



Partner Interface Description – Partner API V5

VAS Billing Partner API

**Interface Specification V5
A1 Slovenija, d. d.**



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1. Overview

The VAS Billing Partner API allows content partners to have an easy, secure and transparent authorization and payments mechanism to provide charging on mobile network customer bills. Chargeable goods are value-aggregated contents, such as games, videos, e-paper (digital goods) and many more.

2. API Key Aspects

Easy: VAS Billing Partner API offers SOAP workflows for the content provider to manage subscriptions and single event charges for their products towards MNOs payment systems.

Safe: VAS Billing Partner API allows the MNO and its content partners to authenticate the mobile subscriber and his/her credibility/solvency upon initiating the transaction.

Secure: VAS Billing Partner API communication is protected by industry-strength encryption and explicit authentication on a per-merchant level.

Transparent: VAS Partner API is fully transparent to the consumer, providing a check-out page on purchase as well as a self-care area on the MNO website which lists all relevant data on committed transactions and active subscriptions.

3. Supported customer segments

A1 Vas Billing Partner API supports several customer segments

- A1
- BOB

4. Document Scope

This document describes the VAS Billing Partner API Interface Version 5.x and the associated flows for discovery and payment (check-out and charging)



5. Targeted Audience

Technical engineers, who connect their own infrastructure to VAS Billing Partner API payment services.

6. History of Document

Date	Change description	Author
08.2016	Initial version	A1 AUT
2017-2019	Rework, elaboration on the work flows	A1 AUT
12.2020	Rework, re-design for A1 Slovenia	A1 SLO

7. Data Flow Description

7.1. Discovery-Phase

SMS purchase

The user sends a SMS to merchant system to purchase a product. Now the service provider initiates a purchase towards the VAS Billing system via SOAP. The system will perform a SMS handshake directly with the end customer in order to authorize the purchase. This process is completely asynchronous.

WEB purchase

VAS Billing WEB flow follows similar approach as the standard SMS Flow, with the exception that instead of using the SMS handshake, the customer has to authorize the purchase on a checkout page provided by VAS billing system.

Silent purchase

The merchant can be configured to be able to perform Silent (i.e. pre-authorized) purchases (configured at VAS Billing 2.0). During a silent purchase, no customer interaction is required.

Following checks are made for all purchase channels:

- Is there user a customer of one of the implemented payment providers?
- Is the user eligible for payment?

Is the amount within the configured charging limit?



7.2. Connect/Commit-Phase

The payment process bases on two phases:

- Connect: to verify the payment authorization and to guarantee a payment for the service provider.
- Commit: to commit the booking and capture the payment

In between the content delivery process through the merchant/service provider is supposed to take place.

Through this separation the following two error cases cannot occur:

- Content delivery is successful but payment fails
- Payment is successful but content delivery fails

8. Admin UI Access

Currently not available. Will be available in the upcoming releases.

The admin interface can be accessed in production environment at:

<https://url/vasbillingadmin>

To be able to access, it is mandatory to have an A1.net user, which needs to be registered upfront on the A1.net site: <https://www.a1.si/registration>

9. Partner API Access

Every merchant needs to have a distinct set of credentials (username/password) to be able to access the Partner API. Those will be provided during integration and can be self-administered in the admin UI at a later stage.

9.1. HTTPS Integration

Hypertext Transfer Protocol Secure (HTTPS) is a [communications protocol](#) for [secure](#) communication over a [computer network](#), with especially wide [deployment](#) on the [Internet](#).

VAS Billing 2.0 interfaces are only accessible via HTTPS to increase the security for online content access. The main motivation for HTTPS is to prevent [wiretapping](#) and [man-in-the-middle attacks](#).



10. What's new in Partner API v5?

New operations

- Partner Interface Description - Partner API V5#GetTransactionInfo - get current state of transaction
- Partner Interface Description - Partner API V5#GetAvailableServices - get available merchant services
- Partner Interface Description - Partner API V5#GetAvailableContentTypes - get all available content types

10.1. New hierarchy element: `serviceId`

A new element `serviceId` has been introduced to better distinguish on merchant services and to remove redundant definitions (i.e. multiple "virtual" merchant definitions).

10.2. Dynamic image (banner) support

A dynamic image reference can be supplied in the Discover request, which will be used for the purchase experience. The platform will transcode the image to best fit for the client device. Optionally, a promotional link can be defined, which will get linked with the image.

10.3. Content type support

Currently not available. Will be available in the upcoming releases.

To add more transparency towards the end customer, we have added content classification for any item the customer is about to purchase at the time of transaction. As such, starting with Partner API v5, a content type has to be provided for the purchase transaction. This can be done by either providing a default content-type setting on service configuration level in the Admin UI, or by providing a `contentType` on a per-request basis in the Discover request. Per-request definitions will have precedence over the default content-type, so it is possible to set a meaningful default value, and just override the content-type when needed. The list of available content types can always be retrieved via the `getAvailableContentTypes` webservice.

10.4. Reduced charging (subscription discount)

ChargeConnect requests can have a lower amount than the original transaction amount (as defined in the Discover request). Note that the maximum amount will to be shown to the customer on the purchase page (as usual), it is up to the merchant to separately communicate any eventual discount on consecutive charges to the end customer.



