed SLAs. The response for unsuccessful verifications will be indicated by a 'U' (unprocessed) in every field for that record.

2.5.2 The 'per verification fee' is based on the following:

- Tiered pricing, ie the higher the volume of verifications requested for each month, the lower the 'per verification fee'.
- The fee will differ based on the type of bank account that is going to be verified, ie a Nedbank account (us-on-us) versus a bank account with another participating bank (us-on-them).
- For all failed prevalidation responses, a fee will be billed.

Nedbank AVS has the ability to accumulate amounts and bill the organisation for each group, department or area specified (subbilling ID) by the organisation. For example, various departments or branches within the organisation can submit verification requests under one profile number and receive a statement that shows the cost breakdown for each department or branch.



Note: Real-time account verification requests may be charged at a different rate than AVS near-real-time requests.

3 Data verified by the Account Verification Service product

3.1 Verify and validate specific data fields

3.1.1 The following data fields can be verified for Nedbank accounts only:

- Dormancy status of the account

3.2 Data verified by receiving/participating banks

3.2.1 Participating banks for Account Verification Service real time

Participating bank	Valid branch code range	Universal branch code (preferable)
Nedbank	100 000 to 199 999	198765
Absa	630 000 to 659 999 300 000 to 349 999 500 000 to 569 999 420 000 to 429 999	632005

Capitec	470 000 to 470 999	470010
First National Bank	200 000 to 299 999	250655
Standard Bank*	000 000 to 099 999	051001
African Bank	Not applicable	430000
Sasfin	Not applicable	683000
Investec	580 000 to 580 999	580105
Discovery Bank	679 000 to 679 999	679000
Grindrod Bank	584000	584000
Finbond Mutual Bank	591000	591000
Tyme Bank	678910	678910
Bidvest	462005	462005
Bank Zero	888000	888000

* The Standard Bank 11-digit account number can be verified using only the universal branch code. This is a Standard Bank requirement. The Standard Bank 10-digit account number can be verified using the branch code or the universal branch code.

3.2.2 Data fields verified by participating banks

Field to be verified	Reply	Mandatory/Optional	Absa	Capitec Bank	First National Bank	Nedbank	African Bank	Standard Bank	Sasfin	Investec	Discovery Bank	Grindrod Bank	Finbond Mutual Bank	Tyme Bank
Account found	Y – account found N – account not found U – unprocessed due to SLA exceeded F – failed Nedbank validation	M	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Account open	Y – account is open N – account is not open U – field cannot be checked	M	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Account open length	Y – account is open (> 3 months) N – account is not open (> 3 months) U – field cannot be checked	M	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Account dormancy	Y – account dormant N – account active U – field cannot be checked	O	N	N	N	Y	N	N	N	N	N	N	N	N
Identity number match	Y – there is a match N – there is not a match U – field cannot be checked	M	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Initials match	Y – initials match N – initials do not match U – field cannot be checked	O	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Surname	Y – there is a match	O	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

match for account-holder or name match for company	N – there is not a match U – field cannot be checked														
Account accepts debits	Y – account accepts debits N – account does not accept debits U – field cannot be checked	M	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Account accepts credits	Y – account accepts credits N – account does not accept credits U – field cannot be checked	M	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Account type match	Y – account type matches N – account type does not match U – field cannot be checked	O	N	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y	Y
Email address match	Y – account accepts credits N – account does not accept credits U – field cannot be checked	O	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Cell phone number match	Y – account accepts credits N – account does not accept credits U – field cannot be checked	O	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Cutoff times



The AVS product is offered to clients of Nedbank and participating banks seven days a week (Monday to Sunday). However, due to processing constraints from participating banks, the following cutoff times apply: (This is irrespective of whether these are Nedbank or non-Nedbank accounts.)

- AVS-R requests can only be submitted between 03:30 and 00:00.
- The maximum time for a response is 45 seconds from the time Nedbank receives the request.
- During downtime you will receive a 'U' response and will be required to resubmit the transaction when the system is back up.

4 Technical onboarding process

The table below describes the high-level onboarding process for new organisations.

Steps	Process to follow
1	Nedbank Client Integration Services (CIS) receives a mandate from the sales team to initiate the AVS product.
2	Nedbank schedules a startup meeting with the following attendees: <ul style="list-style-type: none">• The client representative.• The integration manager.• The relationship/business manager. The agenda and aspects to be covered during the meeting: <ul style="list-style-type: none">• High-level requirement.• Identification of all stakeholders –<ul style="list-style-type: none">– Organisation's project manager or single point of contact.– Nedbank's single point of contact, eg integration manager.• Explanation of the business and technical implementation process.• Next steps.
3	Weekly progress meetings are scheduled with the organisation's project manager and Nedbank's client integration manager, as required.
4	Nedbank will arrange an AVS testing schedule session to explain the suggested AVS testing schedule to the organisation and to discuss the implementation plan. The organisation must develop its own test plan and share it with the Nedbank client integration manager.
5	Nedbank confirms the delivery date of the leased line (if applicable) with the organisation.
6	Nedbank confirms when the organisation's development and testing team will be ready to test.
7	Nedbank manages the integration and provides weekly progress reports to all stakeholders.
8	The organisation and Nedbank conclude the required tests and submit the test results for approval.
9	The AVS function is implemented on Nedbank's production platform.
10	The organisation is asked to complete a satisfaction survey.

