

TECHNICAL REFERENCE

PAYONE Platform Frontend

Version: 2.54

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Preface

This document serves as a technical reference for the PAYONE Platform and is exclusively intended for the identified recipient. If you are not the intended recipient or the recipient's representative please notice that the content is protected by copyright and that any form of acknowledgement, publication, duplication or distribution of the contents of this document is illegal.

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This document has been prepared with the utmost care. There is, however, no warranty as to its complete accuracy.

Amendments

BS PAYONE GmbH reserves the right to make product improvements and other changes without notice.

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Change history

History		
Date	Version	Comment
2013-01-02	2.21	New document layout
2013-02-27	2.22	<p>Parameters "invoiceappendix", "invoice_deliverydate", "invoice_deliveryenddate" added</p> <p>Feature parameter handling within Exit-Url is deprecated and has been removed.</p> <p>Note to IP V4 / IP V6</p> <p>Note to currency handling</p> <p>New payment type BillsAFE</p> <p>Parameter "email" mandatory for payment type BSV</p>
2013-11-07	2.23	<p>SEPA-specific extensions</p> <p>parameters "iban" / "bic" can be used – even without bankcode / bankaccount</p> <p>Please note that API-responses may be extended by new response key/values at any time to provide additional features</p>
2013-11-14	2.24	<p>Usage of IBAN / BIC: IBAN/BIC can be used together with bankcountry. If bankcountry is given it must match with IBAN.</p> <p>bankcountry is mandatory with bankcode, bankaccount</p> <p>PCS-merchants: mandate-identifications must be generated automatically</p>
2013-11-19	2.25	New error code 2012
2013-12-27	2.26	<p>Direct Debit Netherlands removed from chapter "1. General"</p> <p>Requests "ManageMandate" and "getfile" are only available with Server API</p>
2014-01-29	2.27	<p>Mode "live" / "test" consistently written in lower case.</p> <p>Error messages added and text corrected</p>
2014-03-19	2.28	new error codes 878, 905, 909, 1007, 1367, 1372, 1373
2014-09-05	2.29	<p>new error codes 940, 941, 952, 1337, 1338, 1374, 1375</p> <p>Parameter "telephonenumber" shortened from 50 to 30 characters</p> <p>Parameter for Klarna (KLV) added</p> <p>Parameter "shipping_addressaddition" has been removed as it is not used for any payment type</p> <p>Documentation for TxStatus has been corrected: "cancellation" -> "cancelation"</p> <p>IMPORTANT NOTE:</p> <p>Starting with 2014-12-29 the range of IP-addresses of the PAYONE Platform will be extended!</p> <ul style="list-style-type: none"> old: 213.178.72.196, 213.178.72.197, 217.70.200.0/24 new: 213.178.72.196, 213.178.72.197, 217.70.200.0/24, 185.60.20.0/24 <p>Please ensure that your systems will be able to accept outgoing and incoming connections to and from all these IP-addresses.</p>

History		
Date	Version	Comment
2015-01-12	2.30	<p>New error code 1012 added</p> <p>Parameter for Klarna installment (KLS) have been added</p> <p>Transaction Status PAYONE -> merchant:</p> <ul style="list-style-type: none"> new parameter "transaction_status" has been introduced <p>(if your systems are not prepared to process new parameters, please contact our PAYONE Technical Support)</p> <p>Parameter "api_version" added -> see parameters in request URL</p>
2015-02-25	2.31	<p>Transaction Status PAYONE -> merchant:</p> <ul style="list-style-type: none"> description added for parameter "notify_version" (in use since January 2015) txaction "failed": description corrected (mistake by copy&paste). -> this txaction is not in use yet.
2015-04-08	2.32	<ul style="list-style-type: none"> PCS (PAYONE Collection Service) has been migrated to PPS (PAYONE Payment Service) Chapter 1, "please note" chapter supplemented by reference to costs
2015-06-03	2.33	<ul style="list-style-type: none"> Additional support of hash algorithm "sha2-384" (HMAC-SHA-2, 384) PMI-setting to enforce usage of "sha2-384" (Hash-value of SessionStatus and TransactionStatus still remains with MD5 by now and is subject to change). Transaction Status PAYONE -> merchant, txaction "failed" is used with "Barzahlen" and expired refund. Character set for parameter "id" (product number) has been clearly defined
2015-09-02	2.34	<ul style="list-style-type: none"> Parameter "reference" for GPY must be min. 4, max. 20 characters PAYONE Frontend hosted-iFrame available for easy PCI DSS 3.1 SAQ A compliance -> please read notes for Migration in chapter 3.2
2015-12-07	2.35	<ul style="list-style-type: none"> Online-Payment P24 added Old IP-addresses for Session-Status and Transaction-Status removed. New error codes 972 and 973 have been added Parameter "bankcode" and "clearing_bankcode" have changed from N..8 to AN..11 Parameter "bankaccount" and "clearing_bankaccount" have changed from AN..14 to AN..26
2016-01-28	2.36	<ul style="list-style-type: none"> itemtype (Parameter „it“) now does support „voucher“ for PPE (PayPal Express) Additional test data for "consumerscore" and "address check person". Please refer to separate document "PAYONE_Platform_Testdata_EN.pdf"
2016-02-15	2.37	<ul style="list-style-type: none"> New SSL-certificates for PAYONE -> https://www.payone.de/en/platform-integration/platform/important-technical-information/ssl-certificates/

History		
Date	Version	Comment
2016-02-23	2.38	<ul style="list-style-type: none"> Naming changed from “truncated cardpan” to “masked cardpan”. Parameter name “truncated cardpan” does remain unchanged. In fact “masked cardpan” means display of first six and last four digits while “truncated cardpan” means showing only last four digits. Actually the pseudo card pan is 13 to 16 digits long. In future the pseudo card pan will be 19 digits long. This is already specified by format “N..19” and in future the full range of 19 digits will be used.
2016-03-18	2.39	<ul style="list-style-type: none"> Check of correct encoding will be enforced. I.e.: If request-encoding is specified with “UTF-8” (Parameter “encoding”) and non-matching characters are detected (e.g. “ß” instead of “U+00DF” or “Ö” instead of “U+00D6”) the request will be rejected with errorcode=2013.
2016-05-09	2.40	<ul style="list-style-type: none"> iDEAL: Bunq-Bank added (Parameter “bankgrouptype”) Contract/createaccess: Limit (3 years) for trail and recurring period documented. Chapter 3.9: Special remarks to usage of not-used parameters.
2016-07-26	2.41	<ul style="list-style-type: none"> Additional features for “PAYONE hosted iFrame mode” <ul style="list-style-type: none"> Config-block for element “cardcvc2” has been extended by array “length” to specify the exact required CVC-length per cardtype Attribute “placeholder” can now be set for input fields. American Express Safekey (3-D Secure) is planned for 2016-10-01 China Union Pay / CUP (as credit card) is planned for 2016-10-01 IBAN / BIC / bankcode / bankaccount can be omitted for SOFORTBanking (OBT/PNT) on API-level as they are returned from SOFORT and saved by PAYONE (for later upcoming SEPA-credits in case of refund).
2016-11-10	2.42	<ul style="list-style-type: none"> Chapter 3.7 clarified that further parameters have to be added to this sample. Parameter “id_trail” and “id_recurring” have been shortened from AN..100 to AN..32. This is necessary as these values will be used for later usage with parameter “id” in authorization-requests. And there the “id” is limited to AN..32. Format for request-parameter “bankcode” changed from “AN..11” to “N8” (fixed 8) for direct debit requests as only DE is supported with bankcode/bankaccount (BBAN). For international direct debit IBAN is required. Format for request-parameter “bankaccount” changed from “AN..26” to “N..10” for direct debit requests as only DE is supported with bankcode/bankaccount (BBAN). For international direct debit IBAN is required. Request-parameters “bankbranchcode” and “bankcheckdigit” removed. They were only valid for SEPA-countries and they have moved to IBAN. Mistake in documentation in chapter “Responses -> TransactionStatus”: <ul style="list-style-type: none"> “clearing_amount” was described as N..7,2 in largest unit (e.g. Euro) but is returned as N..10 in smallest unit (e.g. Cent).

History		
Date	Version	Comment
2016-12-02	2.43	<ul style="list-style-type: none"> New error codes for Blacklist (731 to 734)
2017-02-15	2.44	<ul style="list-style-type: none"> Added comments to URLs (successurl, backurl, errorurl) in section "special remark", to email-encoding and whitespaces in values.
2017-04-03	2.45	<ul style="list-style-type: none"> Added new bankgrouptypes for EPS payments Contact details changed PAYONE.DE -> PAYONE.COM
2017-05-04	2.46	<ul style="list-style-type: none"> Removed deprecated bankgrouptypes for EPS payments Parameter "firstname" also mandatory for payment type PDT Please use only capital letters for country-codes and state-codes Please use only small letters for language-codes Added errorcodes 350 and 351 for PAYONE secure purchase on invoice
2017-07-25	2.47	<ul style="list-style-type: none"> Parameter "invoiceid" and some others are not supported by request=preauthorization – but only by "request=capture" (or "authorization"). These parameters have been marked. Added errorcode 981 for Amazon Payments Correction: iDEAL "ABN_AMRO_BANK" is not deprecated Additional test PANs to simulate credit card failures -> refer to separate test data document. Parameter "email" is mandatory for payment type P24
2017-08-29	2.48	<ul style="list-style-type: none"> Ratepay Subtypes RPD, RPP, RPS, RPV added Design changed to BS PAYONE
2017-11-15	2.49	<ul style="list-style-type: none"> TransactionStatus extended with "txaction=failed" for all types of payment TransactionStatus extended with "errorcode" in case of "txaction=failed" Contracts may have a duration (trail & recurring) of maximum 5 years Address data are required for bank transfers with IBAN-countries CH, SM, MC, PM, JE, GG due to new regulation on the transfer of funds (Geldtransferverordnung) valid from 2017-11-19 New parameter "businessrelation" introduced with values "b2b", "b2c". This will be required from 2018-01-01 to indicate business to business transactions especially for "secure invoice" (POV) and "secure direct debit" (POD)
2018-01-31	2.50	<ul style="list-style-type: none"> New AVS-code "M" (not used by now, used by AVS VISA International) Number of article data (array) limited to 400 positions, starting with 1 New api_version 3.11 for capture / pending Announcement for upcoming request "refund" / response "pending" Announcement for upcoming request "createaccess" / response "pending" New notify_version 7.6 for transaction status with "pending" and "reasoncode"

History		
Date	Version	Comment
2018-04-04	2.51	<ul style="list-style-type: none"> PAYONE Platform requires update to TLS 1.2 until deadline 2018-05-30. According to PCI DSS needs all incoming connections based on SSL and TLS 1.0 / 1.1 have to be upgraded to TLS 1.2. <p>Further information will be announced in upcoming newsletters and merchant information.</p> <ul style="list-style-type: none"> Transactions in mode “test” may be deleted after 3 months. PAYONE Platform shall not be used for integration/regression test. PNT, SOFORT: Combination of firstname + lastname must not exceed 27 characters. BSV, BillSAFE has been removed – not supported any more.
2018-07-06	2.52	<ul style="list-style-type: none"> Added new bankgrouptype “MONEYOU” for iDEAL payments E-Mail-addresses have a maximum length of 254 characters and are validated against RFC 5322. New errorcodes added 55,57,58,60,63,64 for credit card processing
2018-08-13	2.53	<ul style="list-style-type: none"> Tipp: Value for “reference” is case insensitive ! New errorcode “112” for “Account is locked or inactive.” (at external payment service provider, e.g. PayPal). <p>Enforced validation from 2019-01-01:</p> <ul style="list-style-type: none"> Values for “country” and “currency” must be capital letters Values for “language” must be lower case Key / keywords like “state” must not be used for own purpose.
2018-09-12	2.54	<ul style="list-style-type: none"> Name changed “Payolution” -> “Paysafe Pay Later” New Version of “Quick Start Guide” is available with a description of new settings in PMI -> Configuration -> Payment Portals -> Transactions-Status

1 General

The PAYONE Platform Frontend is an TLS-protected payment window which can be fully adapted to the corporate design of the merchant's e-commerce offering and has been specifically developed for e-commerce solutions. The PAYONE Platform Frontend ensures that the entry of sensitive payment information takes place on the VISA and MASTERCARD certified PAYONE systems.

This technical reference includes detailed descriptions and examples for the communication with the PAYONE Platform.

PAYONE Platform supports the following methods of payment:

Direct debit:	Germany, Austria (ELV: electronic SEPA direct debit system)
Credit card:	Visa, MasterCard, American Express, JCB, Diners Club, Discover,...
Debit card:	Maestro International, Carte Bleue
Online transfer:	Sofortbanking, giropay, eps (electronic payment standards), PostFinance E-Finance, PostFinance Card, iDEAL, Przelewy24, Bancontact ⁽¹⁾
Transfer:	BS PAYONE Secure Invoice, Prepayment (worldwide), open invoice (worldwide), cash on delivery (worldwide)
e-wallets:	PayPal, Masterpass ⁽¹⁾ , Amazon Payments ⁽¹⁾ , Alipay, Paydirekt
Financing:	Klarna Invoice ⁽¹⁾ , Payolution ⁽¹⁾ , Ratepay
(1)	PAYONE Frontend not supported

PAYONE Platform includes the following optional modules:

Accounting:	Detection of incoming payments and overdue accounts that result from return debit notes, chargebacks and invoices which have not been settled by the specified date.
Contract:	Administration of subscriptions and recurring payments
Invoicing:	Generating invoices and credit memos
Collect:	Automatic recovery of overdue accounts via dunning processes and encashment
Protect:	Check of accuracy and evaluation of the submitted customer data
Reporting:	Specific export options for all transaction details
Billing:	Aggregated billing of individual purchases and subscriptions

The administration of subscriptions (Contract), the creation of invoices (Invoicing) and the dunning processes (Collect) are, depending on the settings, automatically carried out in the background. You can, however, use API to control these procedures.

The communication is based on HTTPS-POST requests (key/value pairs) between the merchant's systems and PAYONE Platform.

The PAYONE Platform and its connected systems are designed for IP addresses Version 4.

This technical reference may include functions that are not activated for your merchant account due to contractual terms. If you have any questions or problems please do not hesitate to contact our service team.

Please note:

Mode "test" / "live":

- Basically all API-requests can be used in mode "test" and "live" in the same way. But please note that the processes may differ slightly different in mode "test" and "live". So in mode "test" a lot of downstreamed processes are simulated by the PAYONE Platform and are not forwarded to other service providers.
- Please also note that you should not use any live data in mode "test". The PAYONE Platform offers a set of test data to simulate several test cases in payment processing. Please request the document "PAYONE Platform Test procedures and test data".
- Attention: Requests in mode "live" are always processed and forwarded to service providers – even if test data are used. By this additional cost may come up (e.g. by post delivery of documents or by chargebacks).
- Please note that the intention for mode "test" in the PAYONE Platform is to exercise and to test the behavior of the PAYONE Platform – the intention is not to serve for regression / integration tests.
- Please note that transactions and their data in mode "test" may be deleted after 3 months.

Costs:

Please note that depending on the transaction type used costs may occur in addition to transaction fees. See our List of Prices and Services for details.

1.1 Accounts

The PAYONE Platform includes merchant accounts and what is known as sub accounts. For the settlement of your goods you need at least one sub account to which your payments will be allocated.

Each merchant account can include any number of sub accounts. This combination of merchant and sub accounts offers a multitude of flexible options to the merchant.

The merchant can, for example, allocate marketing campaigns to different sub accounts in order to receive exact statistics concerning all transactions, accesses, revenues, subscriptions and purchases generated through the corresponding marketing campaign. The merchant can thus easily measure and analyse the success of his marketing campaigns with just one merchant account.

This combination of merchant and sub accounts can also be used for multilevel marketing platforms (partner programs) or resellers.

1.2 Payment portals

In order to carry out payment processes via the PAYONE Platform, you must first create a payment portal. All settings regarding payment processes and debtor management are anchored in the payment portals. All payment processes are conducted via the different payment portals.

The PAYONE Platform has two different versions of payment portals: "Access" and "Shop".

The fundamental difference between the two payment portal versions is the following: In the "Access" version you need to set up orders/contract templates and the PAYONE Platform can handle the access management for you. You can define how long or how often your customers have access to your products and services after a successful payment process. In the same manner, subscriptions are supported by the PAYONE Platform payment portals of the version "Access".

"Access" payment portals are thus specifically useful for accounting digital products or services which will grant your customer access for a specific period of time determined by you or if the PAYONE Platform is to manage a subscription.

In payment portals of the version "Shop" a one-time settlement occurs. In this case it is not necessary to set up offers because the products and services that are to be settled are dynamically submitted to the PAYONE Platform. It is therefore possible to settle actual as well as digital products and services.

Versions:

"Access" version:	Time-based settlement (settlement of digital products and services for a specific period of time, such as memberships or subscriptions)
"Shop" version:	Product /event-based settlement (one-time settlement of actual or digital products and services)

1.3 Debtor accounts

With each initialisation of a payment process the PAYONE Platform sets up a debtor account and opens up a payment process in this account.

Each payment process includes a unique PAYONE payment process ID (txid). An individual balance is kept for each payment process. A payment process usually includes an invoice and, where applicable, several credit memos. All payments or return debit notes are automatically allocated to the corresponding payment process. Once a payment request is settled, the balance is reduced by the corresponding amount. In the case of return debit notes or chargebacks the balance is increased by the amount of the return debit notes.

During each booking the master data/payment data for the customer is saved. Each customer (debtor) is assigned a PAYONE debtor ID (userid) by the PAYONE Platform. If you enter the PAYONE debtor ID assigned by the PAYONE Platform (userid) for follow-up bookings for the same debtor, the booking will automatically be assigned to the same debtor.

The second option is to use your own customer ID (customerid). If you use the same customer ID (customerid) for two different bookings, the bookings will also be allocated to the same internal debtor by the PAYONE Platform.

Advantage:

All payment processes by the same debtor are managed automatically internally. Among other things, this makes it possible to synchronise the booking, dunning and encashment processes by combining several open requests for one debtor within one process. In addition, the payment processes or the master data/ payment data for one debtor can easily be administered.

By storing customer data in the PAYONE Platform it is moreover possible to initiate follow-up bookings for a customer without needing to submit the customer data. It is therefore not necessary for the merchant to store e.g. credit card information.

Attention:

When follow-up bookings for the same customer (debtor) (same userid or customerid) are carried out, the debtor's master data is updated / overwritten with the current values.

1.4 Invoicing

The PAYONE Platform can automatically generate invoices and credit memos for you and send these, e.g. as PDF documents, to your customer via email or post.

With the "Access" version the description provided in the offer you have generated is automatically used as the invoice item.

With the "Shop" version you have the possibility to supply the PAYONE Platform with your complete shopping cart including article number, quantity, description, price and VAT. These positions are automatically used as invoice items.

You can create the invoices according to your specifications.

Once the invoice is activated and the invoice/credit memo has been successfully carried out, an invoice/credit memo in your design is automatically created by the PAYONE Platform and sent to the customer as a PDF document via email or post. Afterwards you can download the invoices sent at any time in the PMI (PAYONE Merchant Interface).

For configuration of the PAYONE Platform invoicing module please contact the PAYONE merchant service.

1.5 Dunning processes and encashment

At your request the PAYONE Platform will carry out commercial dunning processes as well as the transfer to encashment. Within the dunning process, the customer will receive up to three reminders (e.g. via email, post) with requests for payment. If the dunning process is without success, the case can be transferred to an external encashment agency. All reminders that have been sent can be viewed via PMI (PAYONE Merchant Interface).

