

# Request for order payment (paymentOrder)

The request used for payment for an order is `paymentOrder`.

The Payment Gateway supports usage of both internal and external MPI.

Validation of card data occurs in accordance with the table:

Name	Meaning	Validation
pan	N..19	Card validation (check whether the card number is valid), the number of digits in the card number from 13 to 20
cvc	CVC code	3 digits
year, month	Year, Month	Present or future date If the card is valid until the current year of the current month, payment is possible before the end of the calendar month
cardholderName	Cardholder	Not tested

In this document, the following data type conventions are used when describing request and response parameters:

- A<n> - a sequence of Latin letters of length <n>;
- A..<n> - a sequence of Latin letters with a length not exceeding <n>;
- N<n> - a sequence of digits of length <n>;
- N..<n> - a sequence of digits with a length not exceeding <n>;
- AN<n> - a sequence of Latin letters and numbers of fixed length <n>;
- AN.. <n> - a sequence of Latin letters and numbers with a length not exceeding <n>;
- ANS<n> - a sequence of Latin letters, numbers and characters of fixed length <n>
- ANS.. <n> - a sequence of Latin letters, numbers and characters with a length not exceeding <n>;
- UTC - date and time, in this case: the date must be passed without specifying the time zone, Moscow time, for the SOAP protocol, the standard encoding xs:dateTime is used.

## Internal MPI

### Request parameters:

Name	Type	Mandatory	Description
orderId	ANS36	Yes	Identifier of the order in the payment system. It is unique within the system. The identifier is missing if the order registration failed due to an error detailed in <code>errorCode</code> .
pan	N12...19	Yes	Payment card number.
cvc	N3	Yes	CVC/CVV2 code on the back of the card.
year	N4	Yes	The last year of the expiration period of the card.
month	N2	Yes	Month of the billing period in the MM format.
cardholderName	A..200	Yes	Cardholder's name in Latin characters, if available.
language	A2	Yes	Language in the ISO 639-1 encoding. If the language is not specified, the default language defined in the store settings is used.

Name	Type	Mandatory	Description
ip	ANS..39	No	IP-address of the buyer. IPv6 is supported in all requests (up to 39 characters).
email	ANS..40	No	Customer's email address.

Name	Type	Mandatory	Description											
params	See column with the description.	No	<p>Additional tag with the attributes for passing additional parameters. The fields for additional information and its subsequent storage. These fields can be submitted for processing by the bank for further display in the registers. By default, the order number <b>orderNumber</b> and its description <b>orderDescription</b> are passed to the bank for processing (no more than 99 characters, «%» (percentage), «+» (plus), «\r» (carriage return) and «\n» (line feed) are prohibited for using).</p> <p>Enabling the functionality is possible upon agreement with the Bank during the integration period. To pass N parameters, a request must contain N <b>params</b> tags, where the <b>name</b> attribute contains the parameter name and <b>value</b> attribute contains its value:</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Type</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td><b>Name</b> name <b>Type</b> AN..20 <b>Type2</b> ANS..255 <b>Type3</b> A7 <b>Type4</b> ANS..100 <b>Description</b> <b>REST</b> Name of the additional parameter. <b>REST Online Lending</b> The attribute name, always takes the value of <b>mdOrder</b>. <b>WS</b> Name of the additional parameter. <b>Spasibo</b> Name or the description of an item in any format. <b>Spasibo2</b> Name of the parameter describing the details of a line item</td> <td>ANS..255</td> <td>Name of the additional parameter.</td> </tr> <tr> <td><b>value</b></td> <td>AN..1024</td> <td>The value of the additional parameter is up to 1024 characters.</td> </tr> </tbody> </table> <p>It is forbidden to pass reserved names in the parameter (if they are passed, the order may be rejected):</p> <ul style="list-style-type: none"> <li>• sbrf_spasibo:amount_bonus</li> <li>• sbrf_sbermiles:amount_bonus</li> <li>• loyaltyId</li> </ul>	Name	Type	Description	<b>Name</b> name <b>Type</b> AN..20 <b>Type2</b> ANS..255 <b>Type3</b> A7 <b>Type4</b> ANS..100 <b>Description</b> <b>REST</b> Name of the additional parameter. <b>REST Online Lending</b> The attribute name, always takes the value of <b>mdOrder</b> . <b>WS</b> Name of the additional parameter. <b>Spasibo</b> Name or the description of an item in any format. <b>Spasibo2</b> Name of the parameter describing the details of a line item	ANS..255	Name of the additional parameter.	<b>value</b>	AN..1024	The value of the additional parameter is up to 1024 characters.		
Name	Type	Description												
<b>Name</b> name <b>Type</b> AN..20 <b>Type2</b> ANS..255 <b>Type3</b> A7 <b>Type4</b> ANS..100 <b>Description</b> <b>REST</b> Name of the additional parameter. <b>REST Online Lending</b> The attribute name, always takes the value of <b>mdOrder</b> . <b>WS</b> Name of the additional parameter. <b>Spasibo</b> Name or the description of an item in any format. <b>Spasibo2</b> Name of the parameter describing the details of a line item	ANS..255	Name of the additional parameter.												
<b>value</b>	AN..1024	The value of the additional parameter is up to 1024 characters.												