5 Hardware and software requirements

5.1 Software compatibility

The web service software is compatible with the following platforms and operating systems:

- Z/OS
- Unix
- Linux
- Windows
- HP Non-stop (Tandem)
- Open VMS
- OS/600 Series
- VM/VSE
- Gentran Integration Suite
- Java
- .NET



Note: Contact your CIS manager for detailed web service hardware and software requirements related to your platform or operating system.

5.2 Account Verification Service real time Simple Object Access Protocol web service structure

5.2.1 AVS real time third-party web service contract and layout

- Step 1: Extract the four files below to a folder on your machine.
Step 2: Open your development environment.
Step 3: Initiate the 'Create a web service wizard' (wizard name may be different depending on the development tool you are using).
Step 4: Use the AccountVerification_v4.wsdl as your primary file.



Note: If you experience issues importing the contract into .Net or other languages, try the troubleshooting steps below.

Troubleshooting steps:

- Install SoapUI:
 - Free open-source software is available from SmartBear.com under the 'Product' menu, submenu 'Open Source'. This is a useful tool for testing web services Single Object Access Protocol [(SOAP) +Restful and can present certificates, etc].
- Open SoapUI.
- Save the .xml project to disk.
- Import saved file into SOAPUI (File > Import Project). You should have an AccountVerification3rdParty project in the project tree.
- Expand project so you can see AccountVerificationSoapBinding (for you to call a service that is implemented elsewhere) and MockService1 (mock implementation of the service that you can call for testing consumer side code).
- Right click 'MockService1' and select 'Run Minimised'.
- You now have a mock service running on the following URL: <http://localhost:8080/> that you can call from within Visual Studio or other IDE using <http://localhost:8080/?WSDL>. This URL will also display the WSDL in a web browser.

5.2.2 Enterprise context headers for all messages

The below SOAP header is to be included in all web service calls to the Nedbank AVS-R web service.

Enterprise context headers for all message layouts (request and response)

Field name	Type (min to max length)	Mandatory/Optional	Min occurs	Max occurs	Description	Comment
Process context ID	String (0–36)	O	0	1	This identifier indicates that the request is part of a bigger process. It is a unique ID for each process request and it must be a globally unique identifier (GUID).	Usually populated with a GUID/UUID, used for tracing/tracking.

Execution context ID	String (0–36)	M	1	1	This identifier is uniquely used to identify the request and it must be a GUID.	Usually populated with a GUID/UUID, used for tracing/tracking.
Machine IP address	String (0–20)	M	1	1	This field contains the IP address of the machine.	Source IP address.
User principle name	String (0–32)	M	1	1	This field contains the username that is used to log on to a machine.	Leave blank, will be replaced from your client certificate.
Machine DNS name	String (0–50)	M	1	1	This field contains the full qualified domain name of the machine.	Source machine name.
Channel ID	Long (1–3)	M	1	1	This is the unique identifier for the channel and is used to initiate the request.	Populate as 0, will be replaced from your client certificate.
Parent instrumentation ID	String (0–36)	M	1	1	This is the instrumentation ID of the parent instrumentation entry and it must be a GUID.	Usually populated with a GUID/UUID, used for tracing/tracking.
Child instrumentation ID	String (0–36)	M	1	1	This is the instrumentation ID of the child instrumentation entry and it must be a GUID.	Usually populated with a GUID/UUID, used for tracing/tracking.

Sample Enterprise Context format

```

<ent:EnterpriseContext>
  <ent:ContextInfo>
    <ent:ProcessContextId>?</ent:ProcessContextId>
    <ent:ExecutionContextId>?</ent:ExecutionContextId>
  </ent:ContextInfo>
  <ent:RequestOriginator>
    <ent:MachineIPAddress>?</ent:MachineIPAddress>
    <ent:UserPrincipleName>?</ent:UserPrincipleName>
    <ent:MachineDNSName>?</ent:MachineDNSName>
    <ent:ChannelId>?</ent:ChannelId>
  </ent:RequestOriginator>
  <ent:InstrumentationInfo>
    <ent:ParentInstrumentationId>?</ent:ParentInstrumentationId>
    <ent:ChildInstrumentationId>?</ent:ChildInstrumentationId>
  </ent:InstrumentationInfo>
</ent:EnterpriseContext>

```

5.2.3 Account Verification Service real time bank enquiry layouts (request and response)

This web service operation allows the requester to obtain the details of participating banks. Specifying a bank identifier of 0 will return all banks, while a specific bank code will return only details for the matching bank.

Real-time request message for bank enquiry

Field name	Type (min to max length)	Mandatory/Optional	Min occurs	Max occurs	Description	Comment
Bank identifier	Long (1–5)	M	1	1	Use zero (0) for all banks.	If you provide a 0, all banks details will be provided. Using a specific bank's identifier will return only that bank's details.

Message structure

BankEnquiryRq (BEI-ABEI-BANK-ENQ-RQ) [Aggregate]
BankIdentifier (BEI-ABEI-BANK-ID) [Long (5)]

Sample message in IFX format

```
<BankEnquiryRq>  
  
  <BankIdentifier>0</BankIdentifier>  
  
</BankEnquiryRq>
```

Real-time response message for bank enquiry

Field name	Type	Mandatory/Optional	Min occurs	Max occurs	Description	Comments
Return code	Closed Enum (0–3)	M	1	1	Return code for bank enquiry.	R00 – Successful call. R01 – Technical error. R02 – Business error.
Return description	String (0–100)	M	1	1	Return description.	
Bank list/detail	Aggregate	O	0	50	List of bank details.	
Bank list/detail/identifier	Long (1–5)	M	1	1	The unique ID for the bank.	
Bank list/detail/name	String (0–40)	M	1	1	The bank name.	
Bank list/detail/Accepts	Boolean (true/false)	M	1	1	True/False indicating if	

batch					the bank accepts batch (file) AVS requests.	
Bank list/Bank detail/Accepts real-time	Boolean (true/false)	M	1	1	True/False indicating if the bank accepts real-time (web service) AVS requests.	
Bank list/Bank detail/Universal branch code	Long (1–6)	O	0	1	Universal branch code for this bank, if one is available.	