If an invoice is not settled by the specified date or in the case of return debit notes and chargebacks (credit card) the case is automatically transferred to the PAYONE Platform's internal dunning.

In the reminders, the customer receives an overview of all outstanding requests and of any additional fees that may have resulted. The email includes all data relevant for payment and the customer is therefore able to settle all outstanding requests by credit transfer straight away. The incoming payments are automatically assigned to the outstanding request by the PAYONE debtor management system. If the dunning procedure is without success, the case is transferred to an encashment agency.

The merchant is supplied with all outstanding requests via the TransactionStatus (see chapter 4.2). In the same manner the TransactionStatus transmits the settlement of every outstanding request. The customer is optionally provided with a confirmation mail acknowledging the settlement of the outstanding request.

For configuration of the PAYONE Platform Collect module please contact the PAYONE Merchant Service.

1.6 Administration of subscriptions

With the help of the Contract module the PAYONE Platform manages subscriptions and recurring payments. Terms, prices and dependencies can be defined freely within the PMI (PAYONE Merchant Interface), which means that complex order models can be displayed as well.

In order for subscriptions to be managed automatically via the PAYONE Platform, you must first provide the key details of the subscription in the PMI (PAYONE Merchant Interface). For this purpose, create a payment portal of the type "Access" and corresponding offers (templates) for the different subscriptions (see chapter 2.1). Here, you can define terms, prices, etc. for the subscription.

To initialise a subscription use the corresponding order ID (template) and a "createaccess" request. If the first booking is successful, a subscription will be created for the customer using the template.

All bookings created by the administration of subscriptions via the TransactionStatus (see chapter 4.2) are submitted to the merchant. If Invoicing is active, the customer will automatically receive an invoice with each booking.

For configuration of the PAYONE Platform Contract module please contact the PAYONE merchant service.

2 Payment portals

2.1 Payment portal version „Access“

2.1.1 Creating a payment portal of the „Access“ version

In order to invoice your products and services with access management or administration of subscriptions via PAYONE, you must first create at least one payment portal of the version "Access".

Options

Portal name:	General description of the payment portal.
URL:	URL on which your products or services you wish to settle via this payment portal are to be found.

2.1.2 Adding an offer to a payment portal

Options initial term

Name:	Will be used as article description for the creation of invoices.
Login time:	Defines the duration for the initial contract term. (Days/months/years) Do not exceed a duration of 60 months / 5 years.
Price:	Price for the initial contract term.

Options follow-up term / repeat term

Automatic renewal:	Activate this check box to activate repeat terms. If you activate this option, the subscription will be renewed until it is actively terminated.
Name:	Will be used as article description for the creation of invoices.
Repeat cycle:	Defines the duration of the repeat cycle. (Days/months/years). Do not exceed a duration of 60 months / 5 years.
Price:	Price of the repeat cycle
Currency:	The currency applies for both the initial term and the repeat term.
VAT tax rate:	The VAT tax rate applies for both the initial term and the repeat term.

2.1.3 Extended options of the payment portal

Options

SessionStatus URL:	<p>Status changes for an open session (access) are transmitted to this URL via HTTP request (see chapter 4.1).</p> <p>If you are using the SessionControl script, enter the corresponding URL here.</p>
TransactionStatus URL:	<p>Status changes for a booking are transmitted to this URL via HTTP request (see chapter 4.2).</p>
Key:	<p>This key is transmitted to the SessionStatus/TransactionStatus URL as an MD5 or SHA2-384 hash value with every request. In addition, the request for the Frontend is secured using this key (see below).</p> <p>Attention: The hash value has to be given in lower case.</p>
Language:	<p>With this configuration you can save different HTML headers/footers for each language.</p> <p>If you create a language independent template, you only need to save the template in one language. This will then always be used irrespective of the language selected by the end customer.</p>
Default template:	<p>Defines that this header/footer represents the default template. If no template has been stored for a specific language, this template will be used.</p>
Header HTML:	<p>Insert the HTML source code for the header of the payment page here. This provides you with the option to freely determine the design and adjust the colours and layout of the payment form using stylesheets (CSS).</p> <p>You can use the PAYONE "default" template to start with. To do so, copy the HTML source code from the Frontend directly via your browser. The source codes have been highlighted.</p>
Footer HTML:	<p>Insert the HTML source code for the footer of the payment page here.</p>

2.2 Payment portal „Shop“ version

2.2.1 Creating a payment portal of the „Shop“ version

In order for the PAYONE System to be able to handle the payments for one or several products at a time, you must first create a payment portal of the version „Shop“. Please notice the differences to the payment portal of the version „Access“ (see 2.1).

Options

Shopname:	General description of the shop portal.
URL:	URL on which to find your products you wish to sell here.

Advanced configuration

TransactionStatus URL:	The purchase data are transmitted to this URL via a POST request (see chapter 5.2).
Exit-URL:	The end customer is forwarded to this URL after completing the purchase.
Back-URL:	The end customer is forwarded to this URL if he wants to cancel the payment process.
Key:	This key is transmitted to the SessionStatus/TransactionStatus URL as an MD5 or SHA2-384 hash value with every request. In addition, the request for the Frontend is secured using this key (see below).
Language:	<p>With this configuration you can save different HTML headers/footers for each language.</p> <p>If you create a language independent template, you only need to save the template in one language. This will then always be used irrespective of the language selected by the end customer.</p>
Default template:	Defines that this header/footer represents the default template. If no template has been stored for a specific language, this template will be used.
Header HTML:	<p>Insert the HTML source code for the header of the payment page here. This provides you with the option to freely determine the design and adjust the colours and layout of the payment form using stylesheets (CSS).</p> <p>You can use the PAYONE „default“ template to start with. To do so, copy the HTML source code from the Frontend directly via your browser. The source codes have been highlighted.</p>
Footer HTML:	Insert the HTML source code for the footer of the payment page here.

3 Request definitions

3.1 Introduction

With the PAYONE Frontend hosted-iFrame you have a compliant solution even with using external references (e.g. images, self-hosted CSS) and customized JavaScript. The basic requirements to be eligible with SAQ A¹ are:

- Your company accepts only card-not-present (e-commerce or mail/telephone-order) transactions;
- All payment acceptance and processing are entirely outsourced to PCI DSS validated third-party service providers;
- Your company has no direct control of the manner in which cardholder data is captured, processed, transmitted, or stored;
- Your company does not electronically store, process, or transmit any cardholder data on your systems or premises, but relies entirely on a third party(s) to handle all these functions;
- Your company has confirmed that all third party(s) handling acceptance, storage, processing, and/or transmission of cardholder data are PCI DSS compliant; and
- Your company retains only paper reports or receipts with cardholder data, and these documents are not received electronically.

and

- The entirety of all payment pages delivered to the consumer's browser originates directly from a third-party PCI DSS validated service provider(s).

PAYONE provides now the PAYONE Frontend hosted iFrame for input of sensible credit card data which is fully PCI DSS 3.1 SAQ A compliant.

Therefore a new URL has to be used: <https://frontend.pay1.de/frontend/v2/>.

For security reasons the new PAYONE Frontend hosted-iFrame

- does not populate credit card details with given data.
- must not be used with option "autosubmit=yes" and credit card data.
- has to be hosted on new domain and URL <https://frontend.pay1.de/frontend/v2/>

¹ Please refer to PCI DSS Security Standards listed in [SAQ A V3](https://de.pcisecuritystandards.org) on <https://de.pcisecuritystandards.org>

3.2 Migration to PAYONE Frontend hosted-iFrame

The PAYONE Frontend hosted-iFrame is configured in the same way as the existing Frontend solution. You can configure the Frontend design via PMI, payment portals, extended configuration. You will now find two tabs named "Classic Frontend (secure.pay1.de)" and "Frontend PCI DSS SAQ A (frontend.pay1.de)". For both frontend configuration the HTML header and footer can be specified and the design of the frontend can be customized.

PAYONE already copied your existing frontend configuration into the configuration for PAYONE Frontend hosted-iFrame. However, the display of the PAYONE Frontend hosted-iFrame may differ from the existing Frontend as the size of an input field and an input iframe may differ. So please verify that the design of the PAYONE Frontend hosted-iFrame meets your expectations.

After setup the new PAYONE Frontend hosted-iFrame you will simply have to replace the URL in your shop:

- **old URL to Frontend:** <https://secure.pay1.de/frontend/>
-> HTML footer/header in PMI-Tab "Classic Frontend (secure.pay1.de)"
- **new URL to PAYONE Frontend hosted-iFrame:** <https://frontend.pay1.de/frontend/v2/>
-> HTML footer/header in PMI-Tab "Frontend PCI DSS SAQ A (frontend.pay1.de)"

Important notes:

The HTML footer and header for "PAYONE Frontend" and "PAYONE Frontend hosted-iFrame" can be and have to be configured separately.

It is recommended to disable the usage of the Frontend classic once the PAYONE Frontend hosted-iFrame has been setup and tested. Otherwise it may be possible that an offender may change the new URL after calling the PAYONE Frontend hosted-iFrame to the old URL.

Feature "auto-submit" must not be used with PAYONE Frontend hosted-iFrame and credit card data.

3.2.1 Customization of hosted-iFrames

You may customize the HTML-type and HTML-CSS for the PAYONE hosted-iFrames. Therefore you may put a script-block named “config” into your HTML Header Code within the PMI-Portal configuration in tab “Frontend PCI DSS SAQ A (frontend.pay1.de)”.

This block may look like this (example):

```
<script>
config = {
  fields:{
    cardpan: {
      type: "tel",
      size: "21",
      maxlength: "21"
    },
    cardexpiremonth: {
      type: "select",
      size: "2",
      maxlength: "2"
    },
    cardexpireyear: {
      type: "select",
      size: "4",
      maxlength: "4"
    },
    cardcvc2: {
      type: "password",
      size: "4",
      maxlength: "4",
      style: "font-size: 10px; line-height: 12px; width: 60px;"
    }
  },
  defaultStyle: {
    input: " font-size: 10px; line-height: 12px; width: 220px",
    select: "font-size: 10px;",
    iframe: {
      height: "27px",
      width: "98%"
    }
  }
};
</script>
```

Please pay attention to separate the elements by “,” – but not the last element of a list.

Please find a list of supported elements in the next chapter.

3.2.1.1 Table of config-attributes

These attributes and values are allowed in object "config.fields":

cardtype	cardpan	cardcvc2	cardexpiremonth	cardexpireyear	attribute	value
x					cardtypes	define possible cardtypes for selection in PAYONE iFrame, e.g. ["V", "M", "A"]
	x	x	x	x	size	size of input field in characters, e.g. "20"
	x	x	x	x	maxlength	maximum length of accepted input, e.g. "20"
		x			length	Array of exact length of accepted input per CC-type e.g.: length: { "A": 4, "V": 3, "M": 3, "J": 0 }
	x	x	x	x	type	define type of input field: "text" input is visible "tel" input is visible, simple keyboard is displayed on mobile devices "password" input is masked "select" display selection/drop-down with possible values (only valid for month and year)
x	x	x	x	x	style	CSS style properties, e.g. "font-size: 1em; border: 1px solid #000; background: white; color: red; width: 145px; height: 70px; font-family: 'Courier'; font-style: italic; font-weight: bold; text-align: center; letter-spacing: 2px;" <i>Remark: if "url" is used the style will be ignored as PCI DSS does not allow external ressources.</i>
x	x	x	x	x	iframe.height	size
x	x	x	x	x	iframe.width	size, e.g.: iframe: { height: "25px", width: "250px" }

These attributes and values are allowed in object "config.defaultStyle":

attribute	value
input	CSS style properties for input fields, e.g. "font-size: 1em; border: 1px solid #000; width: 175px;"
select	CSS style properties for select fields, e.g. "font-size: 1em; border: 1px solid #000;"
iframe.height	size in pixel
iframe.width	size in pixel, e.g.: iframe: { height: "25px", width: "250px" }

3.3 Creating a link for the payment portal „Shop“ version

All products you want to bill for are transmitted to the PAYONE Platform Frontend dynamically in the form of parameters. The key you need to specify in every payment portal of the „Shop“ version protects against potential fraudulent attempts.

Account:	Here you select the account (sub-account) for which the bookings are to be listed in the statistics
Item number:	Your item number
Item name:	The description of the item

Example

```
<form action="https://frontend.pay1.de/frontend/v2/" method=POST>
<input type="hidden" name="portalid" value="2000000">
<input type="hidden" name="aid" value="10000">
<input type="hidden" name="mode" value="test">
<input type="hidden" name="request" value="authorization">
<input type="hidden" name="clearingtype" value="elv">
<input type="hidden" name="reference" value="1234567">
<input type="hidden" name="amount" value="1499">
<input type="hidden" name="currency" value="EUR">
<input type="hidden" name="id[1]" value="1">
<input type="hidden" name="pr[1]" value="1499">
<input type="hidden" name="no[1]" value="1">
<input type="hidden" name="de[1]" value="Jurassic Park">
<input type="hidden" name="va[1]" value="19">
<input type="hidden" name="hash" value="70eaec2a33fa1b4674c0b112f6982966">
<input type="submit" value="Buy now!">
</form>
```

Please use either:

- **URL to PAYONE Frontend hosted-iFrame:** <https://frontend.pay1.de/frontend/v2/>
- **or URL to Frontend Classic:** <https://secure.pay1.de/frontend/>

Alternatively, you can also pass the values via URL (via GET request). The calculation of the hash value can be found in chapter 3.7.

Billing several items using the „Shop“ version:

Any number of items to be billed can be transferred. If the Invoicing module has been ordered, these are listed on the invoice. "n" is the location of the item. Start with n=1. Accordingly id[2],pr[2],no[2],de[2],va[2] are the parameters of item 2 etc.

3.4 Creating a link for the payment portal „Access“ version

In the „Access“ version all offers (accesses or subscriptions) you want to bill have first to be created (see 2.1.2). The payment window is opened using this offer ID.

Account:	Here you select the account (sub-account) for which the bookings are to be listed in the statistics.
Offer:	Select the desired offer

Example

```
<form action="https://frontend.pay1.de/frontend/v2/" method="POST">
<input type="hidden" name="portalid" value="2000000">
<input type="hidden" name="aid" value="10000">
<input type="hidden" name="mode" value="test">
<input type="hidden" name="request" value="createaccess">
<input type="hidden" name="clearingtype" value="elv">
<input type="hidden" name="reference" value="1234567">
<input type="hidden" name="productid" value="1234">
<input type="hidden" name="hash" value="70eaec2a33fa1b4674c0b112f6982966">
<input type="submit" value="Buy now!">
</form>
```

Please use either:

- **URL to PAYONE Frontend hosted-iFrame:** <https://frontend.pay1.de/frontend/v2/>
- **or URL to Frontend Classic:** <https://secure.pay1.de/frontend/>

Alternatively, you can also pass the values via URL (via GET request). The calculation of the hash value can be found in chapter 3.7.

3.5 Auto-Submit

PAYONE Platform Frontend supports the automatic triggering of a payment without the customer having to re-confirm the payment on the Frontend. This can be useful in payment methods where you already have obtained all relevant customer data (e.g. prepayment, invoice). This function also allows you to ask for the payment data already on your site and then simply transfer them to the Frontend. In this case the Frontend executes the payment automatically. If the payment was successful the customer is forwarded directly. In case of an error the customer is shown the Frontend and given the option to correct his data.

Note:

Payment data should not come into contact with your system. This is very important with credit card data. Certification according to the PCI standard is not necessary only if the card data does not come into contact with your systems. To prevent your systems from coming into contact with sensitive payment data, the payment data from your form should be sent directly to the Frontend and not be forwarded through your systems (see below). Any other data can be queried in preceding steps.

To be PCI DSS SAQ A compliant feature “autosubmit” must not be used with PAYONE Frontend and credit card payments.

To utilise this function you must use the hash method in this documentation (2.x). The hash method from the documentation of version 1.x is not permitted.

Example

```
<form action="https://frontend.pay1.de/frontend/v2/" method="POST">
<input type="hidden" name="portalid" value="2000000">
<input type="hidden" name="aid" value="10000">
<input type="hidden" name="mode" value="test">
<input type="hidden" name="request" value="createaccess">
<input type="hidden" name="clearingtype" value="elv">
<input type="hidden" name="reference" value="1234567">
<input type="hidden" name="productid" value="1234">
<input type="hidden" name="autosubmit" value="yes">
<input type="hidden" name="hash" value="70eaec2a33fa1b4674c0b1ge5e982966">
<input type="hidden" name="bankcountry" value="DE">
<table>
<tr>
<td>Kontonummer</td><td><input type="text" name="bankaccount"></td>
</tr>
<tr>
<td>BLZ</td><td><input type="text" name="bankcode"></td>
</tr>
</table>
<input type="submit" value="Buy now!">
</form>
```

Please use either:

- URL to PAYONE Frontend hosted-iFrame: <https://frontend.pay1.de/frontend/v2/>
- or URL to Frontend Classic: <https://secure.pay1.de/frontend/>

3.6 One-Click Checkout

The PAYONE Platform supports the automatic storage of your customers' master and payment data. The PAYONE Platform Frontend can use these data to accelerate the payment process for the customer. If the customer is already known to the PAYONE Platform, it is possible for these data not having to be requested again during the payment process via the Frontend. The data are only displayed to the customer for checking. If the customer does not wish to change the data, he can complete the payment process with a single click.

To use the One-Click Checkout function you have to have it activated by the PAYONE Merchant Service. It is also technically necessary to transmit the customer ID („customerid“) of your customer with every request. This is necessary for the unique identification of the customer. In addition, you must use the hash method in this documentation (2.x). The hash method from the documentation of version 1.x is not permitted.

Note:

This method requires a certain level of security on behalf of the merchant. It must be ensured that the user is indeed the correct customer. This must be ensured using correspondingly secure login mechanisms. Otherwise it might be possible that a customer misuses the payment data of a third party.

3.7 Calculation of the HASH value

The hash value protects the request parameters from changes by the customer, e.g. price changes.

The hash value is calculated from the request parameters and a secret key using the hash function `hash("md5", $data)` or `hash("sha384", $data)`. Any parameter values to be protected are concatenated in alphabetical order. Finally the key will be attached to the string and the hash value is calculated.

Parameters are sorted by their name. It does not matter in which order they are used in the request URL. The parameters to be protected can be found in chapter 3.9. They have been identified with a "+" in the hash column.

You can assign the key to be used in the PMI (PAYONE Merchant Interface). Do not pass this key to third parties in any case. You can also choose the desired hash algorithm in the PMI:

PMI, configuration, payment portals, hash calculation	
PMI-Selection	Meaning
md5 (actual method)	PAYONE platform expects hash value as md5 (md5 is compromised and should be replaced by sha2-384) for compatibility reason this is currently default.
sha2-384 (recommended method)	PAYONE platform expects hash value as sha2-384 (if you want to use sha2-384 hash values this option has to be activated)
md5_or_sha2-384 (during migration)	PAYONE platform accepts both hash calculations (md5 and sha2-384) (this option should only be use for migration from md5 to sha2-384)

Attention:

The PAYONE Platform expects the hash value in small letters.

Please pay attention that for "sha2-384" the portal key is not part of parameters for hash-function, but a separate parameter passed to hash-function "hash_hmac".