10.5. Partial refunds

Partial refunds are now available by supplying an amount with the refund request. If needed, a partial refund can be repeated, up to the full amount of the original transaction.

10.6. Authentication changes

Authentication on the partner API has to be done via pre-emptive Basic Authentication, using configured API username and password.

The credentials will be provided upon integration / platform onboarding, and will always be available for lookup in Admin UI.

10.7. Refund idempotency

When supplying an optional merchantTransactionID for refund requests, the operation will be done idempotent: The result will always be the same for the same supplied merchantTransactionID.

10.8. Extended Refund response

The refund response has been enhanced with additional attributes for more insight on the refund transaction. See the Refund section below for details.



10.9. Changes to existing operations

Partner Interface Description - Partner API V5#

Discover: New request attributes

- serviceID (M)
- contentTypeId (O)
- promotionalImage (O)
- promotionalLink (O)
- promotionalText (O)
- language (O)
- merchantTransactionID (O)

ChargeConnect: New request attributes

- serviceID (M)
- amount (O)

Refund: New request attributes

- serviceID (M)
- amount (O)
- merchantTransactionID (O)

Cancel: New request attributes

- serviceID (M)



11. WSDL

11.1. Download

Latest WSDL file is available here:

TEST: <https://vas-test-slo.a1.net/vas/ws/partner/v5.0?wsdl>

PROD: <https://vas.a1.si/vas/ws/partner/v5.0?wsdl>

The provided Partner API credentials need to be used in order to be able to download the WSDL file.

12. SOAP Endpoints

12.1. TEST environment

<https://vas-test-slo.a1.net/vas/ws/partner/v5>

12.2. PROD environment

<https://vas.a1.si/vas/ws/partner/v5>



13. Partner API Operations

14. Discover

14.1. Scope

- Initialize the customer transaction
- Lookup customer account information
- Pre-verification of
 - customer debit
 - customer-defined cost limits, blockings
 - service provider / merchant period transaction limits
 - customer age

14.2. Request

Attributes

Name	Value	M/O	Description
serviceProviderID	long	M	The unique identifier of the service provider. (assigned during setup)
merchantID	long	M	The unique identifier of the merchant. (assigned during setup)
serviceID	long	M	The unique identifier of the service.
contentTypeID	long	O	The unique identifier of the content type. Optional, if a default content type is defined.
channel	string, enumeration	M	Options: "WAP" "WEB" "SMS" "SILENT". Note: WAP flow not supported
promotionalImage	string	O	Dynamic image URL used for the purchase page promo image.
promotionalLink	string	O	Dynamic link used for the purchase page promo image.
promotionalText	string	O	Optional alternate text for the purchase page promo image.
successURL	string	O	Redirect-URL in case of success. Not mandatory for SILENT channel.
failureURL	string	O	Redirect-URL in case of failure. Not mandatory for SILENT channel.



customerID	string	M	Customer MSISDN or IP address (i.e.: for WAP flow). The MSISDN must be provided in a "386..." format. Note: WAP flow not supported
ageClass	string, enumeration	M	Type of content: "ALL" "ABOVE16" "ABOVE18"
amount	int	M	Gross amount in cents, e.g. 500
percentTax	decimal	M	Percentage of the tax, decimal e.g. 22.0
units	int	M	Quantity of products (total transaction amount will be calculated as "amountGross" x "units")
currency	string	M	Only system-defined currencies are allowed (e.g. "EUR")
accountingText	string	M	Accounting text (billing text). Max. length 20 char. Note: Only the first 20 chars will be displayed on the end customer's bill. Note2: No special characters allowed (ščž etc)
marketingText	string	M	A free text attached to the purchase. Max. length 30 char. Note: When SMS channel is used no special characters allowed (ščž, etc.)
isSubscription	boolean	M	Set to "yes", if the purchase is a subscription. Single transactions should always be set to "false".
subscriptionPeriod	Period	O	Periodicity of the subscription. See details on Period below.
language	string	O	Values: "EN" "SL". If empty, defaults to default language of service.
merchantTransactionID	string	O	The merchant's transaction ID

Attributes - Period



Name	Value	M/O	Description
chargingCount	int	M	Number of planned charging within the given period.
periodLength	int	M	Period multiplier, e.g. 3 weeks.
periodMessageType	string, enumeration	O	"MSG_DEFAULT_DELIVERY" "MSG_MAX_DELIVERY"
periodType	string, enumeration	M	"DAY" "WEEK" "WEEKGLIDE" "MONTH" "MONTHGLIDE" "YEAR" "YEARGLIDE"

Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:soap="http://soap.interfaces.vasbilling.a1.net">
  <soapenv:Header/>
  <soapenv:Body>
    <soap:discover>
      <discoverRequest>
        <serviceProviderID>1</serviceProviderID>
        <merchantID>1</merchantID>
        <serviceID>1</serviceID>
        <contentTypeID>1</contentTypeID>
        <channel>WEB</channel>
        <promotionalImage>https://link.to.image.url</promotionalImage>
        <promotionalLink>https://link.to.promotion.url</promotionalLink>
        <promotionalText>promoText</promotionalText>
        <successURL>https://link.to.success.url</successURL>
        <failureURL>http://link.to.failure.url</failureURL>
        <customerID>38640123456</customerID>
        <ageClass>ALL</ageClass>
        <amountGross>100</amountGross>
        <percentTax>22.0</percentTax>
        <units>1</units>
        <currency>EUR</currency>
        <accountingText>aT</accountingText>
        <marketingText>mT</marketingText>
        <isSubscription>true</isSubscription>
        <subscriptionPeriod>
          <chargingCount>1</chargingCount>
          <periodLength>1</periodLength>
          <periodType>MONTH</periodType>
        </subscriptionPeriod>
      </discoverRequest>
    </soap:discover>
  </soapenv:Body>
</soapenv:Envelope>
```



14.3. Response

Attributes

Name	Value	M/O	Description
mandant	string	M	Provider string, e.g. "A1-SI"
redirectURL	string	M	URL which the customer should be redirected to, containing the purchaseId
purchaseID	long	M	The unique identifier of the purchase.
purchaseToken	string	M	Generated token for the purchase flow.

Example

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns1:discoverResponse xmlns:ns1="http://soap.interfaces.vasbilling.a1.net">
      <discoverReturn>
        <mandant>A1-SI</mandant>
        <redirectURL>https://vasbilling.a1.si</redirectURL>
        <purchaseID>123</purchaseID>
        <purchaseToken>token</purchaseToken>
      </discoverReturn>
    </ns1:discoverResponse>
  </soap:Body>
</soap:Envelope>
```

Error Codes

ErrorCode	ErrorType	Reason
8	IllegalParameterError	Missing parameters Wrong/malformed/unknown parameters Wrong combination of parameters Blocked Service provider Blocked Merchant Blocked Service
10	LimitExceededError	Service provider limit(s) exceeded Max. number of active subscriptions exceeded Defined amount out-of-range (single event) Defined amount out-of-range (subscription)



9	InternalAppError	Internal Error Wrong or missing purchase MSISDN (used for SMS handshake)
12	NoSuchClientError	Customer cannot be identified / Unknown
14	NotBillableError	Brand/submarket not enabled for VAS services Payment Type not available for VAS services HasDebit has failed
3	AgeVerificationError	Failing Age Verification
15	ContentTypeBlockedError	Customer has blocked content-type
16	NoContentTypeProvidedError	No content-type has been provided
17	ContentTypeNotAllowedError	Content-type is not allowed for merchant/service
7	IdentificationError	Error on customer lookup



15. ChargeConnect

15.1. Scope

Initiate the payment towards billing system and reserve the amount for the transaction.

15.2. Request

Attributes

Name	Value	M/O	Description
serviceID	long	M	The unique identifier of the service.
serviceProviderID	long	M	The unique identifier of the service provider.
merchantID	long	M	The unique identifier of the merchant.
purchaseID	long	M	The unique identifier of the purchase.
purchaseToken	string	M	Generated token for the purchase flow.
amount	int	O	Gross amount in cents. Only applicable for subscription purchases <ul style="list-style-type: none">If defined, a smaller amount may be charged.Must not exceed the original transaction amount.

Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:soap="http://soap.interfaces.vasbilling.a1.net">
  <soapenv:Header/>
  <soapenv:Body>
    <soap:chargeConnect>
      <chargeConnectRequest>
        <serviceProviderID>1</serviceProviderID>
        <merchantID>2</merchantID>
        <serviceID>3</serviceID>
        <purchaseID>4</purchaseID>
        <purchaseToken>token</purchaseToken>
      </chargeConnectRequest>
    </soap:chargeConnect>
  </soapenv:Body>
</soapenv:Envelope>
```



15.3. Response

Attributes

Element	Value	M/O	Description
transactionID	string	M	The unique identifier of the transaction.
customerMsisdn	string	O	Customer's MSISDN. Only returned on subscription purchases.

Example

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns1:chargeConnectResponse xmlns:ns1="http://soap.interfaces.vasbilling.a1.net">
      <chargeConnectReturn xmlns:ns2="http://soap.interfaces.vasbilling.a1.net/">
        <transactionID>12345</transactionID>
        <customerMsisdn>38640123456</customerMsisdn>
      </chargeConnectReturn>
    </ns1:chargeConnectResponse>
  </soap:Body>
</soap:Envelope>
```

Error Codes

ErrorCode	ErrorType	Reason
8	IllegalParameterError	Missing parameters Wrong/malformed/unknown parameters Wrong combination of parameters Blocked Service provider Blocked Merchant Blocked Service
10	LimitExceededError	Service provider limit(s) exceeded Defined amount out-of-range (single event) Defined amount out-of-range (subscription)
9	InternalAppError	Internal Error
12	NoSuchClientError	Customer cannot be identified / Unknown



5	BillingError	Error in Billing System Brand/submarket not enabled for VAS services Payment Type not available for VAS services
19	InvalidAmountError	Amount is different (single-event) from or higher (subscription) than provided in the original Discover request
2	SubscriptionExpiredError	Subscription has expired due to inactivity
1	SubscriptionCancelledError	Subscription has been cancelled
4	AlreadyChargedError	The purchase was already charged
13	NotAuthorizedError	The purchase was not authorized by the end customer
7	IdentificationError	Error on customer lookup



16. ChargeCommit

16.1. Scope

Commit the payment transaction.