Message structure

```

BankEnquiryRs (BEO-ABEO-BANK-ENQ-RS) [Aggregate]
  ReturnCode (BEO-ABEO-RETURN-CODE) [Closed Enum(3) ]
  ReturnDescription (BEO-ABEO-RETURN-DESC) [NC-100]
  BankList (BEO-ABEO-BANK-LST) [Aggregate]
    BankDetail (BEO-ABEO-BANK-ITM) [Aggregate minOccurs=0 maxOccurs=50]
      BankIdentifier (BEO-ABEO-BANK-ID) [Long (5)]
      BankName (BEO-ABEO-BANK-NAME) [NC-40]
      AcceptsBatch (BEO-ABEO-ACCEPT-BATCH) [Boolean]
      AcceptsRealtime (BEO-ABEO-ACCEPT-REALTIME) [Boolean]
      UniversalBranchCode (BEO-ABEO-UNIV-BANK-CODE) [Long (6) minOccurs=0 ]

```

Sample message in IFX format

```

<BankEnquiryRs>

  <ReturnCode>R00</ReturnCode>

  <ReturnDescription>Success</ReturnDescription>

  <BankList>

    <BankDetail>

      <BankIdentifier>1</BankIdentifier>

      <BankName>Nedbank</BankName>

      <AcceptsBatch>true</AcceptsBatch>

      <AcceptsRealtime>>false</AcceptsRealtime>

      <UniversalBranchCode>603356</UniversalBranchCode>

    </BankDetail>

  </BankList>

</BankEnquiryRs>

```

5.2.4 AVS-R bank branch enquiry layouts

This web service operation allows the requester to obtain details regarding a specific bank's branches or all branches for all banks. Specifying a bank identifier of 0 and branch code of 0 will return all branches for all banks.

Real-time request message for branch enquiry

Field name	Type (min to max length)	Mandatory/Optional	Min occurs	Max occurs	Description	Comments
Bank identifier	Long (1–5)	M	1	1	Use zero (0) for all banks.	If you specify the bank identifier (and not 0), only the branches for that bank will be returned.
Branch code	Long (1–6)	M	1	1	Bank branch code.	If you specify the bank identifier (and not 0), only the branches matching that identifier will be returned.
Bank branch enquiry continuation value	String (0–20)	M	1	1	Continuation value for bank branch enquiry.	For the initial request specify blank. For subsequent requests specify the continuation value in the response message to get the next page/chunk of results.

Message structure

BankBranchEnquiryRq (BBEI-ABEI-BANK-BRANCH-ENQ-RQ) [Aggregate]
 BankIdentifier (BBEI-ABEI-BANK-ID) [Long(5)]
 BranchCode (BBEI-ABEI-BRANCH-CODE) [Long(6)]
 BankBranchEnquiryContValue (BBEI-ABEI-CONTINUATION-VAL) [NC-20]

Sample message in IFX format

```
<BankBranchEnquiryRq>

  <BankIdentifier>21</BankIdentifier>

  <BranchCode>198765</BranchCode>
```

<BankBranchEnquiryContValue>AKJH786KJG</BankBranchEnquiryContValue>

</BankBranchEnquiryRq>

Real-time response message for branch enquiry

Field name	Type (min to max length)	Mandatory/ Optional	Min occurs	Max occurs	Description	Comments
Return code	Closed enum (0–3)	M	1	1	Return code for bank branch enquiry.	R00 – Successful call. R01 – Technical error. R02 – Business error.
Return description	String (0–100)	M	1	1	Return description.	
Bank branch enquiry continuation value	String (0–20)	M	1	1	Continuation value for subsequent bank branch enquiries. This value allows multiple pages/chunks of results to be returned.	A blank in this field indicates that no further chunks/pages of data exist.
Bank list/Branch detail	Aggregate	O	0	600	List of branch details.	
Bank list/Branch detail/Bank identifier	Long (1–5)	M	1	1	Bank Identifier.	Matches the bank identifier from the bank enquiry.
Bank list/Branch detail/Branch code	Long (1–6)	M	1	1	The branch code.	
Bank list/Branch name	String (0–30)	M	1	1	The branch name.	

Message structure

BankBranchEnquiryRs (BBEO-ABEO-BANK-BRANCH-ENQ-RS) [Aggregate]
 ReturnCode (BBEO-ABEO-RETURN-CODE) [Closed Enum (3)]
 ReturnDescription (BBEO-ABEO-RETURN-DESC) [NC-100]
 BankBranchEnquiryContValue (BBEO-ABEO-CONTINUATION-VAL) [NC-20]
 BranchList (BBEO-ABEO-BRANCH-LST) [Aggregate]
 BranchDetail (BBEO-ABEO-BANK-LST-ITM) [Aggregate minOccurs=0 maxOccurs=600]
 BankIdentifier (BBEO-ABEO-BANK-ID) [Long (5)]
 BranchCode (BBEO-ABEO-BRANCH-CODE) [Long (6)]
 BranchName (BBEO-ABEO-BRANCH-NAME) [NC-30]

Sample message in IFX format

```
<BankBranchEnquiryRs>

  <ReturnCode>R00</ReturnCode>

  <ReturnDescription>Success</ReturnDescription>

  <BankBranchEnquiryContValue>AKJH786KJG</BankBranchEnquiryContValue>

  <BranchList>

    <BranchDetail>

      <BankIdentifier>1</BankIdentifier>

      <BranchCode>6053366</BranchCode>

      <BranchName>Florida</BranchName>

    </BranchDetail>

  </BranchList>

</BankBranchEnquiryRs>
```

5.2.5 AVS-R account verification layouts

This web service operation performs the verification of a single account.