An example in PHP:

```
// Important notes:
//
// * Intention of this sample is to show the concept of HASH-calculation
//   It's not a fully valid payment request
//
// * Please add further parameters as needed:
//   clearingtype / subtype
//   mode ("live" or "test")
//   further as needed - depending on clearingtype, subtype, ...
//
// * Please refer to the table in chapter 3.9 and add values to
//   HASH-calculation as indicated by column "Hash"
//
$request="authorization"; // Request
$portalid=2000001; // Portal ID
$said=10002; // Sub Account ID
$key="geheim"; // Key (configurable in the payment portal)

$id[1]="123-345"; // Your item no.
$pr[1]=5900; // Price in Cent
$no[1]=1; // Quantity
$de[1]="Puma Outdoor"; // Item description
$va[1]=19; // VAT (optional)
$amount=round($pr[1]*$no[1]); // Total amount
$currency="EUR"; // Currency
$reference="73464354"; // Merchant reference no.
$customerid="123456"; // Merchant customer ID (option)

// usage of md5-hash
// select "md5" in PMI-portal-settings
// $hash=md5($said . $amount . $currency . $customerid .
//           $de[1] . $id[1] . $no[1] . $portalid . $pr[1] .
//           $reference . $request . $va[1] .
//           $key); // Parameters in sorted order + key

// usage of sha2-384-hash
// select "sha2-384" in PMI-portal-settings
$hash=hash_hmac("sha384", $said .
               $amount .
               $currency .
               $customerid .
               $de[1] .
               $id[1] .
               $no[1] .
               $portalid .
               $pr[1] .
               $reference .
               $request .
               $va[1], // !! Parameters in sorted order
               $key); // !! $key is an individual parameter !

$url="https://frontend.pay1.de/frontend/v2/?request=" . $request .
    "&aid=" . $said .
    "&portalid=" . $portalid .
    "&customerid=" . $customerid .
    "&currency=" . $currency .
    "&amount=" . $amount .
    "&reference=" . $reference .
    "&id[1]=" . $id[1] .
    "&pr[1]=" . $pr[1] .
    "&no[1]=" . $no[1] .
    "&de[1]=" . $de[1] .
    "&va[1]=" . $va[1] .
    "&hash=" . $hash;
```

3.8 CSS style

You can adjust the look and feel of the Frontend using templates. The template consists of an HTML header and an HTML footer. In the HTML header you must define a stylesheet (CSS) amongst other things. Ideally use the "Default CSS" and adapt it as desired.

To customize the iFrames for credit card data input of "PAYONE Frontend hosted-iFrames" please refer to chapter 3.2.1.1.

Default CSS:

```
table {
    padding: 0px;
    border-width: 0px;
    outline-width: 0px;
}
img {
    border-width: 0px;
    outline-width: 0px;
}
td {
    font-size: 11px;
    font-family: Arial, Helvetica, Geneva, SunSans-Regular;
    line-height: 14px;
    padding-top: 2px;
    padding-bottom: 2px;
}
input.long {
    font-size: 10px;
    line-height: 12px;
    width: 98%;
    border: solid 1px #999;
}
input.short {
    font-size: 10px;
    line-height: 12px;
    width: 47%;
    border: solid 1px #999;
}
input.submit {
    color: #fff;
    font-size: 11px;
    background-color: #666;
    text-transform: uppercase;
    letter-spacing: 1px;
    cursor: pointer;
}
input.submit[disabled] {
    color: gray;
    cursor: wait;
}
form {
    display: inline;
}
select.long {
```

```
        font-size: 10px;
        width: 100%;
    }
    select.short {
        font-size: 10px;
        width: 47%;
    }
    a {
        color: #000;
    }
    a:hover {
        color: #666;
    }
    .fullbox {
        background-color: #e6e6e6;
        width: 320px;
        padding-right: 10px;
        padding-bottom: 10px;
        padding-left: 10px;
    }
    .headbox {
        color: white;
        background-color: #666;
        text-transform: uppercase;
        letter-spacing: 1px;
        width: 100%;
        height: 20px;
        margin-top: 20px;
        margin-bottom: 10px;
    }
    .formbox {
        width: 100%;
    }
    .infobox {
        width: 100%;
        border-color: #666666;
        border-width: 1px;
        border-style: solid;
    }
    .footer {
        width: 320px;
        height: 30px;
    }
    .stripline {
        border-top: 1px solid #999;
    }
    .errortext {
        color: #c00;
    }
}
```

3.9 Parameters in the request URL

Special remark:

- Only use key-value-pairs which are filled with meaningful data. All parameters that are not required for a request must not be used. Do not use dummy-values (like “-” or “x”) and do not use empty values. E.g.:
 - request “updateuser” does not require a parameter “clearingtype” nor “currency”.
-> Do not send e.g. “clearingtype=” or “clearingtype=-”, ...
 - request “getinvoice” does not require a parameter “amount” nor “language”.
-> Do not send e.g. “amount=” or “amount=0”, ...
 - request “preauthorization” with “clearingtype=cc” (creditcard) does not require bankdata.
-> Do not send e.g. “bankcountry=”, “bankcountry=x”, “iban=” or “iban=x”, ...
 - Do not use dummy values like “birthdate=00000000” or “birthdate=19700101”
-> then do not send parameter “birthdate” at all.
- Use correct encoding: You may specify two different encodings (ISO 8859-1 or UTF-8). Please set the encoding you really use and don't mix them up. This may lead to denied requests or to misinterpreted data.
- **Please use only upper case for country-codes and state-codes.**
-> Validation enforced from 2019-01-01
- **Please use only lower case for language-codes.**
-> Validation enforced from 2019-01-01
- **Please do not use reserved keys / keywords (like state) for own usage.**
-> Validation enforced from 2019-01-01
- URLs (like successurl, errorurl, backurl) should not contain special characters (e.g. “+”) as they can be mis-interpreted sometimes.
e.g.: “+” (plus) is converted to “ ” (space) with service SOFORT-Überweisung (SB/PNT)
- PAYONE API does not modify any given data. Please ensure that e.g. whitespace characters (leading, trailing or in between (for IBAN, BIC, PAN/PPAN)) are removed before sending data to PAYONE.
- URLs and E-Mail-addresses with non-latin-characters have to be translated to ASCII using Punycode before passing to PAYONE API as PAYONE does not modify any given data.

Please use either:

- Request URL to PAYONE Frontend hosted-iFrame: <https://frontend.pay1.de/frontend/v2/>
- or Request URL to Frontend Classic: <https://secure.pay1.de/frontend/>
(should not be used for new implementations; existing implementations should be migrated)

Request				
Parameter	Required	Hash	Format	Comment
aid	+	+	N..6	Sub account ID
portalid	+	+	N..7	Payment portal ID
api_version ²	+	+	Default	3.8 Actual API-version (Default if not present) 3.9 New API-version from 2015-01-05 3.10 New API-version from 2016-06-01
mode	+*	+	AN..5	live Live mode test Test mode
request	+*	+	AN..32	authorization Receivables are collected immediately preauthorization Receivables are collected at a later date (via API or PMI) createaccess Contract is created
encoding	-	+	Default	ISO-8859-1 (default), UTF-8
clearingtype	+	+	AN..3	elv Debit payment cc Credit card vor Prepayment rec Invoice sb Online bank transfer wlt e-wallet fnc Financing
reference	+*	+	AN..20	Merchant reference number for the payment process (case insensitive) (permitted symbols: 0-9, a-z, A-Z,+,-,_,/) special limits / restrictions: GPY min./max: AN 4..16
customerid	-	+	AN1..20	Merchant's customer ID (permitted symbols: 0-9, a-z, A-Z,+,-,_,/)
invoiceid ⁴	-	+	AN..20	Merchant's invoice number ³
invoice_deliverydate ⁴	-	+	N8	Delivery date (YYYYMMDD) ⁴
invoice_deliveryenddate ⁴	-	+	N8	Delivery period end date (YYYYMMDD) ⁴
invoiceappendix ⁴	-	+	AN..255	Dynamic text on the invoice ⁴
param ⁴	-	+	AN1..255	Individual parameter ⁴
narrative_text ⁴	-	+	AN1..81	Dynamic text component of the booking text for direct debits (3 lines @ 27 characters) and credit card collections ⁴

² New parameter "api_version" should be added to actual implementations as it will be mandatory in future.

³ Please note: This parameter is not supported for request=preauthorization.

Request				
Parameter	Required	Hash	Format	Comment
display_name	-	+	Default	yes: Name will be queried (default) no: name/company will not be queried if all necessary data were already transferred and are correct
display_address	-	+	Default	yes: Address will be queried (default) no: address will not be queried if all necessary data were already transferred and are correct
display_change_order	-	-	Default	no: Unchanged order (default) yes: Changed order. Payment details are listed after the payment information.
autosubmit	-	+	Default	no: No auto-submit (default) yes: Payment is executed immediately without customer interaction. If the payment was successful the customer is forwarded directly to the „successurl“. All payment data must be transmitted in this version.
successurl	o	+	AN..255	URL „payment successful“ (only if not provided in the PMI)
backurl	o	+	AN..255	URL „Back“ or „Cancel“ (only if not provided in the PMI)
targetwindow	-	+	Default	„window“ (default), „opener“, „top“, „parent“, „blank“, „self“
hash	+		AN..32 AN..96	MD5 hash code (see chapter 3.7) SHA2-384 hash code (see chapter 3.7)
Parameter („pre-/authorization“)				
amount	+	+	N..10	Total price in the smallest unit (Cent, max. 19 999 999 99)
currency	+	+	AN3	Currency (ISO 4217)
it[n]	+	+	Default	For KLV / KLS: Item type goods Goods shipment Shipping charges handling Handling fee voucher Voucher / discount Note: Item type "handling" only available after assignment by BillSAFE. [n] starting with [1];serially numbered;max [400]
id[n]	+	+	AN..32	Product number, order number or the like Permitted symbols: 0-9 a-z A-Z ()[]{} +_#/: [n] starting with [1];serially numbered;max [400]
pr[n]	+	+	N..10	Price in the smallest unit (Cent, max. 19 999 999 99) [n] starting with [1];serially numbered;max [400]

Request				
Parameter	Required	Hash	Format	Comment
no[n]	+	+	N..3	Quantity [n] starting with [1];serially numbered;max [400]
de[n]	+	+	AN..255	Description (on invoice) [n] starting with [1];serially numbered;max [400]
va[n]	o	+	N..4	VAT rate (% or bp) value < 100 = percent value > 99 = basis points Mandatory for payment type KLV, KLS [n] starting with [1];serially numbered;max [400]
Parameter („createaccess“)				
productid	+	+	N..7	ID for the offer
accessname	-	+	AN..32	Customer's user name
accesscode	-	+	AN..32	Customer's password
frontend_description	-	+	AN..10000	Confirmation text for the end customer after creating access. The transfer of HTML elements is permitted. At 10,000 characters this parameter is truncated.
amount_trail	-	+	N..10	Total price of all items during the initial term. Must equal the sum (quantity * price) of all items for the initial term (in the smallest currency unit, e.g. Cent, max. 19 999 999 99).
amount_recurring	-	+	N..10	Total price of all items during the subsequent term. Must equal the sum (quantity * price) of all items for the subsequent term (in the smallest currency unit, e.g. Cent, max. 19 999 999 99).
period_unit_trail	-	+	Default	Time unit for initial term, possible values: Y: Value in years M: Value in months D: Value in days Do not exceed 36 months / 1095 days.
period_length_trail	-	+	N..4	Duration of the initial term. Can only be used in combination with period_unit_trail.
period_unit_recurring	-	+	Default	Time unit for subsequent term, possible values: Y: Value in years M: Value in months D: Value in days N: only if no subsequent term Do not exceed 36 months / 1095 days.
period_length_recurring	-	+	N..4	Duration of the subsequent term. Can only be used in combination with period_unit_recurring.
id_trail[n]	+	+	AN..32	Item number (initial term) Permitted symbols: 0-9 a-z A-Z ()[]{} + - _ # /: [n] starting with [1];serially numbered;max [100]
no_trail[n]	+	+	N..5	Quantity (initial term)

Request				
Parameter	Required	Hash	Format	Comment
				[n] starting with [1];serially numbered;max [100]
pr_trail[n]	+	+	N..10	Unit price of the item in smallest currency unit (initial term, max. 19 999 999 99) [n] starting with [1];serially numbered;max [100]
de_trail[n]	+	+	AN..255	Description (initial term) [n] starting with [1];serially numbered;max [100]
ti_trail[n]	+	+	AN..100	Title (initial term) [n] starting with [1];serially numbered;max [100]
va_trail[n]	-	+	N..4	VAT rate (% or bp) (initial term) value < 100 = percent value > 99 = basis points [n] starting with [1];serially numbered;max [100]
id_recurring[n]	-	+	AN..32	Item number (subsequent term) Permitted symbols: 0-9 a-z A-Z ()[]{} + - _ # /: [n] starting with [1];serially numbered;max [100]
no_recurring[n]	-	+	N..5	Quantity (subsequent term) [n] starting with [1];serially numbered;max [100]
pr_recurring[n]	-	+	N..10	Unit price of the item in smallest currency unit (subsequent term, max. 19 999 999 99) [n] starting with [1];serially numbered;max [100]
de_recurring[n]	-	+	AN..255	Description (subsequent term) [n] starting with [1];serially numbered;max [100]
ti_recurring[n]	-	+	AN..100	Title (subsequent term) [n] starting with [1];serially numbered;max [100]
va_recurring[n]	-	+	N..4	VAT rate (% or bp) (subsequent term) value < 100 = percent value > 99 = basis points [n] starting with [1];serially numbered;max [100]
Parameter (personal data)				
businessrelation	o	+	Default	Will be available from 2017-12-01 or later. Will be required for payment type POV from 2018-01-01. Values b2c Indicates business to consumer b2b indicates business to business
firstname	-	-	AN1..50	First name Mandatory for payment type KLV, KLS, PDT
lastname	-	-	AN2..50	Surname PNT Combination of firstname + lastname limited to 27 characters
company	-	-	AN2..50	Company
street	-	-	AN1..50	Street (required: at least one character)

Request				
Parameter	Required	Hash	Format	Comment
				Mandatory for payment type KLV, KLS mandatory if direct debit (ELV) used with IBAN-countries CH, SM, MC, PM, JE, GG
addressaddition	-	-	AN1..50	Address line 2 (e.g. "7 th floor", "c/o Maier") Mandatory for payment type KLV, KLS in NL
zip	-	-	AN2..10	Postcode Mandatory for payment type KLV, KLS mandatory if direct debit (ELV) used with IBAN-countries CH, SM, MC, PM, JE, GG
city	-	-	AN2..50	City Mandatory for payment type KLV, KLS mandatory if direct debit (ELV) used with IBAN-countries CH, SM, MC, PM, JE, GG
country	-	-	Default	Country (ISO 3166)
email	-	-	AN..254	Email address Mandatory for payment type KLV, KLS, P24
telephonenumber	-	-	AN..30	Telephone number Mandatory for payment type KLV, KLS
birthday	-	-	N8	Date of birth (YYYYMMDD) Mandatory for payment type KLV, KLS
language	-	-	Default	Language indicator (ISO 639) Mandatory for payment type KLV, KLS KLV, KLS support sv, nb (norwegian), fi, da, de, nl If the language is not transferred, the browser language will be used. For a non-supported language, English will be used.
gender	-	-	Default	f=female, m=male Mandatory for payment type KLV, KLS DE, NL, AT
personalid	-	-	AN..32	Person specific numbers or characters Mandatory for payment type KLV, KLS SE, FI, DK, NO Format/allowed characters: A-Z, a-z, 0-9, +, -/()
Parameter (delivery data)				
shipping_firstname	-	-	AN..50	First name
shipping_lastname	-	-	AN..50	Surname
shipping_company	-	-	AN2..50	Company
shipping_street	-	-	AN1..50	Street (required: at least one character)
shipping_zip	-	-	AN2..10	Postcode
shipping_city	-	-	AN2..50	City
shipping_country	-	-	Default	Country (ISO 3166)
Parameter („autosubmit“ - credit card)				
cardholder	-	-	AN..50	Card holder
cardpan	+	-	N..19	Card number

Request				
Parameter	Required	Hash	Format	Comment
				For SAQ A compliance: PAYONE Frontend hosted iFrame must be used. This parameter must not be used.
cardtype	+	-	Default	Card type V Visa M MasterCard A American Express D Diners J JCB O Maestro International C Discover P China Union Pay
cardexpireyear	+	-	N4	Expiry year
cardexpiremonth	+	-	N2	Expiry month
cardcvc2	o	-	N..4	Credit card security number For SAQ A compliance: PAYONE Frontend hosted iFrame must be used. This parameter must not be used.
Parameter („autosubmit“ - direct debit)				
iban	o	-	AN..35	International Bank Account Number Only capital letters, no spaces If both (BBAN and IBAN) are submitted, IBAN is splitted into BBAN and processed. BBAN parameters are ignored.
bic	o	-	AN..11	Bank Identifier Code Only capital letters, no spaces
bankaccountholder	-	-	AN..35	Account holder
bankcountry	o	-	Default	Account type/ country For use with BBAN: DE Mandatory with bankcode, bankaccount Optional with iban/bic as bankcountry will be determined by iban
bankaccount	o	-	AN..10	Account number (BBAN) DE only: IBAN/BIC can be calculated by PAYONE platform automatically given by bankcode/ bankaccount
bankcode	o	-	AN8	Sort code (BBAN) (only in DE) DE only: IBAN/BIC can be calculated by PAYONE platform automatically given by bankcode/ bankaccount (BBAN)
mandate_identification	o	+	AN..35	Can be used to enforce a merchant specific mandate identification. The mandate_identification must be unique. Allowed characters: A-Z a-z 0-9 + - . ()

Request				
Parameter	Required	Hash	Format	Comment
				If the mandate_identification is not set PAYONE will create an unique mandate identification (pattern: PO-nnnnnnnnnn). PPS: This parameter must not be used!
Parameter („autosubmit“ - Online transfer)				
onlinebanktransfertype	+	-	Default	PNT Sofortbanking (DE, AT, CH, NL) GPY giropay (DE) EPS eps – online transfer (AT) PFF PostFinance E-Finance (CH) PFC PostFinance Card (CH) IDL iDEAL (NL) P24 Przelewy24 (PL)
bankcountry	+	-	Default	Account type/ country (DE, AT, CH, NL, PL)
iban ³	o	-	AN..35	International Bank Account Number Only capital letters, no spaces If both (BBAN and IBAN) are submitted, IBAN is splitted into BBAN and processed. BBAN parameters are ignored.
bic ³	o	-	AN..11	Bank Identifier Code Only capital letters, no spaces
bankaccount ⁴	o	-	N..10	Account number (giropay & Sofortbanking only) DE only: IBAN/BIC can be calculated by PAYONE
bankcode ³	o	-	N8	Sort code (giropay & Sofortbanking only) DE only: IBAN/BIC can be calculated by PAYONE
bankgrouptype	o	-	Default	Bank group (eps & iDEAL only)
Parameter („autosubmit“ - e-wallet)				
wallettype	+	-	Default	Wallet provider PPE: PayPal Express
Parameter („autosubmit“ - Financing)				
financingtype	+	-	Default	Financing type KLV Klarna Invoice KLS Klarna Installment
Key				
N..x	Numeric value (x characters maximum)			
AN..x	Alphanumeric value (x characters maximum)			

⁴ Can be omitted for OBT/PNT (Sofortbanking) from 2016-10-01 on as bank data are received from SOFORT and stored for later credits (processed as SEPA-credit).

* These parameters are only mandatory in combination with the hash method from version 2.0.

Hash:

The parameters with a “+” must be included in the calculation of the hash value.