16.2. Request

Attributes

Name	Value	M/O	Description
serviceID	long	M	The unique identifier of the service.
serviceProviderID	long	M	The unique identifier of the service provider.
merchantID	long	M	The unique identifier of the merchant.
purchaseID	long	M	The unique identifier of the purchase.
purchaseToken	string	M	Generated token for the purchase flow.
transactionID	string	M	The unique identifier of the payment transaction.

Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:soap="http://soap.interfaces.vasbilling.a1.net">
  <soapenv:Header/>
  <soapenv:Body>
    <soap:chargeCommit>
      <chargeCommitRequest>
        <serviceProviderID>1</serviceProviderID>
        <merchantID>2</merchantID>
        <serviceID>3</serviceID>
        <purchaseID>4</purchaseID>
        <purchaseToken>token</purchaseToken>
        <transactionID>transaction_id</transactionID>
      </chargeCommitRequest>
    </soap:chargeCommit>
  </soapenv:Body>
</soapenv:Envelope>
```



16.3. Response

Attributes

Element	Value	M/O	Description
n/a	n/a	n/a	n/a

Example

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">  
  <soap:Body>  
    <ns1:chargeCommitResponse  
xmlns:ns1="http://soap.interfaces.vasbilling.a1.net"/>  
  </soap:Body>  
</soap:Envelope>
```

Error Codes

ErrorCode	ErrorType	Reason
8	IllegalParameterError	Missing parameters Wrong/malformed/unknown parameters Wrong combination of parameters Blocked Service provider Blocked Merchant Blocked Service
9	InternalAppError	Internal Error
5	BillingError	Error in Billing System
6	ChargeTimeoutError	The purchase was not committed within the allowed time frame (24 hours)



17. Cancel

17.1. Scope

Cancel an existing subscription. Subsequent charges will be blocked, once the subscription has been cancelled.

17.2. Request

Attributes

Name	Value	M/O	Description
serviceID	long	M	The unique identifier of the service.
serviceProviderID	long	M	The unique identifier of the service provider.
merchantID	long	M	The unique identifier of the merchant.
purchaseID	long	M	The unique identifier of the purchase.
purchaseToken	string	M	Generated token for the purchase flow.

Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:soap="http://soap.interfaces.vasbilling.a1.net">
  <soapenv:Header/>
  <soapenv:Body>
    <soap:cancel>
      <cancelRequest>
        <serviceProviderID>1</serviceProviderID>
        <merchantID>2</merchantID>
        <serviceID>3</serviceID>
        <purchaseID>4</purchaseID>
        <purchaseToken>token</purchaseToken>
      </cancelRequest>
    </soap:cancel>
  </soapenv:Body>
</soapenv:Envelope>
```



17.3. Response

Attributes

Element	Value	M/O	Description
n/a	n/a	n/a	n/a

Example

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">  
  <soap:Body>  
    <ns1:cancelResponse xmlns:ns1="http://soap.interfaces.vasbilling.a1.net"/>  
  </soap:Body>  
</soap:Envelope>
```

Error Codes

ErrorCode	ErrorType	Reason
1	SubscriptionCancelledError	Subscription has been cancelled
2	SubscriptionExpiredError	Subscription has expired due to inactivity
8	IllegalParameterError	Missing parameters Wrong/malformed/unknown parameters Wrong combination of parameters Blocked Service provider Blocked Merchant Blocked Service
9	InternalAppError	Internal Error



18. Refund

18.1. Scope

Refund the transaction. A refund can be either full or partial, and even multiple partial (up to the extent of the original transaction's amount).

18.2. Request

Attributes

Name	Value	M/O	Description
serviceID	long	M	The unique identifier of the service.
serviceProviderID	long	M	The unique identifier of the service provider.
merchantID	long	M	The unique identifier of the merchant.
purchaseID	long	M	The unique identifier of the purchase.
purchaseToken	string	M	Generated token for the purchase flow.
transactionID	string	M	The unique identifier of the payment transaction.
amount	int	O	The amount to be refunded in cents (up to total amount) If not defined, a full refund will be done.
reason	string	O	The reason of the refund as string.
merchantTransactionID	string	O	The merchant's transaction ID. If given, the refund action is idempotent.



Example

```
<soapenv:Envelope
```

```
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:soap="http://soap.interfaces.vasbilling.a1.net">
  <soapenv:Header/>
  <soapenv:Body>
    <soap:refund>
      <refundRequest>
        <serviceProviderID>1</serviceProviderID>
        <merchantID>2</merchantID>
        <serviceID>3</serviceID>
        <purchaseID>4</purchaseID>
        <transactionID>transactionid</transactionID>
        <reason>reason of refund</reason>
      </refundRequest>
    </soap:refund>
  </soapenv:Body>
</soapenv:Envelope>
```

18.3. Response

Attributes

Name	Value	M/O	Description
refundTransactionID	string	O	Transaction ID of the refund
amount	long	O	Refunded amount for this transaction
charged	dateTime	O	Timestamp of the refund transaction