Real-time request message to verify an account

NOTE: All fields are mandatory, ie all tags must be included in the request message. The Mandatory/Optional column below refers to if data must be populated in the specific fields of the request message.

Field name	Type (min to max length)	Mandatory/Optional	Min occurs	Max occurs	Description	Comments
Profile number	Long (1–10)	M	1	1	Profile number.	
Profile user number	Long (1–8)	M	1	1	Indicates the profile user initiating the request.	
Charge account	String (0–23)	M	1	1	The account that must be charged for this request.	
Account verification list/item	Aggregate	M	1	40	Contains a list of accounts to be verified.	For real-time queries only one item will be verified per request.
Account verification list/Account verification item/Sequence number	Long (1–7)	M	1	1	Contains the sequence number of this item in this request.	Always use 1.
Account verification list/Account	Long (1–5)	M	1	1	Contains the bank identifier.	The bank identifier can

verification item/ Bank identifier						be obtained from the bank enquiry or you can refer to appendix A for the list of bank identifiers.
Account verification list/Account verification item/ Account number	String (0–23)	M	1	1	Contains the account number.	
Account verification list/Account verification item/ Account type	String (0–2)	O	0	1	Contains the account type – 01 for cheque, 02 for savings and 00 for unknown.	Defaults to blank
Account verification list/Account verification item/ Sort code	String (0–6)	M	1	1	Contains the bank branch code.	Matches the branch code from the bank branch enquiry.
Account verification list/Account verification item/ Accountholder information	Aggregate (1–1)	M	1	1	Contains the accountholder's information.	
Account verification list/Account verification item/ Accountholder information/Identity number	String (0–25)	M	1	1	Contains the accountholder's identity, passport, company registration or trust number.	
Account verification list/Account verification item/ Accountholder information/Identity type	Closed enum (0–3)	M	1	1	Contains the accountholder's identity type.	Possible values are: SID – South African ID SPP – Passport number SBR – Business registration number TRN – Trust number
Account verification list/Account verification item/ Accountholder information/Initials	String (0–5)	O	0	1	Contains the accountholder's initials.	
Account verification list/Account verification item/ Accountholder information/Last name	String (0–60)	O	0	1	Contains the accountholder's last name.	Can also contain the company/trust name.
Account verification list/Account verification item/Account holder Information/Email ID	String (0–100)	O	0	1	Contains the accountholder's email address.	

Account verification list/Account verification item/Account holder Information/Cellphone number	String (0–12)	O	0	1	Contains the accountholder's cellphone number.	Values accepted: 27123456789 0812345678
Account verification list/Account verification item/Tax reference	String (0–20)	O	0	1	Contains the tax reference.	This field will only be verified for Nedbank accounts.
Account verification list/Account verification item/Customer reference	String (0–60)	O	0	1	Contains the customer reference.	This field is echoed back to the calling application.
Account verification list/Account verification item/Subbiling ID	String (0–12)	O	0	1	Contains your subbiling ID.	This determines which account your AVS-R transaction is billed to.
Account verification list/Account verification item/Customer reference 2	String (0–60)	O	0	1	Contains the customer reference 2.	This field is echoed back to the calling application.

Message structure

[RealTimeAcctVerificationRq](#) (:RAVI:-RT-AC-VRFCT-RQ) [Aggregate]
[ProfileNumber](#) (:RAVI:-PRFL-NR) [Long(10)]
[ProfileUserNumber](#) (:RAVI:-PRFL-USER-NR) [Long (8)]
[ChargeAccount](#) (:RAVI:-CHRG-AC) [NC-23]
[AccountVerificationList](#) (:RAVI:-AC-VRFCT-LIST) [Aggregate]
[AccountVerificationItem](#) (:RAVI:-AC-VRFCT-ITEM) [Aggregate maxOccurs=40]
[SequenceNumber](#) (:RAVI:-SEQ-NR) [Long(7)]
[BankIdentifier](#) (:RAVI:-BANK-ID) [Long(5)]
[AccountNumber](#) (:RAVI:-ACCT-NR) [NC-23]
[AccountType](#) (:RAVI:-AC-TYP) [NC-2 minOccurs=0]
[SortCode](#) (:RAVI:-SORT-CDE) [NC-6]
[AccountHolderInformation](#) (:RAVI:-AC-HLDR-INF) [Aggregate]
[IdentityNumber](#) (:RAVI:-IDENT-NR) [NC-25]
[IdentityType](#) (:RAVI:-IDENT-TYP) [Closed Enum(3)]
[Initials](#) (:RAVI:-INTLS) [NC-5]
[LastName](#) (:RAVI:-LAST-NM) [NC-60]
[EmailId](#) (:RAVI:-EMAIL-ID) [NC-100 minOccurs=0]
[CellNumber](#) (:RAVI:-CELL-NUM) [NC-12 minOccurs=0]
[TaxReference](#) (:RAVI:-TAX-RFRNC) [NC-20]
[CustomerReference](#) (:RAVI:-CSTMR-RFRNC) [NC-60 minOccurs=0]
[SubBillingID](#) (:RAVI:-SUB-BILLING-ID) [NC-12 minOccurs=0]
[CustomerReference2](#) (:RAVI:-CSTMR-RFRNC2) [NC-60 minOccurs=0]
[ImportFileName](#) (:RAVI:-IMPORT-FILE-NM) [NC-30 minOccurs=0]
[EmailAttachInd](#) (:RAVI:-ATTACH-EMAIL-IND) [NC-1 minOccurs=0]