4 Responses

4.1 Common / important information on Status-Responses

- Status messages from PAYONE to merchant's server are **always ISO-8859-1 encoded**.
- Status messages are posted with "application/x-www-form-urlencoded" to the URL specified in PMI -> Configuration -> Payment Portals -> Extended -> TransactionStatus URL.
- Please find some information on encoding here: https://en.wikipedia.org/wiki/Percent-encoding#The_application/x-www-form-urlencoded_type and find a few samples below.
- No other characters may be issued with this character string "SSOK"/"TSOK", e.g. no HTML code.
- Do not return an error without gathering information about this error.
- The **request must be answered** with SSOK (for SessionStatus) / TSOK (for TransactionStatus) **within 10 seconds**. This time-out cannot be extended. The answer does only confirm receipt of the SessionStatus, the **evaluation can and should follow asynchronously** to receiving the answer.
- Make sure the request **is always answered** with an SSOK (for SessionStatus) / TSOK (for TransactionStatus) **within 48 hours**.
- If a specific request shall not be processed, issue an SSOK (for SessionStatus) / TSOK (for TransactionStatus) anyway to prevent the request from interfering with the processing of other requests.
- **Without the return** of an SSOK (for SessionStatus) / TSOK (for TransactionStatus) you **will not** receive any **further status reports** for that subscription / payment process.
- Please **verify** received status responses **before** processing, i.e.: check whether portalid, aid and key do match your **expected credentials**. If credentials do not match your expected values then dismiss status response.

4.1.1 Sample of TransactionStatus sent for a credit card payment

2018/08/06 09:31:48

`https://shop.domain.shop/test/p1.php?key=xxxxx&txaction=appointed&portalid=2000001&aid=10001&clearingtype=cc¬ify_version=7.4&txtime=1533547771¤cy=EUR&userid=100000001&accessname=&accesscode=¶m=&mode=test&price=1.00&id[1]=1_1&pr[1]=1.00&no[1]=1&de[1]=item+description&ti[1]=&va[1]=19.00&txid=285115882&reference=1533547769340&sequencenumber=0&company=&firstname=Max&lastname=Musterm%E4nnchen&street=Fraunhoferstra%DFe+2-4&zip=24118&city=Kiel&email=test.test%40test.com&country=DE&shipping_company=&shipping_firstname=Max&shipping_lastname=Muster&shipping_street=FRAUNHOFER+STR+2-4&shipping_zip=24103&shipping_city=Kiel&shipping_country=DE&cardexpiredate=2012&cardtype=V&cardpan=401200xxxxxx1112&transaction_status=completed&balance=1&receivable=1`

2018/08/06 09:36:45

`https://shop.domain.shop/test/p1.php?key=xxxxx&txaction=invoice&portalid=2000001&aid=10001&clearingtype=cc¬ify_version=7.4&txtime=1533547771¤cy=EUR&userid=100000001&accessname=&accesscode=¶m=&mode=test&price=1.00&txid=285115882&reference=1533547769340&sequencenumber=0&company=&firstname=Max&lastname=Musterm%E4nnchen&street=Fraunhoferstra%DFe+2-4&zip=24118&city=Kiel&email=test.test%40test.com&country=DE&shipping_company=&shipping_firstname=Max&shipping_lastname=Muster&shipping_street=FRAUNHOFER+STR+2-4&shipping_zip=24103&shipping_city=Kiel&shipping_country=DE&cardexpiredate=2012&cardtype=V&cardpan=401200xxxxxx1112&invoiceid=RG-285115882-0&invoice_grossamount=1&invoice_date=20180806`

2018/08/06 09:38:33

`https://shop.domain.shop/test/p1.php?key=xxxxx&txaction=paid&portalid=2000001&aid=10001&clearingtype=cc¬ify_version=7.4&txtime=1533547771¤cy=EUR&userid=100000001&accessname=&accesscode=¶m=&mode=test&price=1.00&id[1]=1_1&pr[1]=1.00&no[1]=1&de[1]=item+description&ti[1]=&va[1]=19.00&txid=285115882&reference=1533547769340&sequencenumber=0&company=&firstname=Max&lastname=Musterm%E4nnchen&street=Fraunhoferstra%DFe+2-4&zip=24118&city=Kiel&email=test.test%40test.com&country=DE&shipping_company=&shipping_firstname=Max&shipping_lastname=Muster&shipping_street=FRAUNHOFER+STR+2-4&shipping_zip=24103&shipping_city=Kiel&shipping_country=DE&cardexpiredate=2012&cardtype=V&cardpan=401200xxxxxx1112&balance=0&receivable=1`

4.2 Parameter for SessionStatus query

According to the configuration of your payment portal you will receive access status changes for accesses to your premium sector. You will only receive these status messages with payment portals of the "Access" version. You can use them to protect your premium sector or to receive information about a subscription. The data is submitted to the URL specified in the merchant area. The data transfer is based on simple HTTP-POST request (key/value pairs).

The SessionStatus is sent from the following IP addresses: 185.60.20.0/24 (i.e. 185.60.20.1 to 185.60.20.254). Please configure your firewall to allow incoming packets from these IP addresses.

HTTP request from PAYONE to the merchant's server			
Parameter	Required	Format	Comment
key	+	AN..32	Key can be selected freely (see options payment portal) as MD5 value (The key hash values is currently given as MD5. This currently still remains with MD5 and is subject to change in future to SHA2-384.)
clearingstyp	+	Default	Type of payment used for this access. elv Debit payment cc Credit card vor Prepayment rec Invoice sb Online bank transfer
serverip	-	Default	payone.de -> this parameter may be removed in future.
accessid[x]	+	N3..12	Access ID (PAYONE)
action[x]	+	Default	Event, which refers to one customer each. "add", "remove", "abocancel", "renew "cancel_reversal", "lock", "unlock" (see below)
portalid[x]	+	N..7	Payment portal ID
productid[x]	+	N..7	ID for the offer
expiretime[x]	+	N..12	Unix timestamp at which access expires
userid[x]	+	N..12	Debtor ID (PAYONE)
customerid[x]	-	AN1..20	Merchant's customer ID
accessname[x]	-	AN..32	Customer's user name
accesscode[x]	-	AN..32	Customer's password
ip[x]	-	AN..15	Customer IP
param[x]	-	AN..15	Individual parameter
Key	x	x	x
N..x	x	x	Numeric value (x characters maximum)
AN..x	x	x	Alphanumeric value (x characters maximum)
[x]	x	x	In this manner changes for several customers can be submitted simultaneously in one request. [x] = position number, e.g. [0],[1],...)

Important note: Please note that new parameters may be added at any time without previous notice. Therefore, you should use the parameter name for the evaluation and not the sequence, which may be subject to change at any time!

Expected reply to the request:

As a reply to the request, the string "**SSOK**" is expected. Each request is repeated in a 1-hour cycle until it is answered with "SSOK". This procedure ensures that all requests will be processed by your system. Simply issue the "SSOK" in a script via the "print" command. Make sure that this character string is the first that is printed from this script, e.g. `print ("SSOK") ;`

4.2.1 Sequence of events

After the start of the initial term an "add" request is deployed to your system. Different pieces of information about this customer are submitted (see above). After the access has expired, you will receive a "remove" request.

4.2.2 List of events (action)

With each access status change you receive a request. Via the "action" variable you receive information about the status of the access.

add

An access portal has been opened.

remove

Access has expired and will not be renewed.

renew

Access was renewed/reduced (e.g. renewal of a subscription).

abocancel

The customer has cancelled the subscription for this access portal.

lock

Access has been blocked.

unlock

Access has been unblocked.

cancel_reversal

The termination of the subscription has been revoked.

4.3 Parameter for the TransactionStatus query

According to the configuration of your payment portal you will receive the data and the status for each payment process via the URL you have submitted. The data transfer is based on simple HTTP-POST request (key/value pairs).

The TransactionStatus is sent from the following IP addresses: 185.60.20.0/24 (i.e. 185.60.20.1 to 185.60.20.254). Please configure your firewall to allow incoming packets from these IP addresses.

HTTP request from PAYONE to the merchant's server				
Parameter	Required	Format	Comment	
key	+	AN..32	Payment portal key as MD5 value (The key hash values is currently given as MD5. This currently still remains with MD5 and is subject to change in future to SHA2-384.)	
txaction	+	Default	"appointed", "capture", "paid", "underpaid", "cancelation", "refund", "debit", "reminder", "vauthorization", "vsettlement", "transfer", "invoice", "failed" (See explanation below)	
transaction_status	-	Default	"completed", "pending" new parameter in use from January 2015	
notify_version	-	Default	7.3	without "notify_version" and without "transaction_status"
			7.4	with "notify_version" and with "transaction_status" (completed/pending)
			7.5	with txaction "failed"
			7.6	with "transaction_status=pending" and "reasoncode"
mode	+	Default	test	Test mode
			live	Live mode
portalid	+	N..7	Payment portal ID	
aid	+	N..6	Sub account ID	
clearingtype	+	Default	elv	Debit payment
			cc	Credit card
			vor	Prepayment
			rec	Invoice
			cod	Cash on delivery
			sb	Online bank transfer
			wlt	e-Wallet
			fnc	Financing
txtime	+	N..11	Initiating payment process (Unix timestamp)	
currency	+	Default	Currency (ISO 4217)	
userid	+	N..12	Debtor ID (PAYONE)	
customerid	-	AN1..20	Merchant's customer ID	
param	-	AN..255	Individual parameter that was, where applicable, submitted while payment was initiated	

HTTP request from PAYONE to the merchant's server			
Parameter	Required	Format	Comment
Parameter (personal data)			
Invoice-Address			
firstname	o	AN..50	First name (optional if company is used)
lastname	+	AN..50	Surname
company	-	AN..50	Company
street	-	AN..50	Street number and name
zip	-	AN..10	Postcode
city	-	AN..50	City
country	+	Default	Country (ISO 3166)
Delivery-Address			
shipping_firstname	-	AN..50	First name (optional if company is used)
shipping_lastname	-	AN..50	Surname
shipping_company	-	AN..50	Company
shipping_street	-	AN..50	Street number and name
shipping_zip	-	AN..10	Postcode
shipping_city	-	AN..50	City
shipping_country	-	Default	Country (ISO 3166)
email	-	AN..254	Email address
Parameter for the status message of a payment process			
txid	+	N..12	Payment process ID (PAYONE)
reference	+	AN..20	Merchant reference number for the payment process
sequencenumber	+	N..2	Sequence number at the time of the event for this payment process (0..n)
price	+	N..10,2	Payment request (in largest currency unit! e.g. Euro)
receivable	-	N..10,2	Total payment request (in largest currency unit! e.g. Euro); not set for encashment reminder status information without paid amount
balance	-	N..10,2	Balance of transaction account (in largest currency unit! e.g. Euro) ; not set for encashment reminder status information without paid amount Negative amount: positive balance Positive amount: payment request
failedcause	-	Default	Reason for return debit note or incorrect collection (see chapter 5)
errorcode	o	N..4	Errorcode in case of txaction="failed"
reasoncode	-	N..10	Reasoncode in case of transaction_status="pending". Further details for transactionhandling see payment addon documentation. With "notify_version=7.6"
Additional parameter Contract for the status message of a payment process			
productid	+	N..7	ID for the offer

HTTP request from PAYONE to the merchant's server			
Parameter	Required	Format	Comment
accessid	+	N3..12	Access ID
expiretime	-	N..12	Unix Timestamp an dem der Zugang abläuft
Additional parameter for payment type debit payment			
bankcountry	-	Default	Account type/ country
bankaccount	-	AN..26	Account number (masked)
bankcode	-	AN..11	Sort code
bankaccountholder	-	AN..35	Account holder
Additional parameter for payment type debit payment (only for authorization with appointed and only if "due_time" is not specified)			
iban	o	AN..35	International Bank Account Number (masked)
bic	o	AN..11	Bank Identifier Code
mandate_identification	o	AN..35	Used mandate_identification
creditor_identifier	o	AN..35	Merchant's creditor identifier
clearing_date	o	N8	clearing date (format YYYYMMDD)
clearing_amount	o	N..10	Payment request (in smallest currency unit! e.g. cent)
Additional parameter for payment type credit card			
cardpan	+	N..19	Card number
cardtype	+	Default	Card type V Visa M MasterCard A American Express D Diners J JCB O Maestro International C Discover B Carte Bleue P China Union Pay
cardexpiredate	+	N4	Expiry date YYMM
cardholder	-	AN..35	Name of cardholder
Additional parameter for payment type BillSAFE / Klarna			
clearing_bankaccountholder	-	AN..35	Recipient bank account holder
clearing_bankcountry	-	Default	Recipient account type/ country (e.g. DE, AT, etc.)
clearing_bankaccount	-	AN..26	Recipient bank account
clearing_bankcode	-	AN..11	Recipient sort code
clearing_bankiban	-	AN..35	Recipient IBAN
clearing_bankbic	-	AN..11	Recipient BIC
clearing_bankcity	-	AN..50	Recipient city or bank
clearing_bankname	-	AN..50	Recipient bank name
clearing_legalnote	-	AN..500	Note to claim assignment
clearing_duedate	-	N8	Due date of payment (format YYYYMMDD)

HTTP request from PAYONE to the merchant's server			
Parameter	Required	Format	Comment
clearing_reference	-	AN..50	Reference
clearing_instructionnote	-	AN..200	Note to payment handling
Additional parameter Collect (txaction=reminder) for the status message of a payment process			
reminderlevel	+	Default	Customer's reminder status 1...4: Dunning level 1-4 5: Encashment A: Dunning procedure ended S: Dunning procedure begins M: Dunning proposal list I: Encashment proposal list O: Dunning procedure completed
encashment_statuscode	-	AN..20	Internal status code of the encashment agency, if provided by the encashment agency.
encashment_statuslongtext	-	AN..255	Free text: if the encashment agency has reported a long text (detailed information) on the status
Parameter Invoicing (txaction=invoice)			
txid	+	N..12	Payment process ID (PAYONE)
reference	+	AN..20	Merchant reference number for the payment process
sequencenumber	+	N..2	Sequence number at the time of the event for this payment process (0..n)
invoiceid	+	AN..20	Merchant's invoice number
invoice_grossamount	+	N..10,2	Gross invoice amount
invoice_date	+	N8	Invoice date (format YYYYMMDD)
invoice_deliverydate	-	N8	Delivery date (format YYYYMMDD)
invoice_deliveryenddate	-	N8	Delivery period end date (format YYYYMMDD)
Parameter Billing (txaction=vauthorization/vsettlement)			
vaid	+	N..8	Billing account ID (module billing)
balance	+	N..10,2	Balance of billing account (in largest currency unit! e.g. Euro) Negative amount: positive balance Positive amount: payment request
vreference	+	AN..20	Merchant's transaction reference number (This is the reference for the corresponding payment process for a vsettlement)
vxid	+	N..12	Billing account entry ID
Parameter Billing (txaction=vsettlement)			
txid	o	N..12	Corresponding payment process ID
sequencenumber	o	N..2	Sequence number of settled payment process ID
settled_vxid[n]	o	N..12	Array of settled vxid's starting with n=0. Array will not be sent if more than 500 vxid's are settled.
Key			

HTTP request from PAYONE to the merchant's server			
Parameter	Required	Format	Comment
N..x		Numeric value (x characters maximum)	
AN..x		Alphanumeric value (x characters maximum)	

Important note: Please note that new parameters may be added at any time without previous notice. Therefore, you should use the parameter name for the evaluation and not the sequence, which may be subject to change at any time!

Expected reply to the request:

As a reply to the request, the string "TSOK" is expected. Each request is repeated in a 1 to 6 hour cycle until it is answered with "TSOK". This procedure ensures that all requests will be processed by your system. Simply issue the "TSOK" in a script via the "print" command. Make sure that this character string is the first that is printed from this script, e.g. `print ("TSOK");`

4.3.1 List of events (txaction)

With each payment process status change you receive a request. The last event is submitted to you via the parameter "txaction". The status of the request is provided via the balance of the payment process (parameter "balance") and the amount of the request (parameter "receivable").

appointed

Via "appointed" you are informed about the successful initiation of the payment process. This request is affected immediately after the first successful booking.

Important note:

- The new parameter "transaction_status" indicates whether the event "appointed" is pending or completed.
-> see list of status (transaction_status)

capture

Via "capture" you are informed about the booking of a request or the collection of your reserved amount. The amount of the request (receivable) is increased in this case. If no settlement of balances occurs, the balance changes as well.

paid

Via "paid" you are informed that the booking has been processed by the credit institution or that the customer has paid the invoice in full. The balance for the request in this case is smaller than or equal to zero.

underpaid

Via "underpaid" you are informed about an underpayment. The balance for the request in this case is greater than zero.

cancelation

Via "cancelation" you are informed that a payment process has resulted in a return debit note. In the case of electronic direct debit processes (ELV) insufficient funds in the account may also be the cause. The balance for the request in this case is greater than zero.

refund

Via "refund" you are informed if an amount has been refunded. The amount of the request (receivable) is decreased in this case.

debit

Via "debit" you are informed about the booking of a request/credit for a request. The amount of the request (receivable) changes in this case. If no settlement of balances occurs, the balance changes as well.

transfer

Via "transfer" you are informed if an amount has been transferred. The amount of the open balance (balance) changes in this case.

reminder (Attention: This request must be activated by PAYONE.)

Via "reminder" you are informed about the current status of the dunning procedure.

vauthorization (Attention: This request must be activated by PAYONE.)

Via "vauthorization" you are informed about a booking affected into a billing account (module billing).

vsettlement (Attention: This request must be activated by PAYONE.)

Via "vsettlement" you are informed about a settlement effected on a particular billing account (module billing).

invoice (Attention: This request must be activated by PAYONE.)

Via "invoice" you are informed that an invoice or a credit voucher has been created.

failed (for future use – not implemented yet.)

Via "failed" you are informed that the booking has finally failed. No further actions are possible.

4.3.2 List of status (transaction_status)

Via "pending" you are informed that the payment transaction is (still) pending at the external payment processor. The following transaction status may be "pending" (again), "completed" (external payment processor completed the actual transaction successfully).

With each payment process status change you receive a request. The last event is submitted to you via the parameter "txaction".

The parameter "transaction_status" is currently introduced with event-txaction "appointed" only. Other event-txaction with parameter "transaction_status" may follow (e.g. "paid", "debit", ...).

Please note:

- **The parameter "transaction_status" is optional and not available for all payment transactions ("txaction") and all payment types (as not all payments and processors do support "pending" / "completed").**
- **It may happen that you will receive two times the same txaction (e.g. "appointed"). First with "pending" and then with "completed".**

pending

The event indicated by "txaction" is pending and may change later. i.e. an event "appointed/pending" (txaction/transaction_status) indicates that the payment is pending and in process at the 2nd payment processor.

Another event may follow to inform change of status by txaction e.g. "appointed/completed", "failed/completed".

Also another "appointed/pending" may follow to indicate that transaction is still pending.

completed

Indicates that the event itself has reached final status.

However a new "txaction" (e.g. "paid", "cancelation", ...) may follow to inform of change of status.

The new "txaction" can then be "paid/pending", "paid/completed", ... or "failed/completed".

4.3.3 Explanation of price, balance, receivable

Field	Description
price	Value of the initial claim
balance	The outstanding balance of this transaction: <ul style="list-style-type: none"> negative: Customer has a claim against merchant, e.g. merchant received money without effort positive: Merchant has a claim against the customer
receivable	Account balance for the transaction. <ul style="list-style-type: none"> With a "preauthorization" the value "receivable" is not set as the merchant did not provide the service yet (e.g. delivering goods). With type of payment "cash In advance" the value "receivable" is not set as the merchant will only provide its service when money has arrived.