Example

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns1:refundResponse xmlns:ns1="http://soap.interfaces.vasbilling.a1.net">
      <return xmlns:ns2="http://soap.interfaces.vasbilling.a1.net/">
        <amount>100</amount>
        <charged>2020-20-20T10:35:33.460+02:00</charged>
        <refundTransactionID>202020201234567890123</refundTransactionID>
      </return>
    </ns1:refundResponse>
  </soap:Body>
</soap:Envelope>
```

Error Codes



ErrorCode	ErrorType	Reason
8	IllegalParameterError	Missing parameters Wrong/malformed/unknown parameters Wrong combination of parameters Blocked Service provider Blocked Merchant Blocked Service
9	InternalAppError	Internal Error
18	AlreadyRefundedError	The transaction was already fully refunded
19	InvalidAmountError	Refund amount exceeds the remaining amount



19. GetTransactionInfo

19.1. Scope

Get info on the current state of an existing transaction, as identified by transactionId.

19.2. Request

Attributes

Name	Value	M/O	Description
serviceProviderID	long	M	The unique identifier of the service provider.
merchantID	long	M	The unique identifier of the merchant.
serviceID	long	M	The unique identifier of the service.
purchaseID	long	M	The unique identifier of the purchase.
purchaseToken	string	M	Generated token for the purchase flow.
transactionID	string	M	The unique identifier of the transaction.

Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:soap="http://soap.interfaces.vasbilling.a1.net">
  <soapenv:Header/>
  <soapenv:Body>
    <soap:getTransactionInfo>
      <getTransactionInfoRequest>
        <serviceProviderID>1</serviceProviderID>
        <merchantID>2</merchantID>
        <serviceID>3</serviceID>
        <purchaseID>4</purchaseID>
        <purchaseToken>token</purchaseToken>
        <transactionID>transaction_id</transactionID>
      </getTransactionInfoRequest>
    </soap:getTransactionInfo>
  </soapenv:Body>
</soapenv:Envelope>
```



19.3. Response

Attributes

Name	Value	M/O	Description
status	string, enumeration	M	"PENDING" "COMMITTED" "ROLLEDBACK" "REFUNDED" "PARTIALLY_REFUNDED"
currency	string	M	e.g. "EUR"
amount	int	M	Total net amount in cents of the purchase.
refundedAmount	int	M	Total refunded net amount in cents. Relevant for "PARTIALLY_REFUNDED" and "REFUNDED".
startDate	dateTime	M	Timestamp when the transaction was started.
closeDate	dateTime	O	Set if transaction is not in "PENDING" state.

Example

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns1:getTransactionInfoResponse
xmlns:ns1="http://soap.interfaces.vasbilling.a1.net">
      <getTransactionInfoReturn xmlns:ns2="http://soap.interfaces.vasbilling.a1.net/">
        <status>PARTIALLY_REFUNDED</status>
        <currency>EUR</currency>
        <amount>499</amount>
        <refundedAmount>199</refundedAmount>
        <startDate>2020-12-21T10:47:26.981+02:00</startDate>
        <closeDate>2020-12-21T10:47:27.686+02:00</closeDate>
      </getTransactionInfoReturn>
    </ns1:getTransactionInfoResponse>
  </soap:Body>
</soap:Envelope>
```



Error Codes

ErrorCode	ErrorType	Reason
8	IllegalParameterError	Missing parameters Wrong/malformed/unknown parameters Wrong combination of parameters Blocked Service provider Blocked Merchant Blocked Service
9	InternalAppError	Internal Error

20. GetAvailableServices

20.1. Scope

Returns all available merchant services and their current status.

20.2. Request

Attributes

Element	Value	M/O	Description
serviceProviderID	long	M	The unique identifier of the service provider.
merchantID	long	M	The unique identifier of the merchant.

Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:soap="http://soap.interfaces.vasbilling.a1.net">
  <soapenv:Header/>
  <soapenv:Body>
    <soap:getAvailableServices>
      <getAvailableServicesRequest>
        <serviceProviderID>1</serviceProviderID>
        <merchantID>2</merchantID>
      </getAvailableServicesRequest>
    </soap:getAvailableServices>
  </soapenv:Body>
</soapenv:Envelope>
```



20.3. Response

Attributes

Name	Value	M/O	Description
service	[]		Array of services.
service[].serviceID	long	M	The unique identifier of the service.
service[].serviceName	string	M	The name of the service.
service[].serviceDescription	string	M	The description of the service.
service[].serviceStatus	string, enumeration	M	the status of the service: Active Inactive Locked.