Sample message in IFX format

```

<soapenv:Body>
<v4:RealTimeAcctVerificationRq>
  <v4:ProfileNumber>4000000000</v4:ProfileNumber>
  <v4:ProfileUserNumber>00000</v4:ProfileUserNumber>
  <v4:ChargeAccount>1234567890</v4:ChargeAccount>

```

```

<v4:AccountVerificationList>
  <v4:AccountVerificationItem>
    <v4:SequenceNumber>00</v4:SequenceNumber>
    <v4:BankIdentifier>21</v4:BankIdentifier>
    <v4:AccountNumber>1098765432</v4:AccountNumber>
    <v4:AccountType>01</v4:AccountType>
    <v4:SortCode>198765</v4:SortCode>
    <v4:AccountHolderInformation>
      <v4:IdentityNumber>2025010101234</v4:IdentityNumber>
      <v4:IdentityType>SID</v4:IdentityType>
      <v4:Initials>P</v4:Initials>
      <v4:LastName>NAIDU</v4:LastName>
      <v4:EmailId>pnaidu@email.co.za</v4:EmailId>
      <v4:CellNumber>0123456789</v4:CellNumber>
    </v4:AccountHolderInformation>
    <v4:TaxReference></v4:TaxReference>
    <v4:CustomerReference>Reference Test 1</v4:CustomerReference>
    <v4:SubBillingID>Sub billing Test</v4:SubBillingID>
    <v4:CustomerReference2>Reference Test 2</v4:CustomerReference2>
  </v4:AccountVerificationItem>
</v4:AccountVerificationList>
</v4:RealTimeAcctVerificationRq>
</soapenv:Body>

```

Real-time response message after an account has been verified

Field name	Type (min to max length)	Mandatory/Optional	Min occurs	Max occurs	Description	Comments
Result code	Closed enum (0–3)	M	1	1	Result code for complete verification.	Indicates that the verification transaction was processed successfully. R01 – Technical error R02 – Business error R03 – Invalid profile R04 – Profile not enabled for AVS R05 – Invalid user ID R06 – Invalid charge account R07 – Invalid subbilling ID
Account verification list	Aggregate	O	0	1	Contains a list of results for a single account verification request.	
Account verification list/Item	Aggregate	M	0	40	Contains a list of accounts to be verified.	For real-time queries only 1 item will be verified per request.
Account verification list/Account verification item/Result code account	Closed enum (0–3)	M	1	1	Result code for this specific account verification.	Indicates that this account was verified successfully. R00 – Success R01 – Technical error R02 – Account does not exist

						R03 – Account unprocessed R04 – Account valid but conditions exists R05 – CDV failed R06 – Account type invalid R07 – Invalid data in field R08 – Follow-up not applicable R09 – Timeout U0 – Undefined *This field should be catered for but not used. It is for Nedbank use only.
Account verification list/Account verification item/Sequence number	Long (1–7)	M	1	1	Contains the sequence number of this item in this request.	Always use 1.
Account verification list/Account verification item/Bank identifier	Long (1–5)	M	1	1	Contains the bank identifier.	The bank identifier can be obtained from the bank enquiry or you can refer to appendix A for the list of bank identifiers.
Account verification list/Account verification item/Account number	String (0–23)	M	1	1	Contains the account number.	
Account verification list/Account verification item/Account type	String (0–2)	O	0	1	Contains the account type.	Defaults to blank.
Account verification list/Account verification item/Sort code	String (0–6)	M	1	1	Contains the bank branch code.	Matches the branch code from the bank branch enquiry.
Account verification list/Account verification item/Accountholder information	Aggregate	M	1	1	Contains the accountholder's information.	
Account verification list/Account Verification Item/Account Holder Information\Identity Number	String (0–25)	M	1	1	Contains the accountholder's identity number.	Can also contain the passport number, trust, number, etc.
Account verification list/Account verification item/Accountholder information/Identity type	Closed enum (0–3)	M	1	1	Contains the accountholder's identity type.	Possible values are: SID – South African ID SPP – Passport number SBR – Business registration number TRN – Trust Number