4.3.4 Sample: authorization, CC

Merchant's request			HTTP request from PAYONE to the merchant's server					Comment
	Seq-No	Time	TX-Action/transaction_state ⁵	Seq-No	price	balance	receivable	
Request authorization CC amount=15061	0	T=0	appointed/completed	0	150.61	150.61	150.61	
	0	+4 min	paid	0	150.61	0	150.61	

4.3.5 Sample: preauthorization/capture, CC

Merchant's request			HTTP request from PAYONE to the merchant's server					Comment
	Seq-No	Time	TX-Action/transaction_state ⁶	Seq-No	price	balance	receivable	
Request preauthorization CC amount=2950	0	T=0	appointed/completed	0	29.50	0.00	0.00	

⁵ Internal reference: 148021809

⁶ Internal reference:

Merchant's request			HTTP request from PAYONE to the merchant's server					Comment
	Seq-No	Time	TX-Action/transaction_state ⁶	Seq-No	price	balance	receivable	
Request capture	1	+2 hours	paid	1	29.50	0	29.50	

4.3.6 Sample: authorization, ELV with cancelation

Merchant has configured:

- Due time ELV = 7 days
- Fee 1. reminder = 0,00 Euro after 7 days
- Fee 2. reminder = 1,00 Euro after 7 days
- Fee 3. reminder = 2,40 Euro after 7 days
- Encashment transfer = 5,00 Euro after 7 days
- TxStatus without reminder-information

Merchant's request			HTTP request from PAYONE to the merchant's server					Comment
	Seq-No	Time	TX-Action/transaction_state ⁷	Seq-No	price	balance	receivable	
Request authorization ELV amount=4612	0	T=0	appointed/completed	0	46.12	46.12	46.12	Merchant initiates payment via SEPA direct debit
		+15 min	paid	0	46.12	0	46.12	PAYONE platform has processed direct debit
		+7 days	cancelation	0	46.12	54.72	54.72	PAYONE platform has detected a return debit note initiated by end customer and added bank charges of 8,60 EUR and 0 Euro dunning fee
		+14 days (7+7)	debit	1	46.12	55.72	55.72	PAYONE platform processed dunning note and added 1,00 Euro dunning fee
		+21 days	debit	2	46.12	57.72	57.72	PAYONE platform processed dunning note and added 2,00 Euro dunning fee
		+28 days	debit	3	46.12	62.72	62.72	PAYONE platform processed dunning note and added 5,00 Euro dunning fee

⁷ Internal reference: 146039593

4.3.7 Sample: preauthorization/capture, REC with credit note

Merchant has configured:

- Due time Invoice = 14 days
- Fee 1. reminder = 0,00 Euro after 3 days
- Fee 2. reminder = 2,00 Euro after 10 days
- Fee 3. reminder = 4,00 Euro after 10 days
- TxStatus without reminder-information

Merchant's request			HTTP request from PAYONE to the merchant's server					Comment
	Seq-No	Time	TX-Action/transaction_state ⁸	Seq-No	price	balance	receivable	
Request preauthorization REC amount=11500	0	T=0	appointed/completed	0	115.00	0.00	0.00	Merchant initiates payment via payment type invoice
Request capture	1	+1 day	capture	1	115.00	115	115	Merchant has delivered ordered items
		+27 days (14+3+10)	debit	2	115.00	117	117	PAYONE platform generates reminder document and added 2 Euro dunning fee
		+10 days	debit	3	115.00	121	121	PAYONE platform generates reminder document and added 4 Euro dunning fee
PMI: credit note by 15,00 Euro	4	+13 days	debit	4	115.00	106	106	PAYONE platform processed credit note initiated via PMI

4.3.8 Sample: preauthorization/capture, WLT (with "pending")

Merchant's request			HTTP request from PAYONE to the merchant's server					Comment
	Seq-No	Time	TX-Action/transaction_state ⁹	Seq-No	price	balance	receivable	
Request preauthorization WLT amount=1561	0	T=0	appointed/completed	0	15.61	0.00	0.00	

⁸ Internal reference: 136229273

⁹ Internal reference: 126353063

Merchant's request			HTTP request from PAYONE to the merchant's server					Comment
requires „notify_version=7.6“	Seq- No	Time	TX-Action/transaction_state ⁹	Seq- No	price	balance	receivable	
Request capture WLT amount=1561	1	+6 seconds	capture/pending	0	15.61	0.00	15.61	Server api status=PENDING (requires api_version=3.11)
		+15 seconds	capture/-	0	15.61	15.61	0.00	

4.3.9 Sample: authorization, WLT (with “pending”)

Merchant's request			HTTP request from PAYONE to the merchant's server					Comment (130445995)
requires „notify_version=7.6“	Seq- No	Time	TX-Action/transaction_state ¹⁰	Seq- No	price	balance	receivable	Please contact BS PAYONE Merchant Service
Request authorization WLT amount=111	0	T=0	appointed /pending	0	1.11	0.00	0.00	Server api status=PENDING (requires api_version=3.11) and "reasoncode=903" indicating Timeout at service provider
	0	+10 sec	appointed /completed	0	1.11	1.11	1.11	
	0	+6 min	paid	0	1.11	0	1.11	

¹⁰ Internal reference: 126353063

5 Codes

5.1 Reasons for return debit notes

Parametername: failedcause

Code	Signification
soc	Insufficient funds
cka	Account expired
uan	Account no. / name not identical, incorrect or savings account
ndd	No direct debit
rcl	Recall ¹¹
obj	Objection ¹²
ret	Return ¹³
nelv	Debit cannot be collected
cb	Credit card chargeback
ncc	Credit card cannot be collected

¹¹ Recall: The recipient of the payment recalls the direct debit order.

¹² Objection: The payer objects to the direct debit.

¹³ Return: The executing bank returns the order (due to insufficient funds, account closure, decease of the account holder, ...).

5.2 Bank groups

Parametername: bankgroupype

Status	Code	Signification
	Banks for EPS (Austria)	
existing	ARZ_OAB	Apothekerbank
existing	ARZ_BAF	Ärztebank
existing	BA_AUS	Bank Austria
existing	ARZ_BCS	Bankhaus Carl Spängler & Co.AG
existing	EPS_SCHEL	Bankhaus Schelhammer & Schattera AG
existing	BAWAG_PSK	BAWAG P.S.K. AG
existing	BAWAG_ESY	Easybank AG
existing	SPARDAT_EBS	Erste Bank und Sparkassen
existing	ARZ_HAA	Hypo Alpe-Adria-Bank International AG
existing	ARZ_VLH	Hypo Landesbank Vorarlberg
existing	HRAC_OOS	HYPO Oberösterreich, Salzburg, Steiermark
existing	ARZ_HTB	Hypo Tirol Bank AG
existing	ARZ_IMB	Immo-Bank
existing	EPS_OBAG	Oberbank AG
existing	RAC_RAC	Raiffeisen Bankengruppe Österreich
existing	EPS_SCHOELLER	Schoellerbank AG
existing	ARZ_OVB	Volksbank Gruppe
existing	EPS_VRBB	VR-Bank Braunau
new 04/2017	EPS_AAB	Austrian Anadi Bank AG
new 04/2017	EPS_BKS	BKS Bank AG
new 04/2017	EPS_BKB	Brüll Kallmus Bank AG
new 04/2017	EPS_VLB	BTV VIER LÄNDER BANK
new 04/2017	EPS_CBGG	Capital Bank Grawe Gruppe AG
new 04/2017	EPS_DB	Dolomitenbank
new 04/2017	EPS_NOEGB	HYPO NOE Gruppe Bank AG
new 04/2017	EPS_NOELB	HYPO NOE Landesbank AG
new 04/2017	EPS_HBL	HYPO-BANK BURGENLAND Aktiengesellschaft
new 04/2017	EPS_MFB	Marchfelder Bank
new 04/2017	EPS_SPDBW	Sparda Bank Wien
new 04/2017	EPS_SPDBA	SPARDA-BANK AUSTRIA
new 04/2017	EPS_VKB	Volkskreditbank AG
	Banks for iDEAL (The Netherlands)	
existing	ABN_AMRO_BANK	ABN Amro
existing	BUNQ_BANK	Bunq
existing	RABOBANK	Rabobank
existing	ASN_BANK	ASN Bank

existing	SNS_BANK	SNS Bank
existing	TRIODOS_BANK	Triodos Bank
existing	SNS_REGIO_BANK	SNS Regio Bank
existing	ING_BANK	ING Bank
existing	KNAB_BANK	Knab Bank
existing	VAN_LANSCHOT_BANKIER	van Lanschot Bank
deprecated	FRIESLAND_BANK	Friesland Bank
new 04/2018	MONEYOU	Moneyou

5.3 Parameters for AVS returns

Parametername: protect_result_avs

Under "street number" any numeric parts of the street name and street number, as well as the postal code of the invoice address are validated, e.g. "Münchhausenstraße 22, 3rd Floor", "D-12345" -> "223" and "12345" are validated.

Code	Signification
A	Street number is OK, postal code is not OK
F	Street number and postal code are OK
M	Street number and postal code are OK new code, 2018-01-03: not in use by now, but may be used with AVS VISA International
N	Neither street number nor postal code are OK
U	Request is not supported
Z	Street number is not OK, but postal code is OK

5.4 BankAccountCheck (Available countries)

Continuous updates of check digit algorithms of Deutsche Bundesbank incl. check of Bankcode and of Österreichischen Nationalbank:

	bank-country	bank-account	bank-code	bank-branch-code	bank-check-digit
Germany (DE)	x	x	x	-	-
Austria (AT)	x	x	x	-	-
Swiss (CH)	x	x	x	-	-
Key: x =mandatory, o = optional, - = not used					

In these European countries the bank account will be syntax-checked and also validated with a check digit algorithm:

	bank-country	bank-account	bank-code	bank-branch-code	bank-check-digit
Niederlande (NL)	x	x	-	-	-
Schweden (SE)	x	x	o	-	-
Belgien (BE)	x	x	o	-	o
Frankreich (FR)	x	x	x	x	x
Norwegen (NO)	x	x	o	-	-
Polen (PL)	x	x	o	-	o
Key: x =mandatory, o = optional, - = not used					

In these countries the bank account will be syntax-checked:

	bank-country	bank-account	bank-code	bank-branch-code	bank-check-digit
Denmark (DK)	x	x	o	-	-
Finland (FI)	x	x	o	-	-
Italy (IT)	x	x	o	o	o
Spain (ES)	x	x	o	o	o
United Kingdom (GB)	x	x	x	-	-
Key: x =mandatory, o = optional, - = not used					

5.5 Parameters for address check person returns

5.5.1 AddressCheck PAYONE Services - personstatus

Parametername: personstatus

Code	Signification
NONE	no verification of personal data carried out
PAB	first name & surname unknown
PHB	surname known
PKI	ambiguity in name and address
PNP	address cannot be checked, e.g. fake name used
PNZ	cannot be delivered (any longer)
PPB	the person can be confirmed for this address.
PPF	postal address details incorrect
PPV	person deceased
PUG	postal address details correct but building unknown
PUZ	person has moved, address not corrected
UKN	unknown return values are mapped to UKN

5.5.2 AddressCheck Boniversum Services - personstatus

Parametername: personstatus

mapped to Code	Boniversum internal status	Signification	Signification (DE)
PPF	00	postal address details incorrect	Nicht identifiziert.
PPB	02	the person can be confirmed for this address.	Person identifiziert.
PHB	03	surname known	Haushalt identifiziert.
PAB	05	first name & surname unknown	Gebäude identifiziert.
PPV	06	person deceased	Person verstorben.

5.6 Parameters for Consumerscore returns

5.6.1 Consumerscore arvato Infoscore - secscore

Parametername: secscore

I. "Weak" negative attributes (Data from collection - pre court):		Weiche Negativmerkmale
IA	Initiation of collection process	Inkasso-Mahnverfahren eingeleitet
AM	Continuation of extrajudicial collection procedures after partial payments or instalments.	Fortlauf des außergerichtlichen Inkasso-Mahnverfahrens nach Teil- bzw. bei Ratenzahlung
IE	Dismissal of extrajudicial collection proceedings du to futility	Einstellung des außergerichtlichen Inkasso-Mahnverfahrens wegen Aussichtslosigkeit

II. "Middle" negative attributes (Data from collection - court):		Mittlere Negativmerkmale
MB	Payment ordered by the court	Antrag auf Mahnbescheid
VB	Enforcement order from the court	Antrag auf Vollstreckungsbescheid
TR	Payment installment plan resulting from court decision	Ratenzahler nach Forderungs-Titulierung
ZWA	Levy of execution to liquidate personal assets (non real-estate)	Zwangsvollstreckung in das bewegliche Vermögen
ZWI	Levy of execution to liquidate personal assets (real-estate)	Zwangsvollstreckung in das unbewegliche Vermögen
FRP	Futile collections attempt	fruchtlose Pfändung
LP	Garnishment of wages	Lohn- oder sonstige Forderungspfändung aufgrund eines gerichtlichen Pfändungs- und Überweisungsbeschlusses
UF	Non collectable legally binding payment claim	uneinbringliche, titulierte Forderung
UBV	Relocation leaving no forwarding address	unbekannt verzogen (unter Hinterlassung von Verbindlichkeiten aus Geld- oder Warenkrediten)
SU		Suchauftrag zu - unter Hinterlassung von Verbindlichkeiten - unbekannt verzogenen Personen (Adresse über Einwohneramt nicht ermittelbar)

III. "hard" negative attributes (Data from public lists of debtors / / Bundesanzeiger):		Harte Negativmerkmale
HB	Warrant to provide Affidavit	Haftbefehl zur Erzwingung der eidesstattlichen Versicherung
HV	Execution of warrant to provide Affidavit	Vollstreckung des Haftbefehls zur Erzwingung der EV
EV	Affidavit or oath of disclosure	eidesstattliche Versicherung ("Offenbarungseid")
EEV	Amendment to Affidavit	Ergänzung der eidesstattlichen Versicherung
WEV	Repeated affidavit or oath of disclosure	wiederholte eidesstattliche Versicherung (§ 903 ZPO)
SVV		Verweigerung der Vermögensauskunft gem. §882c Abs. 1 Nr. 1 ZPO
SAV		erkennbare Aussichtslosigkeit der Vollstreckung gem. §882c Abs. 1 Nr. 2 ZPO
SNZ		Nichtzahler gem. §882c Abs. 1 Nr. 3 ZPO

IVE	Extrajudicial settlement attempt in the course of insolvency proceedings	außergerichtlicher Einigungsversuch im Rahmen des Insolvenzverfahrens
III. "hard" negative attributes (Data from public lists of debtors // Bundesanzeiger):		Harte Negativmerkmale
ISP	Initiation of debt settlement plan / initiations of insolvency proceedings	Schuldenbereinigungsplan-Verfahren eingeleitet / Antrag auf Eröffnung des Insolvenzverfahrens
IVS	Court ordered preliminary safeguard provisions in the course of insolvency	Anordnung von vorläufigen Sicherungsmaßnahmen im Insolvenzverfahren
IVA	Court ordered revocation of preliminary safeguard provisions in the course of insolvency	Aufhebung von vorläufigen Sicherungsmaßnahmen im Insolvenzverfahren
IBE	Institution of insolvency proceedings / court order	Eröffnung des Insolvenzverfahrens / Beschluss
IBA	Dismissal of insolvency proceedings due to insufficient assets	Abweisung bzw. Einstellung des Insolvenzverfahrens mangels Masse (§ 26 Abs. 2 InsO)
IWP	Reversal of insolvency proceedings / start of period of good conduct	Aufhebung des Insolvenzverfahrens
IRB	Discharge grant of outstanding debts	Erteilung der Restschuldbefreiung
IRV	Discharge denial of outstanding debts	Versagung der Restschuldbefreiung
KON	Dismissal of bankruptcy petitions due to insufficient assets (Prior to 1999)	Abweisung des Antrags auf Eröffnung des Konkurses mangels Masse (§ 107 KO)
KER	Institution of bankruptcy proceedings (Prior to 1999)	Eröffnung des Konkursverfahrens (§ 108 KO)
KEM	Suspension of bankruptcy proceedings due to insufficient assets (Prior to 1999)	Einstellung des Konkursverfahrens mangels Masse (§§ 202, 204 KO)
KAS	Revocation of bankruptcy proceedings (Prior to 1999)	Aufhebung des Konkursverfahrens (nach Schlusstermin) (§ 163 KO)
VGE	Institution of reorganizations proceedings	Eröffnung des Vergleichsverfahrens (§ 11 ff VerglO)
VGA	Institution of reorganizations proceedings	Abweisung des Antrages auf Eröffnung des Vergleichsverfahrens
VEM	Suspension of reorganizations proceedings	Einstellung des Vergleichsverfahrens nach Rücknahme des Vergleichsvorschlages (§ 99 ff VerglO)
VAS	Revocation of reorganizations proceedings	VAS Aufhebung des Vergleichsverfahrens (§ 90 ff VerglO)
GVA	Dismissal of petition to initiate comprehensive execution for insufficient assets	GVA Abweisung des Antrages auf Eröffnung der Gesamtvollstreckung mangels Masse (§ 4 Abs. 2 GesO)
GVE	Commercial Insolvency Arrangement	Eröffnung bzw. Anordnung der Gesamtvollstreckung (§ 5 GesO)
GEM	Commercial Insolvency	Einstellung des Gesamtvollstreckungsverfahrens
GAS	Aborted Commercial Insolvency	Aufhebung des Gesamtvollstreckungsverfahrens

Other		Sonstige Negativmerkmale
+++	Deceased	verstorben
AE		Adressermittlung (Person unter der Adresse nicht zustellbar)
HI		Hinweise zur Person oder Firma
HA		Risikohinweise zur Adresse (JVA, Obdachlosenunterkunft, o. ä.); TKZ 5

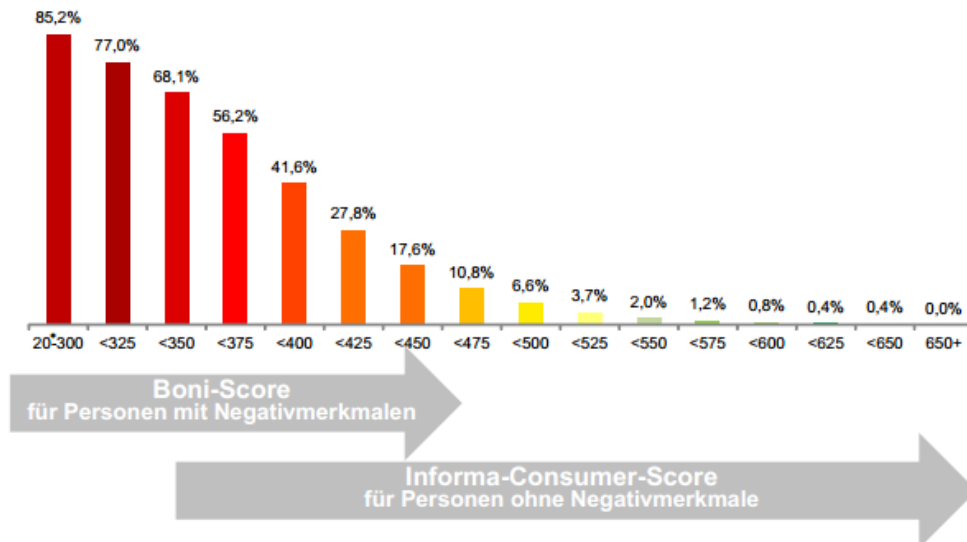
5.6.2 Decision matrix Arvato Infoscore Boni-Score / Informa-Score

Parametername: scorevalue

Hinweise zur Interpretation von Scorewerten

für Bezieher von Boniscore und/oder Scores der Informa-Score-Familie

In der nachstehenden Grafik finden Sie die gültigen Scorewerte des Boni-Score (d.h. Für Personen mit Negativmerkmalen) und für die Informa-Consumer-Scores (für Personen ohne Negativmerkmale) mit den dazugehörigen Ausfallquoten.