Example

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns1:getAvailableServicesResponse
xmlns:ns1="http://soap.interfaces.vasbilling.a1.net">
      <getAvailableServicesReturn>
        <service>
          <serviceID>11</serviceID>
          <serviceName>Service A</serviceName>
          <serviceDescription>Description of service A</serviceDescription>
          <serviceStatus>Active</serviceStatus>
        </service>
        <service>
          <serviceID>11</serviceID>
          <serviceName>Service B</serviceName>
          <serviceDescription>Description of service A</serviceDescription>
          <serviceStatus>Inactive</serviceStatus>
        </service>
      </getAvailableServicesReturn>
    </ns1:getAvailableServicesResponse>
  </soap:Body>
</soap:Envelope>
```



ErrorCode	ErrorType	Reason
8	IllegalParameterError	Missing parameters Wrong/malformed/unknown parameters Wrong combination of parameters Blocked Service provider Blocked Merchant Blocked Service
9	InternalAppError	Internal Error

21. GetAvailableContentTypes

21.1. Scope

Returns all system-defined, available content types. Starting with v5, it is necessary to provide a content type when initiating a transaction (via Partner Interface Description - Partner API V5#Discover).

21.2. Request

Attributes

Name	Value	M/O	Description
serviceProviderID	long	M	The unique identifier of the service provider.
merchantID	long	M	The unique identifier of the merchant.

Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:soap="http://soap.interfaces.vasbilling.a1.net">
  <soapenv:Header/>
  <soapenv:Body>
    <soap:getAvailableContentTypes>
      <getAvailableContentTypesRequest>
        <serviceProviderID>1</serviceProviderID>
        <merchantID>2</merchantID>
      </getAvailableContentTypesRequest>
    </soap:getAvailableContentTypes>
  </soapenv:Body>
</soapenv:Envelope>
```



21.3. Response

Attributes

Name	Value	M/O	Description
contentType	[]		Array of content types.
contentType[].contentTypeID	long	M	The unique identifier of the content type.
contentType[].contentTypeName	string	M	The name of the content type.
contentType[].contentTypeDescription	string	M	The description of the content type.

Example

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns1:getAvailableContentTypesResponse
xmlns:ns1="http://soap.interfaces.vasbilling.a1.net">
      <getAvailableContentTypesReturn>
        <contentType>
          <contentTypeID>1</contentTypeID>
          <contentTypeName>Content Type A</contentTypeName>
          <contentTypeDescription>Content type A </contentTypeDescription>
        </contentType>
        <contentType>
          <contentTypeID>2</contentTypeID>
          <contentTypeName>Content Type B</contentTypeName>
          <contentTypeDescription>Content type B </contentTypeDescription>
        </contentType>
      </getAvailableContentTypesReturn>
    </ns1:getAvailableContentTypesResponse>
  </soap:Body>
</soap:Envelope>
```

Error Codes

ErrorCode	ErrorType	Reason
8	IllegalParameterError	Missing parameters Wrong/malformed/unknown parameters Wrong combination of parameters Blocked Service provider Blocked Merchant
9	InternalAppError	Internal Error



22. QueryNAT

Not available!

22.1. Scope

Identify customer and check if the account belongs to one of the billable markets (MNOs)

How it works:

1. The merchant client needs to provide a successURL and a failureURL in the queryNAT request.
Note that these URLs shall be constructed in a way that will clearly indicate the outcome of the operation to the merchant
2. The merchant will get a redirectUrl in the queryNAT response, the end customer is supposed to be redirected to this URL (via web browser)
3. When the customer is requesting this URL, the platform is able to check whether the account belongs to one of the supported MNOs.
4. If the account has been found, the customer's request will be redirected to the given successUrl, otherwise the request will be redirected to the failureUrl.

22.2. Request

Attributes

Name	Value	M/O	Description
serviceProviderID	long	M	The unique identifier of the service provider.
merchantID	long	M	The unique identifier of the merchant.
serviceID	long	M	The unique identifier of the service.
clientIP	string	M	Customer's IP address.
successURL	string	M	Redirect-URL in case of success.
failureURL	string	M	Redirect-URL in case of failure.

Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:soap="http://soap.interfaces.vasbilling.a1.net">
  <soapenv:Header/>
  <soapenv:Body>
    <soap:queryNAT>
      <queryNatRequest>
        <serviceProviderID>1</serviceProviderID>
        <merchantID>1</merchantID>
        <serviceID>1</serviceID>
        <successURL>https://link-to-merchant.com/SUCCESS</successURL>
        <failureURL>https://link-to-merchant.com/FAIL</failureURL>
        <clientIP>10.0.0.1</clientIP>
      </queryNatRequest>
    </soap:queryNAT>
  </soapenv:Body>
</soapenv:Envelope>
```



22.3. Response

Attributes

Name	Value	M/O	Description
redirectURL	string	M	URL which the customer should be redirected to.

Example

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns1:queryNATResponse xmlns:ns1="http://soap.interfaces.vasbilling.a1.net">
      <queryNATReturn xmlns:ns2="http://soap.interfaces.vasbilling.a1.net">
        <redirectURL>https://asmp-
test.a1.si/CLIENTAUTH/VasBilling/lookup?token=sx62ncug64n9jnv6mqpy3r3p</redirect
URL>
      </queryNATReturn>
    </ns1:queryNATResponse>
  </soap:Body>
</soap:Envelope>
```

Error Codes

ErrorCode	ErrorType	Reason
8	IllegalParameterError	Missing parameters Wrong/malformed/unknown parameters Wrong combination of parameters Blocked Service provider Blocked Merchant
9	InternalAppError	Internal Error



23. QueryNATAfterSuccess

Not available!

23.1. Scope

List customer purchases (single event and subscriptions) for the given merchant / service and optionally the customer MSISDN. Note that only active subscriptions are returned in the response. Precondition: The queryNAT identification was successful, as such a token had been appended to the successURL and the customer was redirected to this successURL.

23.2. Request

Attributes

Name	Value	M/O	Description
serviceProviderID	long	M	The unique identifier of the service provider.
merchantID	long	M	The unique identifier of the merchant.
serviceID	long	M	The unique identifier of the service.
token	string	M	Token appended to the successUrl of the previous queryNAT response.

Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:soap="http://soap.interfaces.vasbilling.a1.net">
  <soapenv:Header/>
  <soapenv:Body>
    <soap:queryNATAfterSuccess>
      <queryNatRequest>
        <serviceProviderID>1</serviceProviderID>
        <merchantID>1</merchantID>
        <serviceID>1</serviceID>
        <token>b1ei5cr326x7rkvkw1hn413b5</token>
      </queryNatRequest>
    </soap:queryNATAfterSuccess>
  </soapenv:Body>
</soapenv:Envelope>
```