Account verification list/Account verification item/Accountholder information/Initials	String (0–5)	O	0	1	Contains the accountholder's initials.	
Account verification list/Account verification item/Accountholder information/Last name	String (0–60)	O	0	1	Contains the accountholder's last name.	Can also contain the company/trust name.
Account verification list/Account verification item/Accountholder Information/Email ID	String (0–100)	O	0	1	Contains the accountholder's email address.	
Account verification list/Account verification item/Accountholder Information/Cellphone number	String (0–12)	O	0	1	Contains the accountholder's cellphone number.	
Account verification list/Account verification item/Tax reference	String (0–20)	O	0	1	Contains the tax reference.	
Account verification list/Account verification item/Customer reference	String (0–60)	O	0	1	Contains the customer reference.	This field is echoed back to the calling application.
Account verification list/Account verification item/Subbiling ID	String (0–12)	O	0	1	Contains your subbiling ID.	
Account verification list/Account verification item/Customer reference 2	String (0–60)	O	0	1	Contains the customer reference 2.	This field is echoed back to the calling application.
Account verification list/Account verification item/Verification results	Aggregate	M	1	1	Contains the results of verifications done on an account.	
Account verification list/Account verification item/Verification results/Account found	Closed enum (0–3)	M	1	1		F – Failed prevalidation N – No U – Unprocessed Y – Yes
Account verification list/Account verification item/Verification results/Identification number matched	Closed enum (0–3)	M	1	1		N – No U – Unprocessed Y – Yes
Account verification list/Account verification item/Verification results/Initials	Closed enum (0–3)	M	1	1		N – No U – Unprocessed Y – Yes

matched						
Account verification list/Account verification item/Verification results/Last name matched	Closed enum (0–3)	M	1	1		N – No U – Unprocessed Y – Yes
Account verification list/Account verification item/Verification results/Account active	Closed enum (0–3)	M	1	1		N – No U – Unprocessed Y – Yes
Account verification list/Account verification list/Verification results/Account dormant	Closed enum (0–3)	M	1	1		N – No U – Unprocessed Y – Yes
Account verification list/Account verification item/Verification results/Account active three months	Closed enum (0–3)	M	1	1		N – No U – Unprocessed Y – Yes
Account verification list/Account verification item/Verification results/Can debit account	Closed enum (0–3)	M	1	1		N – No U – Unprocessed Y – Yes
Account verification list/Account verification item/Verification results/Can credit account	Closed enum (0–3)	M	1	1		N – No U – Unprocessed Y – Yes
Account verification list/Account verification item/Verification results/Tax ref match	Closed enum (0–3)	M	1	1		N – No U – Unprocessed Y – Yes
Account verification list/Account verification item/Verification results/Account type match	Closed enum (0–3)	M	1	1		N - No U - Unprocessed Y - Yes
Account Verification List/Account Verification List/Verification	Closed Enum (0–1)	M	1	1		Reserved for future use

Results/Complete Match						
Account Verification List/Account Verification List/Verification Results/Homing Issuer	Closed enum (0–2)	M	1	1		Reserved for future use
Account verification list/Account verification item/Accountholder information/Email ID matched	Closed Enum (0–1)	M	1	1		N - No U - Unprocessed Y - Yes
Account verification list/Account verification item/Accountholder information/Cell number matched	Closed Enum (0–1)	M	1	1		N - No U - Unprocessed Y - Yes

Message structure

[RealTimeAcctVerificationRs](#) (:RAVO:-RT-AC-VRFCT-RS) [Aggregate]
[ResultCode](#) (:RAVO:-RSLT-CDE-VER) [Closed Enum(3) minOccurs=0]
[AccountVerificationList](#) (:RAVO:-SNG-ACC-VERI-RS-LST) [Aggregate minOccurs=0]
[RealTimeAccVerifRsItem](#) (:RAVO:-SNG-ACC-VERI-RS-ITM) [Aggregate maxOccurs=40]
[ResultCodeAcct](#) (:RAVO:-RSLT-CDE-AC) [Closed Enum(3)]
[AccountVerificationItem](#) (:RAVO:-AC-VRFCT-ITEM) [Aggregate]
[SequenceNumber](#) (:RAVO:-SEQ-NR) [Long(7)]
[BankIdentifier](#) (:RAVO:-BANK-ID) [Long(5)]
[AccountNumber](#) (:RAVO:-ACCT-NR) [NC-23]
[AccountType](#) (:RAVO:-AC-TYP) [NC-2 minOccurs=0]
[SortCode](#) (:RAVO:-SORT-CDE) [NC-6]
[AccountHolderInformation](#) (:RAVO:-AC-HLDR-INF) [Aggregate]
[IdentityNumber](#) (:RAVO:-IDENT-NR) [NC-25]
[IdentityType](#) (:RAVO:-IDENT-TYP) [Closed Enum(3)]
[Initials](#) (:RAVO:-INTLS) [NC-5]
[LastName](#) (:RAVO:-LAST-NM) [NC-60]
[EmailId](#) (:RAVO:-EMAIL-ID) [NC-100 minOccurs=0]
[CellNumber](#) (:RAVO:-CELL-NUM) [NC-12 minOccurs=0]
[TaxReference](#) (:RAVO:-TAX-RFRNC) [NC-20]
[CustomerReference](#) (:RAVO:-CSTM-RFRNC) [NC-60 minOccurs=0]
[SubBillingID](#) (:RAVO:-SUB-BILLING-ID) [NC-12 minOccurs=0]
[CustomerReference2](#) (:RAVO:-CSTM-RFRNC2) [NC-60 minOccurs=0]
[VerificationResults](#) (:RAVO:-VRFCT-RSLTS) [Aggregate]
[AccountExists](#) (:RAVO:-ACC-EXIST) [Closed Enum(1)]
[IdentificationNumberMatched](#) (:RAVO:-ID-MATCH) [Closed Enum(1)]
[InitialsMatched](#) (:RAVO:-INITIAL-MATCH) [Closed Enum(1)]
[LastNameMatched](#) (:RAVO:-LASTNAME-MATCH) [Closed Enum(1)]
[AccountActive](#) (:RAVO:-ACC-ACTIVE) [Closed Enum(1)]
[AccountDormant](#) (:RAVO:-ACC-DORMANT) [Closed Enum(1)]
[AccountActive3Months](#) (:RAVO:-ACC-3MNTH) [Closed Enum(1)]
[CanDebitAccount](#) (:RAVO:-DEBIT-ACC) [Closed Enum(1)]
[CanCreditAccount](#) (:RAVO:-CREDIT-ACC) [Closed Enum(1)]
[TaxRefMatch](#) (:RAVO:-TAX-MATCH) [Closed Enum(1)]
[AccountTypeMatch](#) (:RAVO:-ACC-TYP-MATCH) [Closed Enum(1)]
[CompleteMatch](#) (:RAVO:-PROCING-RSLT) [Closed Enum(1)]
[HomingIssuer](#) (:RAVO:-HOMING-ISSUER) [Closed Enum(2)]
[EmailIdMatched](#) (:RAVO:-EMAIL-ID-MATCH) [Closed Enum(1)]
[CellNumberMatched](#) (:RAVO:-CELL-NUM-MATCH) [Closed Enum(1)]