Hinweise

- Die beiden Scores sind bezüglich ihrer Ausfallquoten adjustiert.
- Die dargestellte Schlechtenquote ist definiert als Wahrscheinlichkeit für das Auftreten einer Zahlungstörung innerhalb eines Jahres. **Sie kann und soll nur als Anhaltspunkt dienen, da sie je nach Branche, Kundenklientel etc. variiert.**

In Ausnahmefällen kann kein gültiger Scorewert gemäß der obigen Tabelle berechnet werden. In diesem Fall ist der Ausgabewert wie folgt zu interpretieren:

Ausgabewert	Bedeutung	Hinweis
0	Kein Score berechenbar	Die Ausgabewerte 0-6 stellen keine Aussage zum Zahlungsausfallrisiko dar, sondern besagen, dass - aus unterschiedlichen Gründen - kein Score berechnet werden konnte.
1**	Postalisch falsch	
2**	Hinweisadresse	
3**	Person verstorben	
4**	Teilnehmeridentcode falsch	
5**	Kein berechtigtes Interesse	
6**	Business-Sperre	

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¹⁴ ©2016 Arvato Infoscore: Available in German language only and only an indication. Your business settings may vary.

5.6.3 Decision matrix Boniversum VERITA score

Decision matrix page 1

Entscheidungsmatrix VERITA Premium Ident S (Mittleres Risiko)							
Adressvalidierung		Identifizierung		Sonderadressen		Zahlungsart	Kreditlimit Unsichere ZA
Raturn-Code	Erläuterung	Raturn-Code	Erläuterung	Adressflag	Bezeichnung	Empfehlung	Empfehlung
Seite 11 von 21 der XML-Dokumentation, § 3.3		Seite 13 von 21 der XML-Dokumentation, § 3.5.1		Seite 17 von 21 der XML-Dokumentation, § 3.7			
03	Adresse NICHT in Ordnung					Vorkasse	Aussteuern bzw. manuelle Prüfung
01 oder 02	Adresse in Ordnung	06	Person verstorben			Vorkasse	
01 oder 02	Adresse in Ordnung	00 bis 05	Person nicht verstorben	S1	Sonderadresse höchstes Risiko	Sicher	
01 oder 02	Adresse in Ordnung	00 bis 05	Person nicht verstorben	S2	Sonderadresse sehr stark erhöhtes Risiko		
01 oder 02	Adresse in Ordnung	00 bis 05	Person nicht verstorben	S3	Sonderadresse stark erhöhtes Risiko		
01 oder 02	Adresse in Ordnung	00 bis 05	Person nicht verstorben	S4	Sonderadresse deutlich erhöhtes Risiko		
01 oder 02	Adresse in Ordnung	00 bis 05	Person nicht verstorben	S5	Sonderadresse spürbar erhöhtes Risiko		
01 oder 02	Adresse in Ordnung	00 bis 05	Person nicht verstorben	S6	Sonderadresse mäßig erhöhtes Risiko	Alle	25%
01 oder 02	Adresse in Ordnung	00 bis 05	Person nicht verstorben	S7	Sonderadresse leicht erhöhtes Risiko		50%
01 oder 02	Adresse in Ordnung	00 bis 05	Person nicht verstorben	S8	Sonderadresse schwach erhöhtes Risiko		
01 oder 02	Adresse in Ordnung	00 bis 05	Person nicht verstorben	Z	keine Sonderadresse	siehe nächste Seite	

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¹⁵ ©2016 Boniversum: Available in German language only and only an indication. Your business settings may vary.

Decision matrix page 2

Entscheidungsmatrix VERITA Premium Ident S (Mittleres Risiko)					
Identifizierung		VERITA Score		Zahlungsart	Kreditlimit
Return-Code	Erläuterung	Scoreklasse	Scorebandbreite	Empfehlung	Unsichere Z
Seite 13 von 21 der XML-Dokumentation, § 3.5.1		Seite 15 von 21 der XML-Dokumentation, § 3.6.3			Empfehlung
02	Person identifiziert	1 bis 4	Scorewert von 1 bis 29	Alle	100%
02	Person identifiziert	5 bis 6	Scorewert von 30 bis 56		75%
02	Person identifiziert	7 bis 8	Scorewert von 57 bis 123		50%
02	Person identifiziert	9	Scorewert von 124 bis 1000		25%
02	Person identifiziert	Keine Scorerückgabe bzw. Scorewert = 0			50%
02	Person identifiziert	-1 bis -5	Creditreform-Inkasso oder Negative Pooldaten	Sicher	
02	Person identifiziert	-6	Härtestes Merkmal Gericht	Vorkasse	
03	Haushalt identifiziert	1 bis 2	Scorewert von 1 bis 13	Alle	75%
03	Haushalt identifiziert	3 bis 4	Scorewert von 14 bis 29		50%
03	Haushalt identifiziert	5 bis 6	Scorewert von 30 bis 56		25%
03	Haushalt identifiziert	7 bis 9	Scorewert von 57 bis 1000	Sicher	
03	Haushalt identifiziert	Keine Scorerückgabe bzw. Scorewert = 0			
05	Gebäude identifiziert	1 bis 2	Scorewert von 1 bis 13	Alle	75%
05	Gebäude identifiziert	3 bis 4	Scorewert von 14 bis 29		50%
05	Gebäude identifiziert	5	Scorewert von 30 bis 40		25%
05	Gebäude identifiziert	6 bis 9	Scorewert von 41 bis 1000	Sicher	
05	Gebäude identifiziert	Keine Scorerückgabe bzw. Scorewert = 0			
00	Nicht identifiziert	1 bis 3	Scorewert von 1 bis 20	Alle	50%
00	Nicht identifiziert	4 bis 5	Scorewert von 21 bis 40		25%
00	Nicht identifiziert	6 bis 9	Scorewert von 41 bis 1000	Sicher	
00	Nicht identifiziert	Keine Scorerückgabe bzw. Scorewert = 0			

5.6.4 Consumerscore Boniversum VERITA score - scorevalue

Parametername: scorevalue

VERITA Score	Klasse	Scorewerte	Schlechtrate ^(*)
Wenn KEINE personenbezogenen Negativmerkmale vorliegen	1	1 bis 8	0,7
	2	9 bis 13	1,2
	3	14 bis 20	1,7
	4	21 bis 29	2,4
	5	30 bis 40	3,6
	6	41 bis 56	4,9
	7	57 bis 80	6,9
	8	81 bis 123	10,5
	9	124 bis 1000	17,8
Wenn personenbezogene Negativmerkmale vorliegen	0	Es sind zu wenige Daten für eine Berechnung vorhanden.	
		Filterwerte	Beschreibung
	-1	5000	geschlossene Inkassofälle (älter als 2 Jahre), negative Kontoschließungen (älter als 2 Jahre)
	-2	5200	geschlossene titulierte Inkassofälle (älter als 2 Jahre), Ausbuchungen (älter als 2 Jahre), gerichtliches Mahnverfahren (älter als 2 Jahre), erteilte Restschuldbefreiung (1 Jahr oder jünger)
	-3	5400	geschlossene Inkassofälle (2 Jahre alt oder jünger), aktueller Zahlungsrückstand 30/60/90 Tage
	-4	5600	offene kaufmännische Inkassofälle (Mahnsachen), geschlossene titulierte Inkassofälle (2 Jahre alt oder jünger), negative Kontoschließungen (2 Jahre alt oder jünger), Kontofälligstellung (2 Jahre alt oder jünger)
	-5	5800	offene titulierte Inkassofälle (Überwachungssachen), Ausbuchung (2 Jahre alt oder jünger), gerichtliches Mahnverfahren (2 Jahre alt oder jünger)
	-6	6000	Harte Gerichtsmerkmale (Eidesstattliche Versicherung, Nichtabgabe der Vermögensauskunft, Gläubigerbefriedigung ausgeschlossen oder nach einem Monat nicht nachgewiesen, Haftanordnung, Insolvenz)

(*) Statistische Wahrscheinlichkeit, dass die bewertete Person in den folgenden 12 Monaten Zahlungsschwierigkeiten aufweist.

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VERITA Score	Beschreibung	Ampelwert	Ampelbeschreibung
1 bis 56	Annehmen. Es liegen keine personenbezogenen Negativmerkmale vor.	03	GRÜN
57 bis 1000	Vorsicht!	02	GELB
5000 bis 6000	Es liegen Negativdaten zu der Person vor.	01	ROT
0	Es sind zu wenig Daten für eine Berechnung vorhanden.	00	Nicht angezeigt

¹⁶ ©2016 Boniversum: Available in German language only and only an indication. Your business settings may vary.

5.6.5 Consumerscore Boniversum VERITA score - addressstatus

Parametername: addressstatus

mapped to Code	Boniversum internal status	Signification	Signification (DE)
Special addresses -> recommended to check addresses manually			
AS1	S1	Prisons, institutions for psychosocial care / addiction, etc., homeless shelters, sheltered facilities for criminals, other homes without recreation and holiday homes, youth hostels, educational centers, youth centers and open house houses	Justizvollzugsanstalten, Stationäre Einrichtungen zur psychosozialen Betreuung/ Suchtbekämpfung u.Ä., Obdachlosenheime, betreute Übergangseinrichtungen für Straftäter, Sonstige Heime (ohne Erholungs- und Ferienheime), Jugendwohnheime, Erziehungsheime, Jugendzentren und Häuser der offenen Tür
AS2	S2	Hospitals, retirement and rehabilitation clinics, nursing homes, nursing homes, disabled workshops, retirement homes; Old people's homes, disabled people's homes, old people's homes	Krankenhäuser, Vorsorge- und Rehabilitationskliniken, Pflegeheime, Altenpflegeheime, Behindertenwerkstätten, Altenheime; Alten- und Behindertenwohnheime, Altenwohnheime
AS3	S3	Games, betting and lotteries, playing halls & operation of game machines, retailing of motor fuels (petrol stations), package shops, packing stations	Spiel-, Wett- und Lotteriewesen, Spielhallen & Betrieb von Spielautomaten, Einzelhandel mit Motorenkraftstoffen (Tankstellen), Paketshops, Packstationen
AS4	S4	Gastronomy, cafés, serving drinks	Gastronomie, Cafés, Ausschank von Getränken
AS5	S5	Other social work (without housing), placement and transfer of workers	Sonstiges Sozialwesen (ohne Heime), Vermittlung und Überlassung von Arbeitskräften
AS6	S6	Operation of sports facilities, fitness centers	Betrieb von Sportanlagen, Fitnesszentren
AS7	S7	Accommodation, holiday houses and holiday apartments, campsites, amusement and theme parks	Beherbergung, Ferienhäuser und Ferienwohnungen, Campingplätze, Vergnügungs- und Themenparks
AS8	S8	Education, boarding school	Erziehung und Unterricht, Internate

5.6.6 Consumerscore SCHUFA - legalform

Parametername: legalform

SCHUFA Code	Signification
1	Aktiengesellschaft
2	Aktiengesellschaft & Co
3	Aktiengesellschaft & Co. KG
4	Aktiengesellschaft & Co. KGaA
5	Aktiengesellschaft & Co. OHG
6	Anstalt des öffentlichen Rechts
7	Akciju Sabiedriba - Aktiengesellschaft aus Lettland
8	Besloten Vennootschap ODER Besloten Vennootschap met Beperkte Aansprakelijkheid - Niederländische GmbH
9	-----
10	Eingetragener Kaufmann
11	Eingetragener Verein
12	Eingetragene Genossenschaft
13	Eingetragene/eingetragene Genossenschaft mit beschränkter Haftpflicht
14	Eingetragene/eingetragene Genossenschaft mit unbeschränkter Haftpflicht
15	Europäische wirtschaftliche Interessenvereinigung
16	Freier Beruf
17	Gemeinnützige Aktiengesellschaft
18	Gesellschaft bürgerlichen Rechts ODER BGB-Gesellschaft
19	Gewerbebetrieb
20	Gemeinnützige Gesellschaft mit beschränkter Haftung
21	Gesellschaft mit beschränkter Haftung
22	Gesellschaft mit beschränkter Haftung & Co.
23	Gesellschaft mit beschränkter Haftung & Co. Kommanditgesellschaft
24	Gesellschaft mit beschränkter Haftung & Co. Kommanditgesellschaft auf Aktien
25	Gesellschaft mit beschränkter Haftung & Co. offene Handelsgesellschaft
26	Gesellschaft mit beschränkter Haftung in Gründung
27	Incorporated - Aktiengesellschaft in USA
28	Kommanditgesellschaft
29	Kommanditgesellschaft Stiftung & Co.
30	Kommanditgesellschaft auf Aktien
31	Kommanditgesellschaft KGaA & Co
32	Offene Handelsgesellschaft KGaA & Co.
33	Körperschaft des öffentlichen Rechts
34	private company limited by shares - Englische GmbH
35	Naamloze Vennootschap
36	Offene Handelsgesellschaft
37	Partnerschaftsgesellschaft
38	Public Company Limited by shares - Englische Aktiengesellschaft
39	Rechtlich selbständige Niederlassung

SCHUFA Code	Signification
40	Rechtlich unselbständige Niederlassung
41	Societa per Azioni
42	Société anonyme
43	Société à Responsabilité Limitée
44	Societas Cooperativa Europea - Europäische Genossenschaft
45	Societas Europaea - Europäische Aktiengesellschaft
46	Sonstige Rechtsform
47	Stiftung öffentlichen Rechts
48	Stiftung privaten Rechts
49	Stiftung
50	Stiftung & Co. KG
51	Stiftung gemeinnützige Gesellschaft mit beschränkter Haftung
52	Stiftung Gesellschaft mit beschränkter Haftung
53	Stiftung Verein
54	Verein durch staatliche Verleihung
55	Versicherungsverein auf Gegenseitigkeit
56	UG
57	UG
58	Erbengemeinschaft
59	UG
60	A/S
61	Corp.
62	Spolka Akcyjna
63	OOD
64	Oy
65	S.R.L.
66	Sp.z.o.o.
67	d.o.o.
68	s.r.o.
69	Ltd. & Co.
70	Inc. & Co. oHG
71	B.V. & Co. KG
72	Ltd. & Co. KG
73	S.R.L. & Co. KG
74	S.a.r.l. & Co. KG
75	Sp.z.o.o. & Co. KG
76	A/S & Co. KG
77	Corp. & Co. KG
78	Inc. & Co. KG
79	N.V. & Co. KG
80	PLC. & Co. KG
81	Ltd. & Co. oHG

5.7 Error messages

No.	Signification	Activity
1	Card issuer temporarily not available	Please try again later.
2	Authorization declined	Decline purchase
4	Card not approved	Decline purchase
5	Authorization declined	Decline purchase
7	Required CVC code not specified or not valid	Specify/change CVC
12	Transaction invalid	Decline purchase
13	Limit exceeded	Decline purchase
14	Invalid card	Decline purchase
21	Activity not processed	Time for Capture after PreAuthorization has been exceeded (among other things)
30	Format Error in request message (e.g. CVC missing).	
31	Invalid card type	Change card type
33	Expiry date invalid, incorrect or in the past	Correct expiry date
34	Manipulation suspected	Decline purchase
43	Card stolen	Decline purchase
51	Limit exceeded or account balance insufficient	Decline purchase
55	Incorrect secret code / Wrong PIN	Decline purchase
56	Card unknown	Decline purchase
57	Cancellation: Wrong card has been used as for original authorization	Decline transaction
58	Terminal ID unknown	Contact BS PAYONE please.
60	Card acceptor must contact the acquirer	Decline purchase
61	Card blocked	Decline purchase
62	Card cancelled	Decline purchase
63	Card is not allowed. Card is blocked.	Decline purchase
64	Authorization amount differs from reserved amount.	
65	Card has been used too often	Decline purchase
80	Amount no longer available	Reservation period has elapsed. Please repeat preauthorization
91	Card issuer temporarily not available	Temporary problem
101	The authorisation has expired.	Restart entire process.
102	Authorisation denied.	
103	Transaction could not be completed successfully.	Customer is to select an alternative method of payment.
104	Customer could not pay.	Transaction rejected.
105	The customer has to be redirected to Wallet Provider in order to select a new payment method.	Redirect customer to Wallet Provider
106	The order has expired.	Close order
107	Risk assessment has denied this transaction.	
108	The transaction has already been completed.	
109	Transaction (credit) denied	The refund was rejected.
110	Problem with mandate of customer at external service provider.	See external Message and contact external service provider or customer.

No.	Signification	Activity
111	The customer has not yet completed the wallet transaction at the external payment provider.	
112	Account is locked or inactive (at the external payment provider)	
201	The transaction was denied by iDEAL.	
202	The transaction was denied by PostFinance.	
250	SEPA mandate does not exist	Please add SEPA mandate
251	SEPA mandate not confirmed	Please confirm SEPA mandate
252	SEPA mandate parameter not valid or missing	Incorrect SEPA mandate parameter
253	SEPA configuration error	Contact PAYONE please.
254	Request not supported for this SEPA configuration	
255	SEPA mandate place of confirmation missing	Please add place of SEPA mandate confirmation
301	Amount for this payment method too low	Change amount
303	Capture amount does not match financing amount	Change amount
304	Parameter Token is expired	
305	Customer has not yet completed the transaction	
306	Transaction already has customer payments	
307	Financing Provider does not secure this transaction	Change payment type
308	Parameter {settleaccount} does not fit to payment type financing	Change value for Parameter {settleaccount}
350	Payment guarantee has expired	
351	Payment guarantee has been rejected	
701	Payment denied after BIN check	Decline purchase
702	Payment was denied because of the BIN country	Decline purchase
703	Payment denied after IP check	Decline purchase
704	Payment was denied because of the IP country	Decline purchase
710	Payment denied after POS check	Decline purchase
721	Payment denied after Velocity IP check	Decline purchase
722	Payment denied after Velocity card number check	Decline purchase
723	Payment denied after Velocity account number check	Decline purchase
724	Payment denied after Velocity e-mail check	Decline purchase
731	Payment rejected by the Blacklist-IP-Check	
732	Payment rejected by the Blacklist-Cardpan-Check	
733	Payment rejected by the Blacklist-Bankaccount-Check	
734	Payment rejected by the Blacklist-Email-Check	
872	Pseudo card PAN not found	
876	AVS mismatch: The address provided does not match billing address of card holder.	Decline purchase
877	Invalid card number (Luhn check for this PAN incorrect)	Correct card number
878	Invalid card number (syntax check for this PAN incorrect)	Correct card number
879	CVC2 code incorrect length or incorrect syntax	Correct CVC2
880	Card type does not correspond with card number	Select different card type
881	Bank details cannot be used for online banking.	