23.3. Response

Attributes

Name	Value	M/O	Description
mandant	string	M	Provider string, e.g. "A1-SI"
customerMsisdn	string	O	
purchase[]	[]	O	
purchase[].amount	int	M	Gross amount in cents, e.g. 500
purchase[].charged	dateTime	M	
purchase[].created	dateTime	M	
purchase[].purchaseID	long	M	The unique identifier of the purchase.
purchase[].serviceProviderID	long	M	The unique identifier of the service provider.
purchase[].merchantID	long	M	The unique identifier of the merchant.
purchase[].serviceID	long	M	The unique identifier of the service.
status	string, enumeration	M	Transaction status, can be a value of either: "AUTHORIZED" "CHARGE_CONNECTED" "CHARGED"



Example

```
<soap:Envelope
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns1:queryNATAfterSuccessResponse
xmlns:ns1="http://soap.interfaces.vasbilling.a1.net">
      <queryNATAfterSuccessReturn
xmlns:ns2="http://soap.interfaces.vasbilling.a1.net/">
        <mandant xsi:nil="true" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"/>
        <customerMsisdn>436641234567</customerMsisdn>
        <purchases>
          <item>
            <purchaseID>123456</purchaseID>
            <merchantID>1</merchantID>
            <amount>1</amount>
            <charged>2020-02-24T16:13:23.632+01:00</charged>
            <created>2020-02-24T16:13:22.071+01:00</created>
            <serviceProviderID>1</serviceProviderID>
            <serviceID>1</serviceID>
            <status>CHARGED</status>
          </item>
          <item>
            <purchaseID>123457</purchaseID>
            <merchantID>1</merchantID>
            <amount>1</amount>
            <created>2020-03-01T15:55:24.336+01:00</created>
            <serviceProviderID>1</serviceProviderID>
            <serviceID>1</serviceID>
            <status>AUTHORIZED</status>
          </item>
        </purchases>
      </queryNATAfterSuccessReturn>
    </ns1:queryNATAfterSuccessResponse>
  </soap:Body>
</soap:Envelope>
```

Error Codes

ErrorCode	ErrorType	Faultstring	Reason
8	IllegalParameterError		Missing parameters Wrong/malformed/unknown parameters Wrong combination of parameters Blocked Service provider Blocked Merchant
9	InternalAppError		Internal Error



24. Ping

24.1. Scope

Check partner API service availability.

24.2. Request

Attributes

Element	Value	M/O	Description
n/a	n/a	n/a	n/a

Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:soap="http://soap.interfaces.vasbilling.a1.net">
  <soapenv:Header/>
  <soapenv:Body>
    <soap:ping/>
  </soapenv:Body>
</soapenv:Envelope>
```

24.3. Response

Attributes

Name	Value	M/O	Description
timestamp	string	M	Unix epoch time.

Example

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns1:pingResponse xmlns:ns1="http://soap.interfaces.vasbilling.a1.net">
      <pingReturn>
        <timestamp>1602983096604</timestamp>
      </pingReturn>
    </ns1:pingResponse>
  </soap:Body>
</soap:Envelope>
```

Error Codes

ErrorCode	ErrorType	Faultstring	Reason
8	IllegalParameterError		Wrong/malformed/unknown parameters
9	InternalAppError		Internal Error



25. Error Definitions

Error Type	Error Code	Error String	Faultstring	Description
SubscriptionCancelledError	1	SUBSCRIPTION_CANCELLED_ERROR	"Subscription has been cancelled"	Subscription is cancelled, not recoverable error.
SubscriptionExpiredError	2	SUBSCRIPTION_EXPIRED_ERROR	"Purchase expired"	Subscription already expired, not recoverable error.
AgeVerificationError	3	AGE_VERIFICATION_ERROR	"Subscriber is not above 16" "Subscriber is not above 18"	Customer has not the valid age, not recoverable error.
AlreadyChargedError	4	ALREADY_CHARGED_ERROR	"Purchase has already been charged"	The purchase has been charged, not recoverable error.



BillingError	5	BILLING_ERROR	"Error in Billing System" "No Debit" "Not billable" "Brand not supported" " "No supported payment provider found" "Subscriber suspended" "Subscriber cancelled" " "Subscriber state unknown" "No active account" "Invalid account state" "Blocked" "Insufficient funds" "Subscriber is not above 16" "Subscriber is not above 18"	There has been an error in the billing system. Not recoverable error.
ChargeTimeoutError	6	CHARGE_TIMEOUT_ERROR	"Purchase expired"	The charging was done after the timeout. Not recoverable error.