Sample message in IFX format

```
<pld:ResultCode>R00</pld:ResultCode>
  <pld:AccountVerificationList>
    <pld:RealTimeAccVerifRsItem>
      <pld:ResultCodeAcct>R00</pld:ResultCodeAcct>
      <pld:AccountVerificationItem>
        <pld:SequenceNumber>1</pld:SequenceNumber>
        <pld:BankIdentifier>21</pld:BankIdentifier>
        <pld:AccountNumber>1234567890</pld:AccountNumber>
        <pld:AccountType>01</pld:AccountType>
        <pld:SortCode>198765</pld:SortCode>
        <pld:AccountHolderInformation>
          <pld:IdentityNumber>1234567890123</pld:IdentityNumber>
          <pld:IdentityType>SID</pld:IdentityType>
          <pld:Initials>P</pld:Initials>
          <pld:LastName>NAIDU</pld:LastName>
        </pld:AccountHolderInformation>
        <pld:TaxReference></pld:TaxReference>
        <pld:CustomerReference>Reference Test 1</pld:CustomerReference>
        <pld:CustomerReference2>Reference Test 2</pld:CustomerReference2>
      </pld:AccountVerificationItem>
    <pld:VerificationResults>
      <pld:AccountExists>Y</pld:AccountExists>
      <pld:IdentificationNumberMatched>Y</pld:IdentificationNumberMatched>
      <pld:InitialsMatched>U</pld:InitialsMatched>
      <pld:LastNameMatched>Y</pld:LastNameMatched>
      <pld:AccountActive>Y</pld:AccountActive>
      <pld:AccountDormant>N</pld:AccountDormant>
      <pld:AccountActive3Months>Y</pld:AccountActive3Months>
      <pld:CanDebitAccount>Y</pld:CanDebitAccount>
      <pld:CanCreditAccount>N</pld:CanCreditAccount>
      <pld:TaxRefMatch>U</pld:TaxRefMatch>
      <pld:AccountTypeMatch>Y</pld:AccountTypeMatch>
      <pld:CompleteMatch>U</pld:CompleteMatch>
      <pld:HomingIssuer>00</pld:HomingIssuer>
      <pld:EmailIdMatched>U</pld:EmailIdMatched>
      <pld:CellNumberMatched>U</pld:CellNumberMatched>
    </pld:VerificationResults>
  </pld:RealTimeAccVerifRsItem>
</pld:AccountVerificationList>
```

6 Account Verification Service real time endpoints/Internet Protocol addresses

6.1 Web service through a leased line

QA

<https://qa-3rdparty.integration.nedsecure.co.za:443/services/ent/arrangementmanagement/AccountVerification/v4>

Production

<https://3rdparty.integration.nedsecure.co.za:443/services/ent/arrangementmanagement/AccountVerification/v4>

6.2 Web service through the internet

QA

<https://qa-secureintegration.nedsecure.co.za:443/services/ent/arrangementmanagement/AccountVerification/v4>

Production

<https://secureintegration.nedsecure.co.za:443/services/ent/arrangementmanagement/AccountVerification/v4>

6.3 Account Verification Service Internet Protocol addresses

6.3.1 Web service through a leased line

QA – 168.142.70.56

Production – 168.142.237.64

6.3.2 Web service through the internet

QA – 168.142.128.27

Production – 168.142.240.180

7 Testing your Account Verification Service real-time functionalities

7.1 Process for Account Verification Service real time

Prerequisites for AVS-R:

- The third-party certificate issued by Nedbank – for securing the connection (mutual SSL) and providing authentication to Nedbank.
- Your static Internet Protocol (IP) address(es) for configuration of firewall rules into the Nedbank DMZ.
- The third-party AVS-R contract included in this document.
- The third-party AVS-R endpoint issued to you by Nedbank (for the testing and production environment).

Due to the complexity of the AVS-R environment, all organisations must go through a testing phase before going into production with the system. During the test phase the following key aspects must be verified:

- Connectivity is in place and stable.
- Certificates have been issued and function correctly (authentication and mutual SSL securing of the web service calls).
- Calling the web service endpoint.
- Business processes align with business requirements.

The organisation must meet the following requirements before testing may begin:

- The AVS-R web service contract must be imported and the code must be implemented to call it.
- The organisation and Nedbank must have parallel QA environments in place.



Note: Contact your Nedbank CIS manager for detailed web service hardware and software requirements relating to your platform or operating system.