No.	Signification	Activity
882	Bank type not supported	Select different bank type
883	The account number is invalid for this sort code	Decline purchase
884	The sort code is invalid	Decline purchase
885	Bank is not supported by giropay	
886	Online transfer type not supported	Select different online transfer type
887	Invalid BIC	
888	Invalid IBAN	
889	Country of the BIC not supported.	
890	Payment declined due to current risk setting	Decline purchase
891	Debtor limit exceeded, payment refused	Decline purchase
892	Country of the account not supported.	
894	account data incomplete: account holder name missing or invalid	Correct the account holder name
895	account data incomplete: street missing or invalid	Correct the street name
896	account data incomplete: zip missing or invalid	Correct the postal code
897	account data incomplete: city missing or invalid	Correct the city name
900	Internal error	Contact BS PAYONE please.
901	Configuration error	Contact BS PAYONE please.
902	Unknown error with external service provider.	Contact BS PAYONE please.
903	No connection to external service provider possible (timeout, breakdown)	Contact BS PAYONE please.
904	Temporary error	Please try again later.
905	Merchant authentication / authorization at service provider failed	Correct authentication data at service provider, please.
906	Refund amount too high	Amount exceeds the original amount or remaining sum too low
907	Sequence no incorrect	Select different sequence number
908	Capture amount too high	Amount exceeds the original amount or remaining sum too low
909	Database connection failed	Contact PAYONE please.
910	Currency does not correspond with the referenced payment process	Change currency
911	Reference number already exists	Change reference number
912	Reference number does not correspond with the referenced payment process	Change reference number
913	Referenced payment process (txid) not found	Enter different txid
914	Referenced clearingsubtype (financingtype, onlinebanktransfertype, wallettype) not available for this channel	Please use another way of payment
915	Refund not possible	The connector settings do not allow a refund
916	Amount error	Amount incorrect sign or zero
917	Refund limit exceeded	Contact BS PAYONE please.
918	Upper or lower limit amount exceeded	Contact BS PAYONE please.
919	Limit revenue exceeded	Contact BS PAYONE please.
920	MaxPayoutAmount exceeded	Reduce amount

No.	Signification	Activity
921	Account balance insufficient	
922	Unknown account	
923	Payment type not available for this currency or card type	Set correct currency, type of payment, type of card, type of account or portalid
924	Test mode not available	Contact BS PAYONE please.
925	Live mode not available	Contact BS PAYONE please.
926	Incorrect mode for the referenced payment process	Change mode (live/test)
927	No refund connector.	Contact BS PAYONE please.
928	Article with itemtype prepaid not allowed in this request	
929	If the request contains articles with itemtype prepaid, the amount must be 0	
930	Connection does not support value of {recurrence}	change {recurrence}
931	Request does not support type of payment	Activity not possible for this type of payment
932	Collection not possible for this type of payment	Activity not possible for this type of payment
933	Multiple partial capture not supported for this method of payment	Change method of payment
934	Multiple partial capture not enabled	Contact BS PAYONE please.
935	Amount for multiple partial capture cannot be 0	
936	Authorisation without incoming payment not possible for this type of payment	
937	settleaccount does not fit to capturemode	Change settleaccount or capturemode
938	Voucher is not supported by this payment type	Remove voucher from article list
939	The amount of a prepaid article must be negative.	
940	Currency or cardtype not available at external service provider.	Contact external service provider please.
941	Feature referenced Transaction is not enabled at service provider.	Contact service provider and request missing feature, please.
944	Amount too small	
945	Amount too high	
950	Desired status change not possible for this payment process	Please try again later.
951	The maximum number of actions for this txid has been reached	
952	The Transaction was already completed.	
960	Target payment process (txid) not found	Transfer not possible
961	No incoming transfer found for this payment process	
962	Transferable amount not available	Amount too big or too small.
970	Operation was cancelled by the user.	
971	The user has not finished his action in given time.	
972	Transaction has expired	
973	Minimum age not reached	
974	The request was rejected because of an unexpected request order. The sequence of the requests should be checked.	
975	Transaction refused. The payment type you selected is not available for B2B transactions.	

No.	Signification	Activity
980	The transaction cannot complete successfully.	Try to authorize the payment via asynchronous mode.
981	Payment declined by third party.	Payment method not available for this transaction. Customer needs to choose other payment method.
982	Payment rejected by third party.	Please start new payment transaction.
983	Payment failed at third party.	Please try the request again.
984	Payment rejected by third party.	Customer equals merchant.
985	Payment rejected by third party.	Please show wallet widget to let customer change the paymentmethod.
986	Payment rejected by third party.	Customer needs to choose a paymentmethod.
987	Payment rejected by third party.	Customer needs to choose a shippingaddress.
990	Maintenance work	Please try again later.
991	Maintenance work at external service provider.	Please try again later.
1000	Parameter faulty or missing	
1001	Parameter {clearingtype} faulty or missing	
1002	Parameter {param} faulty	
1003	Parameter {reference} faulty or missing	
1004	Parameter {processing_time} faulty	
1005	Parameter {currency} faulty or missing	
1006	Parameter {due_time} faulty	
1007	Parameter {add_paydata} faulty or missing	
1008	Parameter {txid} faulty or missing	
1009	Parameter {sequencenumber} faulty or missing	
1010	Parameter {mode} faulty or missing	
1011	Parameter {workorderid} incorrect or missing	
1012	Parameter {api_version} incorrect or missing	
1013	Parameter {clearingsubtype} incorrect	
1016	Parameter {amount} faulty or missing	
1018	Parameter {max_payout_amount} faulty	
1024	Parameter {booking_date} faulty	Check format
1025	Parameter {document_date} faulty	Check format
1031	Parameter {settleaccount} faulty	
1032	Parameter {capturemode} faulty	
1035	Parameter {transactiontype} faulty or missing	
1036	Parameter {customer_is_present} faulty or missing	
1037	Parameter {recurrence} faulty or missing	
1041	Parameter {successurl} faulty or missing	
1042	Parameter {backurl} faulty or missing	
1043	Parameter {errorurl} faulty or missing	
1055	Parameter {financingtype} faulty or missing	
1065	Parameter {onlinebanktransfertype} faulty or missing	

No.	Signification	Activity
1071	Parameter {xid} faulty or missing	
1072	Parameter {storecarddata} faulty or missing	
1073	Parameter {pseudocardpan} faulty or missing	
1075	Parameter {cardissuenummer} faulty or missing	
1076	Parameter {cardtype} faulty or missing	
1077	Parameter {cardexpireddate} faulty or missing	
1078	Parameter {cardpan} faulty or missing	
1079	Parameter {cardcvc2} faulty or missing	
1080	Parameter {bankaccountholder} faulty or missing	
1081	Parameter {bankbranchcode} faulty or missing	
1082	Parameter {bankcountry} faulty or missing	
1083	Parameter {bankaccount} faulty or missing	
1084	Parameter {bankcode} faulty or missing	
1085	Parameter {bankgrouptype} faulty or missing	
1086	Parameter {bankcheckdigit} faulty or missing	
1087	Parameter {BIC} faulty or missing	
1088	Parameter {IBAN} faulty or missing	
1089	Parameter {elvtype} faulty or missing.	
1090	Parameter {shippingprovider} faulty or missing	
1091	Incomplete or missing bank-data. Define {bankaccount} or {iban}.	
1095	Parameter {wallettype} faulty or missing	
1096	Parameter {cashtype} incorrect or missing	
1100	Parameter {mandate_identification} faulty or missing	
1101	Parameter {mandate_status} faulty or missing	
1102	Parameter {mandate_dateofsignature} faulty or missing	
1103	Parameter {mandate_sequencetype} faulty or missing	
1104	Parameter {mandate_language} faulty or missing	
1110	Parameter {bankaccountholder_firstname} faulty or missing	
1111	Parameter {bankaccountholder_lastname} faulty or missing	
1112	Parameter {bankaccountholder_street} faulty or missing	
1113	Parameter {bankaccountholder_zip} faulty or missing	
1114	Parameter {bankaccountholder_city} faulty or missing	
1115	Parameter {bankaccountholder_country} faulty or missing	
1116	Parameter {bankaccountholder_email} faulty or missing	
1117	Parameter {bankaccountholder_company} faulty or missing	
1201	Parameter {encoding} faulty or missing	
1202	Parameter {request} faulty or missing	
1203	Parameter {mid} faulty or missing	
1204	Parameter {aid} faulty or missing	
1205	Parameter {portalid} faulty or missing	
1206	Parameter {key} faulty	
1208	Parameter {responsetype} faulty	

No.	Signification	Activity
1300	Parameter {customerid} faulty	
1301	Parameter {firstname} faulty or missing	
1302	Parameter {lastname} faulty or missing	
1303	Parameter {company} faulty or missing	
1310	Parameter {userid} faulty	
1311	Parameter {street} faulty or missing	
1312	Parameter {streetnumber} faulty or missing	
1313	Parameter {streetname} faulty or missing	
1314	Parameter {addressaddition} faulty or missing	
1321	Parameter {zip} faulty or missing	
1331	Parameter {city} faulty or missing	
1337	Billing address faulty or missing	
1338	Parameter combination {city} and {state} faulty or missing	
1339	Parameter {state} faulty or missing	State unknown or incorrect state
1340	Parameter {country} faulty or missing	Does not correspond with ISO 3166
1341	Parameter {language} faulty or missing	Does not correspond with ISO 639
1343	Parameter {birthday} faulty or missing	
1344	Parameter {telephonenumber} faulty or missing	
1345	Parameter {personalid} faulty or missing	
1346	Parameter {gender} faulty or missing	
1350	Parameter {email} faulty or missing	
1367	Parameter {shipping_street} faulty or missing	
1368	Parameter {shipping_company} faulty or missing	
1369	Parameter {shipping_state} faulty or missing	Shipping state unknown or wrong country
1370	Parameter {shipping_country} faulty or missing	Shipping country unknown or wrong
1371	Parameter {shipping_addressaddition} faulty or missing	
1372	Parameter {shipping_zip} faulty or missing	
1373	Parameter {shipping_city} faulty or missing	
1374	Parameter combination {shipping_city} and {shipping_state} faulty or missing	
1375	Shipping address faulty or missing	
1380	Parameter {ip} faulty or missing	
1381	Parameter {use_customerdata} faulty or missing	
1382	Parameter {businessrelation} incorrect or missing	
1390	Parameter {delete_carddata} faulty or missing	
1391	Parameter {delete_bankaccountdata} faulty or missing	
1421	Parameter {exiturl} faulty or missing	
1432	Parameter {checktype} faulty or missing	
1433	Parameter {scoretype} faulty or missing	
1434	Parameter {consumerscoretype} faulty or missing	
1435	Parameter {addresschecktype} faulty or missing	
1471	Parameter {phone_prefix} incorrect or missing	
1472	Parameter {phone_number} incorrect or missing	

No.	Signification	Activity
1473	Parameter {pin} incorrect or missing	
1475	Parameter {type} incorrect or missing	
1501	Parameter {reminderlevel} faulty or missing	
1502	Parameter {remindertime} faulty or missing	
1503	Parameter {sendreminder} faulty or missing	
1504	Parameter {failedcause} faulty or missing	
1609	List of articles too long	Shorten list of articles
1610	Article list faulty or incomplete	
1611	Parameter {id[n]} faulty or missing	
1612	Parameter {pr[n]} faulty or missing	
1613	Parameter {no[n]} faulty or missing	
1614	Parameter {va[n]} faulty or missing	
1615	Parameter {sd[]} faulty or missing	
1616	Parameter {ed[]} faulty or missing	
1617	Parameter {it[]} faulty or missing	
1618	Gross-amount of an item trespass the maximum	
1631	Parameter {invoice_title} faulty or missing	
1632	Parameter {invoice_deliverymode} faulty or missing	
1633	Parameter {invoice_deliverydate} faulty or missing	
1634	Parameter {invoice_deliveryenddate} faulty or missing	
1650	Parameter {file_reference} faulty or missing	
1651	Parameter {file_type} faulty or missing	
1652	Parameter {file_format} faulty or missing	
1700	Parameter {action} faulty or missing	
1705	Parameter {accessid} faulty or missing	
1706	Parameter {access_price} faulty or missing	
1707	Parameter {access_aboprice} faulty or missing	
1708	Parameter {access_expiretime} faulty or missing	
1709	Parameter {access_period} faulty	
1710	Parameter {access_aboperiod} faulty	
1711	Parameter {access_starttime} faulty or missing	
1712	Parameter {access_cancelttime} faulty or missing	
1713	Parameter {access_vat} faulty or missing	
1721	Parameter {productid} faulty or missing	
1723	Parameter {id_trail} incorrect or missing.	
1724	Parameter {no_trail} (quantity) faulty or missing	
1725	Parameter {pr_trail} (price) faulty or missing	
1726	Parameter {de_trail} (description) faulty or missing	
1727	Parameter {va_trail} (VAT rate) faulty or missing	
1728	Parameter {period_unit_trail} faulty or missing	
1729	Parameter {period_length_trail} faulty or missing	
1730	Parameter {id_recurring} incorrect or missing.	
1731	Parameter {no_recurring} (quantity) faulty or missing	

No.	Signification	Activity
1732	Parameter {pr_recurring} (price) faulty or missing	
1733	Parameter {de_recurring} (description) faulty or missing	
1734	Parameter {va_recurring} (VAT rate) faulty or missing	
1735	Parameter {period_unit_recurring} faulty or missing	
1736	Parameter {period_length_recurring} faulty or missing	
1737	No item data found for initial term.	
1738	No item data found for subsequent term.	
1739	Parameter {amount_trail} faulty or missing	
1740	Parameter {amount_recurring} faulty or missing	
1753	The indicated total price of all articles from the initial term did not correspond with the amounts of the individual items.	
1754	The indicated total price of all articles from the subsequent term did not correspond with the amounts of the individual items.	
1755	Incomplete item data for the initial term.	
1756	Incomplete item data for the subsequent term.	
1757	Incomplete time definition for the initial term.	
1758	Incomplete time definition for the subsequent term.	
1759	For more than one item position in the initial term the price cannot be transmitted without items.	
1760	For more than one item position in the subsequent term the price cannot be transmitted without items.	
1761	Parameter {ti_trail} faulty or missing	
1762	Parameter {ti_recurring} faulty or missing	
1810	Parameter {vaccounname} faulty or missing	
1811	Parameter {vreference} faulty or missing	
1813	Parameter {settleperiod} faulty or missing	
1814	Parameter {settletime} faulty or missing	
1815	Parameter {settle_period_unit} faulty or missing	
1816	Parameter {settle_period_length} faulty or missing	
1817	Parameter {payout_open_balance} faulty or missing	
1999	Parameter {ecommercemode} faulty or missing	
2001	Channel not enabled for this payment portal	Contact BS PAYONE please.
2002	Request not supported by activated channel	Contact BS PAYONE please.
2003	MerchantID not found or no rights	Change MerchantID
2004	SubAccountID not found or no rights	Change SubAccountID
2005	PortalID not found or no rights	Change PortalID
2006	Key incorrect	Change key
2007	Hash incorrect	Change hash
2008	Invalid request - invalid parameter	
2009	Too many API parameters	Reduce number of parameters
2011	Parameters from different API versions cannot be used simultaneously.	
2012	Parameters conflict in request or do not match	Check parameters and repeat request

No.	Signification	Activity
2013	API-request contains invalid characters	Check Encoding and do not use control characters.
2014	HTTP-Header [application/json] incorrect or missing	
3000	Function not available	
3001	Parameter getusertoken invalid. Valid values are yes/no	
3002	A user-id or a customer-id must be set.	
3003	Usertoken not found.	The usertoken was not found. It is either not present or expired.
3004	The usertoken is not allowed within the current request.	The usertoken is not allowed within the current request.
3005	Usertoken and Userid are not to be transmitted simultaneously.	The use of usertoken and userid is mutually exclusive.
3006	The usertoken has a wrong format.	The usertoken transmitted is faulty. It should have a length of 24chars and should consist of alphanumerical characters including the .
3007	The transmitted customerid is not allowed.	You are already using the transmitted customerid.
3008	The desired customer is already present.	The customer to create is already present, you probably used a token generated by yourself.
3009	The customer does not exist.	The customer identified by the token does not exist.
3010	The modes do not match.	The modes of request and dataset have to match. They need to be either test or live.
3200	Customer not found or insufficient privileges	Change customer number
3301	Bank data cannot be deleted, order prevailing	
3302	Bank data cannot be deleted, VirtualAccount not balanced	
3303	Card data cannot be deleted, order prevailing	
3304	Card data cannot be deleted, VirtualAccount not balanced	
4001	Address check not enabled	
4002	Type of address check not enabled	
4010	Country not supported	Cancel or continue without address check
4011	Country not supported	Cancel or continue without consumer score check
4041	Address not found	
4042	Address not unique	
4051	City not found	Change city
4052	City ambiguous	Address correct, however it could not be corrected.
4053	Street not found	Change street, post code or city
4054	Street ambiguous	Address correct, however it could not be corrected.
4055	Wrong post office box number	Change post office box number
4056	Street number error	Change street number
4057	Overseas address	No reference could be found for the submitted address.

No.	Signification	Activity
4058	Street invalid	Change street
4101	Consumer score check not enabled	
4102	Scoretype incorrect	
4110	No information - no hits	Change request data
4112	No information - too many hits	Provide more specific request data
4113	No information - manual post-processing required	Processing not possible
4114	Information is blocked at external service provider	Processing not possible
4200	Merchant does not participate in the 3D Secure procedure	Continue payment process without 3-D Secure
4201	Request is not supported by payment portal type	Change payment portal
4208	Card does not participate in 3D Secure	Continue payment process
4209	PaRes Check not necessary	Cancel payment process
4210	3D Secure error	Continue payment process without 3-D Secure
4211	PaRasCheck error (status=A).	Continue with 3DS (ECIO6)
4212	PaRasCheck error (status=U).	Continue without 3DS (ECIO7)
4213	PaRasCheck error (authentication failed).	Cancel
4214	3D Secure transaction requires XID.	Cancel activity
4215	Indicated ECI mode not supported by 3D Secure	Cancel activity
4216	XID not found.	Cancel activity
4217	3D Secure authentication not completed yet	Booking declined
4218	3D Secure authentication failed	Booking declined
4219	Successful 3D Secure authentication required	Booking declined
4302	Check type incorrect	Change check type
4743	Callback: Country not supported	Cancel or continue without callback
4744	Callback: Prefix disabled	Only use local or mobile numbers
4745	Callback: Number incorrect	Area code or base number incorrect
5050	Dunning level cannot be set	Dunning status does not allow setting a new dunning level
5052	Error on repeated sending of a reminder.	Please try again later
5054	Dunning date could not be set	
6032	Invoice not found	
6500	File not found	Check reference, format, type
6501	File not unique	Check reference, format, type
6502	Service temporarily unavailable	Please try again later.
7005	Access ID not found or no rights	
7008	Contract expiry date in the past or before the start date	
7011	Contract start date in the past	
7012	Term of contract has already started	
7021	ProductID not found or no rights	
7030	Operation not allowed under current access status.	
7040	The total amount of the items in the initial term equals 0.	
7041	The total amount of the items in the subsequent term equals 0.	

No.	Signification	Activity
7042	The property {InvoiceAppendix} does not have the correct data type.	
7043	The IP address does not have the correct data type.	
8010	VirtualAccountName already used for another customer	Select different name or select correct customer.
8011	Reference number (virtual account) already exists	Change reference number
8020	Currency does not correspond with the virtual account	Change currency
8030	Portal ID does not correspond with the virtual account.	Change portal ID
8040	Mode does not correspond with the virtual account.	Change mode

5.8 ISO Currencies (ISO 4127)

The PAYONE Platform and its shop modules are optimized for currencies with two decimals. Currencies without or with three decimals can be generally processed with certain limitations – please contact the PAYONE Merchant Service for further information.