IdentificationError	7	IDENTIFICATION_ERROR	"Customer lookup not available"	The customer was not identified. Not recoverable error.
---------------------	---	-----------------------------	--	--



IllegalParameterError	8	ILLEGAL_PARAMETER_ERROR	"Service, Merchant, Service Provider not found" "Merchant not found" "Service not found" "Service provider not found" "Purchase not found" "Transaction not found" "Customer not found" "Web not allowed" "Wap not allowed" "Sms not allowed" "Silent not allowed" "Direct charge not allowed" "Daily subscription not allowed" "Weekly subscription not allowed" "Monthly subscription not allowed"	There was an illegal parameter sent. Not recoverable error.
-----------------------	---	-------------------------	--	---



			"Yearly subscripti on not allowed" "Age class not allowed" "Single purchase not allowed" "Transacti on state not allowed" "Invalid credential s" "Not refundabl e" "Service blocked" "invalid id" "Content type missing" "channelT ype and clientId do NOT correlate" "Amount not valid" "Purchase has not been authorize d"	
--	--	--	---	--



InternalAppError	9	INTERNAL_APP_ERROR	"Could not parse url" "Could not refund" "Could not cancel" "Application error" "Could not create purchase" "Could not update purchase" "Purchase could not be charge connected" "Purchase could not be charge committed" "Could not retrieve transactions" "Could not retrieve brands" "SMS communication failed"	There was an internal error in VAS Billing. Not recoverable error.
------------------	---	---------------------------	--	---



LimitExceededError	10	LIMIT_EXCEEDED_ERROR	<p>"Amount less than min. limit"</p> <p>"Amount greater than max. limit"</p> <p>"Count of max active subscriptions exceeded"</p> <p>"Daily count exceeded"</p> <p>"Daily amount exceeded"</p> <p>"Weekly count exceeded"</p> <p>"Weekly amount exceeded"</p> <p>"Monthly count exceeded"</p> <p>"Monthly amount exceeded"</p> <p>"Yearly count exceeded"</p> <p>"Yearly amount exceeded"</p> <p>"Period transaction limit"</p>	<p>The limit of the transaction/subscription was exceeded. Not recoverable error.</p>
--------------------	----	----------------------	--	---



			exceeded "	
MessageSenderError	11	MESSAGE_SENDER_ERROR	n/a	The message could not be sent out. (SMS Channel). Not recoverable error.
NoSuchClientError	12	NO_SUCH_CLIENT_ERROR	"No client for channel" "NAT flow not found" "Subscriber not found"	The client does not exist. Not recoverable error.
NotAuthorizedError	13	NOT_AUTHORIZED_ERROR	"Purchase has not been authorized"	The transaction was not authorized. Not recoverable error.



NotBillableError	14	NOT_BILLABLE_ERROR	"Error in Billing System" "No Debit" "Not billable" "Brand not supported" " "No supported payment provider found" "Subscriber suspended" "Subscriber cancelled" " "Subscriber state unknown" "No active account" "Invalid account state" "Blocked" "Insufficient funds"	The client is not billable. Not recoverable error.
ContentTypeBlockedError	15	CONTENT_TYPE_BLOCKED_ERROR	"Content-type blocked"	Content type blocked.
NoContentTypeProvidedError	16	NO_CONTENT_TYPE_PROVIDED_ERROR	"No content-type provided"	No content type provided.
ContentTypeNotAllowedError	17	CONTENT_TYPE_NOT_ALLOWED_ERROR	"Content-type not allowed"	Content type not allowed.



AlreadyRefundedError	18	ALREADY_REFUNDED_ERROR	"Already refunded"	The purchase has been already fully refunded, not recoverable error.
InvalidAmountError	19	INVALID_AMOUNT_ERROR	"Amount not valid"	Used for ChargeConnect and Refund operations The defined amount is not considered valid, either because <ul style="list-style-type: none">it differs from the amount as defined in the Discover request (for single event)it is higher than the originally provided amount in the Discover request (for subscription)the amount (i.e. refund amount) exceeds the remaining amount





26. Details on Customer eligibility

Description	Faultstring	Impact
Not an active customer	Subscriber not found	permanent
Account state invalid	Invalid account state	permanent
Blocked by tariff/acount/selfcare	Subscriber not allowed	temporary
Limit check failed	No debit	temporary
Low balance	Insufficient funds	temporary
Account suspended	Subscriber suspended	temporary

Error response - "Invalid credentials" Example

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <soap:Fault>
      <faultcode>soap:Server</faultcode>
      <faultstring>Invalid credentials</faultstring>
      <detail>
        <ns3:IllegalParameterError xmlns:ns3="http://soap.interfaces.vasbilling.a1.net"
xmlns:ns2="http://soap.interfaces.vasbilling.a1.net/">
          <errorCode>8</errorCode>
          <errorString>ILLEGAL_PARAMETER_ERROR</errorString>
          <description>There was an illegal parameter sent. Not recoverable
error.</description>
        </ns3:IllegalParameterError>
      </detail>
    </soap:Fault>
  </soap:Body>
</soap:Envelope>
```