7.2 Scenarios that should be tested for AVS-R

- Retrieving participating bank information.
- Retrieving participating branch information.
- Performing the real-time account verification.



Note: QA data is for test purposes only and cannot be used for any decision-making pertaining to your customers.

7.3 Interpreting results for AVS-R sent by Nedbank

- The following accounts cannot be validated using AVS:
 - Old BoE accounts
 - Old Perm accounts
 - Old NBS accounts
 - Old PEP accounts
- Submitting the abovementioned banks' accounts for verification will result in the return of an F-indicator in the account number response field and 'U' indicators in the remaining fields in the response file to the organisation.
- Nedbank can currently verify Absa, FNB, Nedbank, Capitec Bank, African Bank, Investec, Discover Bank, Sasfin, Standard Bank, Grindrod Bank, Finbond Mutual Bank and Tyme Bank accounts.
- Unprocessed requests could be a result of a bank's connection being down or the bank not being able to meet the stipulated SLA requirements for verification:
 - An unprocessed request is identified with a 'U' in the 'Account found' field.
 - Unprocessed requests will not incur charges and may be resubmitted for verification.
- If the check digit validation (CDV) on the account number is incorrect, the prevalidation request will fail:
 - This means that the combination of account number and branch number is not valid and the 'Account found' data field is therefore set to 'F', with the remainder of the data fields set to 'U'.



Note: You will be charged for failed prevalidation requests to all participating banks.

8 Frequently asked questions

What is subbilling?

As part of the AVS product, we provide the ability to indicate from which department a particular verification request and subsequent charge originates. This is for billing reconciliation purposes after you have performed a real-time verification request. You will then be able to identify which department in your organisation has incurred verification charges when you receive your billing.

What are the costs involved?

Real-time verification requests may be charged at a rate that differs from that of near-real-time verification requests. You are billed for each account verification request that has been submitted. Fixed and volume-based pricing are available.

What are the cutoff times to submit a real-time request?

The AVS product is offered to Nedbank and participating banks' clients seven days a week (Monday to Sunday). However, due to processing constraints from participating banks, the following cutoff times apply (irrespective of whether these are Nedbank or non-Nedbank accounts):

- AVS-R requests can only be submitted between 03:30 and 00:00.
- Maximum time for a response is 45 seconds from the time Nedbank receives the request.
- During downtime you will receive a 'U' response and will be required to resubmit the transaction when the system is back up.

Which banks participate in AVS-R?

- Nedbank
- Absa
- Standard Bank
- First National Bank
- Capitec Bank
- African Bank
- Sasfin
- Investec
- Discovery Bank
- Grindrod Bank
- Finbond Mutual Bank
- Tyme Bank
- Bidvest Bank
- Bank Zero

Nedbank will notify you when there are any new participants.

9 How you will be billed

Cumulative monthly AVS charges will appear on your current account statement. The debit narratives are given below:

Debit narrative on current account statement	Afrikaans narrative on current account statement	Description
AVS-R (On Ned)	RVD-R (Vir Ned)	Verification of Nedbank accounts using the real-time service.
AVS-R (On other)	RVD-R (Vir ander)	Verification of participating banks' accounts using the real-time
AVS-R failed prevalidation	AVS-R-voorafvalidering onsuksesvol	Accounts that have failed a prevalidation check.

In the case of volume-based pricing the amount charged to your account will be based on the total number of account verification requests submitted in that month.



Note: This will be based on the agreed volume-based sliding scale.

Subbiling charges for each area or department will accumulate monthly for account verification requests. The subbiling ID will be shown in the narrative as indicated in the example below:

Debit narrative on current account statement	Afrikaans debit narrative on current account statement	Description
AVS-R (On Ned) (Dept 001)	RVD-R (Vir Ned) (Dept 001)	Verification of Nedbank accounts using the real-time service.
AVS-R (On other) (Dept 001)	RVD-R (Vir ander) (Dept 001)	Verification of participating banks' accounts using the real-time

If you require subbiling, it will be your responsibility to denote the department or area in the subbiling ID field in the file layout structure. It is applicable to every account verification request.



Note: If you do not require subbiling, you can leave the field blank.

10 Checklists

Use these checklists for real-time transactions to ensure that you have provided all the required documents to Nedbank and that you have completed all the required steps to make your AVS operational.

Documents required by Nedbank for real-time functionality:

No	Item	Completed
1	Signature card	<input type="checkbox"/>
2	Main participant resolutions	<input type="checkbox"/>
3	Master Electronic Banking Agreement	<input type="checkbox"/>
4	Schedule 1	<input type="checkbox"/>
5	Schedule 2	<input type="checkbox"/>
6	AVS loading document	<input type="checkbox"/>
7	Firewall configuration	<input type="checkbox"/>
8	Service account and certificate	<input type="checkbox"/>

Technical information for real time:

No	Item	Completed
1	Certificates received and implemented	<input type="checkbox"/>
2	Contract imported and implemented	<input type="checkbox"/>
3	Endpoint received and configured	<input type="checkbox"/>
4	Testing process completed	<input type="checkbox"/>

Account issuer bank identifier (FI Code) for AVS-R

Absa	16
Capitec Bank	34
First National Bank	05
Nedbank	21
Standard Bank	18
African Bank	36
Sasfin	50
Discovery Bank	56
Investec	51
Tyme Bank	54
Finbond Mutual bank	52
Grindrod Bank	39
Bidvest Bank	64
Bank Zero	66

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