E.g.:

Currency	Alpha	Num	Decimals
Euro	EUR	978	2
Australian Dollar	AUD	036	2
Swiss Franc	CHF	756	2
Danish Krone	DKK	208	2
Pound Sterling	GBP	826	2
Norwegian Krone	NOK	578	2
New Zealand Dollar	NZD	554	2
Swedish Krona	SEK	752	2
US Dollar	USD	840	2

5.9 ISO Countries (ISO 3166)

ISO	Country	ISO	Country
AD	Andorra	LA	Lao People's Democratic Republic
AE	United Arab Emirates	LB	Lebanon
AF	Afghanistan	LC	Saint Lucia
AG	Antigua And Barbuda	LI	Liechtenstein
AI	Anguilla	LK	Sri Lanka
AL	Albania	LR	Liberia
AM	Armenia	LS	Lesotho
AN	Netherlands Antilles	LT	Lithuania
AO	Angola	LU	Luxembourg
AQ	Antarctica	LV	Latvia
AR	Argentina	LY	Libyan Arab Jamahiriya
AS	American Samoa	MA	Morocco
AT	Austria	MC	Monaco
AU	Australia	MD	Moldova, Republic Of
AW	Aruba	MG	Madagascar
AZ	Azerbaijan	MH	Marshall Islands
BA	Bosnia And Herzegowina (Herzegowina)	MK	Republic Of Macedonia (The Former Yugoslav)
BB	Barbados	ML	Mali
BD	Bangladesh	MM	Myanmar
BE	Belgium	MN	Mongolia
BF	Burkina Faso	MO	Macau
BG	Bulgaria	MP	Northern Mariana Islands
BH	Bahrain	MQ	Martinique
BI	Burundi	MR	Mauritania
BJ	Benin	MS	Montserrat
BM	Bermuda	MT	Malta
BN	Brunei Darussalam	MU	Mauritius
BO	Bolivia	MV	Maldives
BR	Brazil	MW	Malawi
BS	Bahamas	MX	Mexico
BT	Bhutan	MY	Malaysia
BV	Bouvet Island	MZ	Mozambique
BW	Botswana	NA	Namibia
BY	Belarus	NC	New Caledonia
BZ	Belize	NE	Niger
CA	Canada	NF	Norfolk Island
CC	Cocos (Keeling) Islands	NG	Nigeria
CF	Central African Republic	NI	Nicaragua
CG	Congo	NL	Netherlands
CH	Switzerland	NO	Norway

ISO	Country	ISO	Country
CI	Cote d'Ivoire	NP	Nepal
CK	Cook Islands	NR	Nauru
CL	Chile	NU	Niue
CM	Cameroon	NZ	New Zealand
CN	China	OM	Oman
CO	Colombia	PA	Panama
CR	Costa Rica	PE	Peru
CU	Cuba	PF	French Polynesia
CV	Cape Verde	PG	Papua New Guinea
CX	Christmas Island	PH	Philippines
CY	Cyprus	PK	Pakistan
CZ	Czech Republic	PL	Poland
DE	Germany	PM	St. Pierre And Miquelon
DJ	Djibouti	PN	Pitcairn
DK	Denmark	PR	Puerto Rico
DM	Dominica	PT	Portugal
DO	Dominican Republic	PW	Palau
DZ	Algeria	PY	Paraguay
EC	Ecuador	QA	Qatar
EE	Estonia	RE	Reunion
EG	Egypt	RO	Romania
EH	Western Sahara	RU	Russian Federation
ER	Eritrea	RW	Rwanda
ES	Spain	SA	Saudi Arabia
ET	Ethiopia	SB	Solomon Islands
EU	Europe (SSGFI only)	SC	Seychelles
FI	Finland	SD	Sudan
FJ	Fiji	SE	Sweden
FK	Falkland Islands (Malvinas)	SG	Singapore
FM	Micronesia, Federated States Of	SH	St. Helena
FO	Faroe Islands	SI	Slovenia
FR	France	SJ	Svalbard And Jan Mayen Islands
FX	France, Metropolitan	SK	Slovakia (Slovak Republic)
GA	Gabon	SL	Sierra Leone
GB	United Kingdom (UK)	SM	San Marino
GD	Grenada	SN	Senegal
GE	Georgia	SO	Somalia
GF	French Guiana	SR	Suriname
GH	Ghana	ST	Sao Tome And Principe
GI	Gibraltar	SV	El Salvador
GL	Greenland	SY	Syrian Arab Republic
GM	Gambia	SZ	Swaziland

ISO	Country	ISO	Country
GN	Guinea	TC	Turks And Caicos Islands
GP	Guadeloupe	TD	Chad
GQ	Equatorial Guinea	TF	French Southern Territories
GR	Greece	TG	Togo
GS	South Georgia And The South Sandwich Islands	TH	Thailand
GT	Guatemala	TJ	Tajikistan
GU	Guam	TK	Tokelau
GW	Guinea-Bissau	TM	Turkmenistan
GY	Guyana	TN	Tunisia
HK	Hong Kong	TO	Tonga
HM	Heard And Mc Donald Islands	TP	East Timor
HN	Honduras	TR	Turkey
HR	Croatia (local name: Hrvatska)	TT	Trinidad And Tobago
HT	Haiti	TV	Tuvalu
HU	Hungary	TW	Taiwan, Province Of China
ID	Indonesia	TZ	Tanzania, United Republic Of
IE	Ireland	UA	Ukraine
II	International (SSGFI only)	UG	Uganda
IL	Israel	UM	United States Minor Outlying Islands
IN	India	US	United States
IO	British Indian Ocean Territory	UY	Uruguay
IQ	Iraq	UZ	Uzbekistan
IR	Iran (Islamic Republic Of)	VA	Vatican City State (Holy See)
IS	Iceland	VC	Saint Vincent And The Grenadines
IT	Italy	VE	Venezuela
JM	Jamaica	VG	Virgin Islands (British)
JO	Jordan	VI	Virgin Islands (U.S.)
JP	Japan	VN	Vietnam
KE	Kenya	VU	Vanuatu
KG	Kyrgyzstan	WF	Wallis And Futuna Islands
KH	Cambodia	WS	Samoa
KI	Kiribati	YE	Yemen
KM	Comoros	YT	Mayotte
KN	Saint Kitts And Nevis	YU	Yugoslavia
KP	Korea, Democratic People's Republic Of	ZA	South Africa
KR	Korea, Republic Of	ZM	Zambia
KW	Kuwait	ZR	Zaire
KY	Cayman Islands	ZW	Zimbabwe
KZ	Kazakhstan		

5.10 ISO Subdivisions (ISO 3166-2)

These values are used for parameter „state“ and „shipping_state“ and represent principal subdivisions of a country.

Here a list of a few codes – for complete reference refer to http://en.wikipedia.org/wiki/ISO_3166-2

5.10.1 US-Subdivisions

ISO	Country	ISO	Country
AK	Alaska	MT	Montana
AL	Alabama	NC	North Carolina
AR	Arkansas	ND	North Dakota
AS	American Samoa	NE	Nebraska
AZ	Arizona	NH	New Hampshire
CA	California	NJ	New Jersey
CO	Colorado	NM	New Mexico
CT	Connecticut	NV	Nevada
DC	District of Columbia	NY	New York
DE	Delaware	OH	Ohio
FL	Florida	OK	Oklahoma
GA	Georgia	OR	Oregon
GU	Guam	PA	Pennsylvania
HI	Hawaii	PR	Puerto Rico
IA	Iowa	RI	Rhode Island
ID	Idaho	SC	South Carolina
IL	Illinois	SD	South Dakota
IN	Indiana	TN	Tennessee
KS	Kansas	TX	Texas
KY	Kentucky	UM	United States Minor
LA	Louisiana	UT	Utah
MA	Massachusetts	VA	Virginia
MD	Maryland	VI	Virgin Islands, U.S.
ME	Maine	VT	Vermont
MI	Michigan	WA	Washington
MN	Minnesota	WI	Wisconsin
MO	Missouri	WV	West Virginia
MP	Northern Mariana Islands	WY	Wyoming
MS	Mississippi		

5.10.2 CA-Subdivisions

ISO	Country		ISO	Country
AB	Alberta		PE	Prince Edward Island
BC	British Columbia		QC	Quebec
MB	Manitoba		SK	Saskatchewan
NB	New Brunswick		NT	Northwest Territories
NL	Newfoundland and Labrador		NU	Nunavut
NS	Nova Scotia		YT	Yukon
ON	Ontario			

5.10.3 MX-Subdivisions

ISO	Country		ISO	Country
BCN	Baja California		MOR	Morelos
DIF	Distrito Federal		NAY	Nayarit
AGU	Aguascalientes		NLE	Nuevo León
BCS	Baja California Sur		OAX	Oaxaca
CAM	Campeche		PUE	Puebla
COA	Coahuila		QUE	Querétaro
COL	Colima		ROO	Quintana Roo
CHP	Chiapas		SLP	San Luis Potosí
CHH	Chihuahua		SIN	Sinaloa
DUR	Durango		SON	Sonora
GUA	Guanajuato		TAB	Tabasco
GRO	Guerrero		TAM	Tamaulipas
HID	Hidalgo		TLA	Tlaxcala
JAL	Jalisco		VER	Veracruz
MEX	México		YUC	Yucatán
MIC	Michoacán		ZAC	Zacatecas

5.10.4 AR-Subdivisions

Code	Country		Code	Country
C	Ciudad Autónoma de Buenos Aires		M	Mendoza
B	Buenos Aires		N	Misiones
K	Catamarca		Q	Neuquén
H	Chaco		R	Río Negro
U	Chubut		A	Salta
X	Córdoba		J	San Juan
W	Corrientes		D	San Luis
E	Entre Ríos		Z	Santa Cruz
P	Formosa		S	Santa Fe
Y	Jujuy		G	Santiago del Estero
L	La Pampa		V	Tierra del Fuego
F	La Rioja		T	Tucumán

5.10.5 BR-Subdivisions

Code	Country		Code	Country
			ISO	
DF	Distrito Federal		PB	Paraíba
AC	Acre		PR	Paraná
AL	Alagoas		PE	Pernambuco
AP	Amapá		PI	Piauí
AM	Amazonas		RJ	Rio de Janeiro
BA	Bahia		RN	Rio Grande do Norte
CE	Ceará		RS	Rio Grande do Sul
ES	Espírito Santo		RO	Rondônia
GO	Goiás		RR	Roraima
MA	Maranhão		SC	Santa Catarina
MT	Mato Grosso		SP	São Paulo
MS	Mato Grosso do Sul		SE	Sergipe
MG	Minas Gerais		TO	Tocantins
PA	Pará			

5.10.6 CN-Subdivisions

Code	Country	Code	Country
11	Beijing	43	Hunan
12	Tianjin	44	Guangdong
13	Hebei	45	Guangxi
14	Shanxi	46	Hainan
15	Nei Mongol (mn), (Inner Mongolia)	50	Chongqing
21	Liaoning	51	Sichuan
22	Jilin	52	Guizhou
23	Heilongjiang	53	Yunnan
31	Shanghai	54	Xizang (Tibet)
32	Jiangsu	61	Shaanxi
33	Zhejiang	62	Gansu
34	Anhui	63	Qinghai
35	Fujian	64	Ningxia
36	Jiangxi	65	Xinjiang
37	Shandong	71	Taiwan
41	Henan	91	Hong Kong (en) Xianggang (zh)
42	Hubei	92	Macao (en) Aomen (zh)

5.10.7 ID-Subdivisions

Code	Country	Code	Country
AC	Aceh, Aceh	MA	Maluku, Maluku
BA	Bali, Bali	MU	Maluku Utara, North Maluku
BB	Bangka Belitung, Bangka–Belitung Islands	NB	Nusa Tenggara Barat, West Nusa Tenggara
BT	Banten, Banten	NT	Nusa Tenggara Timur, East Nusa Tenggara
BE	Bengkulu, Bengkulu	PA	Papua, Papua
GO	Gorontalo, Gorontalo	PB	Papua Barat, West Papua
JA	Jambi, Jambi	RI	Riau, Riau
JB	Jawa Barat, West Java	SR	Sulawesi Barat, West Sulawesi
JT	Jawa Tengah, Central Java	SN	Sulawesi Selatan, South Sulawesi
JI	Jawa Timur, East Java	ST	Sulawesi Tengah, Central Sulawesi
KB	Kalimantan Baratm, West Kalimantan	SG	Sulawesi Tenggara, Southeast Sulawesi
KS	Kalimantan Selatan, South Kalimantan	SA	Sulawesi Utara, North Sulawesi
KT	Kalimantan Tengah, Central Kalimantan	SB	Sumatera Barat, West Sumatra
KI	Kalimantan Timur, East Kalimantan	SS	Sumatera Selatan, South Sumatra
KU	Kalimantan Utara, North Kalimantan	SU	Sumatera Utara, North Sumatra
KR	Kepulauan Riau, Riau Islands	JK	Jakarta Raya, Jakarta
LA	Lampung, Lampung	YO	Yogyakarta, Yogyakarta

5.10.8 IN-Subdivisions

Code	Country	Code	Country
AP	Andhra Pradesh	NL	Nagaland
AR	Arunachal Pradesh	OR	Odisha
AS	Assam	PB	Punjab
BR	Bihar	RJ	Rajasthan
CT	Chhattisgarh	SK	Sikkim
GA	Goa	TN	Tamil Nadu
GJ	Gujarat	TG	Telangana
HR	Haryana	TR	Tripura
HP	Himachal Pradesh	UT	Uttarakhand
JK	Jammu and Kashmir	UP	Uttar Pradesh
JH	Jharkhand	WB	West Bengal
KA	Karnataka	AN	Andaman and Nicobar Islands
KL	Kerala	CH	Chandigarh
MP	Madhya Pradesh	DN	Dadra and Nagar Haveli
MH	Maharashtra	DD	Daman and Diu
MN	Manipur	DL	Delhi
ML	Meghalaya	LD	Lakshadweep
MZ	Mizoram	PY	Puducherry

5.10.9 JP-Subdivisions

Code	Country	Code	Country
23	Aiti (Aichi)	20	Nagano
05	Akita	42	Nagasaki
02	Aomori	29	Nara
38	Ehime	15	Niigata
21	Gifu (Gifu)	44	Ôita (Oita)
10	Gunma	33	Okayama
34	Hiroshima (Hiroshima)	47	Okinawa
01	Hokkaidô (Hokkaido)	27	Ôsaka (Osaka)
18	Hukui (Fukui)	41	Saga
40	Hukuoka (Fukuoka)	11	Saitama
07	Hukushima (Fukushima)	25	Siga (Shiga)
28	Hyôgo (Hyogo)	32	Simane (Shimane)
08	Ibaraki	22	Sizuoka (Shizuoka)
17	Isikawa (Ishikawa)	12	Tiba (Chiba)
03	Iwate	09	Totigi (Tochigi)
37	Kagawa	36	Tokusima (Tokushima)
46	Kagosima (Kagoshima)	13	Tôkyô (Tokyo)
14	Kanagawa	31	Tottori
39	Kôti (Kochi)	16	Toyama
43	Kumamoto	30	Wakayama
26	Kyôto (Kyoto)	06	Yamagata
24	Mie	35	Yamaguti (Yamaguchi)
04	Miyagi	19	Yamanasi (Yamanashi)
45	Miyazaki		

5.10.10 TH-Subdivisions

Code	Country		Code	Country
10	Krung Thep Maha Nakhon [Bangkok]		82	Phangnga
S	Phatthaya		93	Phatthalung
37	Amnat Charoen		56	Phayao
15	Ang Thong		67	Phetchabun
38	Bueng Kan		76	Phetchaburi
31	Buri Ram		66	Phichit
24	Chachoengsao		65	Phitsanulok
18	Chai Nat		54	Phrae
36	Chaiyaphum		14	Phra Nakhon Si Ayutthaya
22	Chanthaburi		83	Phuket
50	Chiang Mai		25	Prachin Buri
57	Chiang Rai		77	Prachuap Khiri Khan
20	Chon Buri		85	Ranong
86	Chumphon		70	Ratchaburi
46	Kalasin		21	Rayong
62	Kamphaeng Phet		45	Roi Et
71	Kanchanaburi		27	Sa Kaeo
40	Khon Kaen		47	Sakon Nakhon
81	Krabi		11	Samut Prakan
52	Lampang		74	Samut Sakhon
51	Lamphun		75	Samut Songkhram
42	Loei		19	Saraburi
16	Lop Buri		91	Satun
58	Mae Hong Son		17	Sing Buri
44	Maha Sarakham		33	Si Sa Ket
49	Mukdahan		90	Songkhla
26	Nakhon Nayok		64	Sukhothai
73	Nakhon Pathom		72	Suphan Buri
48	Nakhon Phanom		84	Surat Thani
30	Nakhon Ratchasima		32	Surin
60	Nakhon Sawan		63	Tak
80	Nakhon Si Thammarat		92	Trang
55	Nan		23	Trat
96	Narathiwat		34	Ubon Ratchathani
39	Nong Bua Lam Phu		41	Udon Thani
43	Nong Khai		61	Uthai Thani
12	Nonthaburi		53	Uttaradit
13	Pathum Thani		95	Yala
94	Pattani		35	Yasothon

5.11 ISO Languages (ISO 639-1)

List of common ISO 639-1 Codes

ISO	Country		ISO	Country
de	German		lb	Luxembourgish
en	English		lt	Lithuanian
bg	Bulgarian		nl	Dutch
cs	Czech		no	Norwegian
es	Spanish; Castilian		pl	Polish
fi	Finnish		pt	Portuguese
fr	French		ro	Romanian
hr	Croatian		sl	Slovenian
hu	Hungarian		tr	Turkish
ja	Japanese			

6 Glossar

Name	Description
BBAN	<p>Basic Bank Account Number</p> <p>Describes the bank account specified by “classic” values:</p> <p>countrycode</p> <p>bankaccount</p> <p>bankcode (where applicable)</p> <p>bankbranchcode (where applicable)</p> <p>bankcheckdigit (where applicable)</p>
BIN	<p>Bank Identification Number</p> <p>Describes the issuing bank of a credit card and is represented by the first six digits of a credit card number (PAN).</p>
CVV	<p>Card Verification Code (aka CVC, “cardcvc2”)</p> <p>The card verification code is a 3 or 4 digit code and printed on the rear side of the credit card. It must not be stored at any time.</p>
IBAN	<p>International Bank Account Number</p> <p>IBAN and BIC specify an international bank account. BIC is planned to be optional within Germany from 2014-02-01 and optional within international bank transfer (in Europe) from 2016-02-01.</p>
masked cardpan	<p>The complete creditcard number must not be logged or displayed at any time.</p> <p>The masked creditcard number (masked cardpan) is shown as 6X4 and may be stored or shown to a user, e.g.: 1234 56xx xxxx 1234 or 1234 56xx xxx1 234</p>
MOTO	<p>Mail Or Telephone Order</p> <p>Describes the order process where an operator processes a payment with details for a customer. The customer provides the payment details (credit card details, bank account details) via email or phone.</p>
PAN	<p>Primary account number</p> <p>Is the complete credit card number (from 13 to 19 digits) and must not be processed or stored without PCI DSS certification (neither in database nor in log files).</p> <p>PAN may only be recorded either encrypted (only with PCI DSS certification) or masked/truncated (max: 6x4).</p>
Payment Process ID	<p>Unique payment process Id assigned to each payment process by PAYONE Platform.</p>
PPS	<p>PAYONE Payment Services</p> <p>All payments are processed via PAYONE accounts. Single contract with PAYONE, centralized payout services.</p>
truncated cardpan	<p>The complete creditcard number must not be logged or displayed at any time.</p> <p>The truncated creditcard number (truncated cardpan) is shown as X4 and may be stored or shown to a user, e.g.: xxxx xxxx xxxx 1234 or xxxx xxxx xxx1 234</p>

7 Contact

Do you have questions or do you need further information?

Then contact us. The BS PAYONE Technical Support is always happy to provide assistance.

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