Name	Type	Mandatory	Description
billingPayerData	See description	No	Customer's registration data (street address, postal code). Required for AVS/AVV checks. Mandatory if «AVS/AVV use allowed» permission is enabled for merchant

## **billingPayerData**

### **billingPayerData block parameters**

Name	Type	Mandatory	Description
billingCity	AN..50	No	City registered for the card at the Issuer Bank.
billingCountry	AN..50	No	
billingAddressLine1	AN..50	No	Address registered for the card at the Issuer Bank. Line 1. Mandatory if «AVS/AVV use allowed» permission is enabled for merchant.
billingAddressLine2	AN..50	No	Address registered for the card at the Issuer Bank. Line 2.
billingAddressLine3	AN..50	No	Address registered for the card at the Issuer Bank. Line 3.
billingPostalCode	AN..50	No	Postal code registered for the card at the Issuer Bank. Mandatory if «AVS/AVV use allowed» permission is enabled for merchant.
billingState	AN..50	No	State registered for the card at the Issuer Bank (ISO 3166-2).

\*By default, the orderNumber and description fields are passed to the bank's processing system (no more than 99 characters, %, +, carriage return \r and line feed \n cannot be used)

### **Response parameters:**

Name	Type	Mandatory	Description
errorCode	ANS..3	Yes	Error code.
errorMessage	AN..512	No	Error description in the language passed in the language parameter in the request.

Name	Type	Mandatory	Description
info	ANS..*	No	<p>On a successful response. Result of a payment attempt. The available values are presented below.</p> <ul style="list-style-type: none"> <li>• Your payment has been processed, redirecting..</li> <li>• Payment declined. Check the entered data and that there are enough funds on the card and repeat the operation.</li> <li>Redirecting...</li> <li>• Sorry, the payment cannot be processed. Redirecting...</li> <li>• Payment declined. Please contact the Merchant. Redirecting...</li> <li>• Payment declined. Contact the bank that issued the card.</li> <li>Redirecting...</li> <li>• Operation is impossible. Cardholder authentication completed unsuccessfully. Redirecting...</li> <li>• No connection to the bank. Try again later. Redirecting...</li> <li>• The data entering period has expired. Redirecting...</li> <li>• No response from the bank. Try again later. Redirecting...</li> </ul>
redirect	ANS..*	No	On a successful response. In the case of a payment without the need for authentication to the ACS – URL to which redirect is performed after the payment. In case of a 3D-Secure payment, the URL to return to ACS.
acsUrl	AN..512	No	Redirect address to the address of the ACS server. Not used for payments that do not require additional authentication on the issuing Bank's ACS.
paReq	AN..512	No	Request for the payer authentication. Not used for payments that do not require additional authentication on the issuing Bank's ACS.

#### Error codes

Error code	Error text
0	Request processing took place without system errors
5	Access denied
5	The user must change the password
5	The maximum number of payments attempted run out or the session timeout expired
5	Data validation error
7	System error

Request example:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<ns1:mer></ns1:mer>
<soapenv:Header>
```

```

<soapenv:Body>
    <mer:paymentOrder>
        <order orderId="09808814-eb60-4cea-86bb-ed849dbe7ae9" year="2015"
month="12" pan="4111111111111111" cvc="123" cardholderName="A Moriarty"
language="ru" ip="?">
            <!--Zero or more repetitions:-->
            <params name="name" value="value"/>
        </order>
    </mer:paymentOrder>
</soapenv:Body>
</soapenv:Envelope>

```

An example of a response in case of a payment that does not require additional authentication on the ACS of the Issuing Bank:

```

<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
    <soap:Body>
        <ns1:paymentOrderResponse
xmlns:ns1="http://engine.paymentgate.ru/webservices/merchant">
            <return info="Your payment has been processed, redirecting..." redirect="www.ya.ru?MD0ORDER=6d295b5b-84c3-44cd-adea-c0eaca122465&ANSWER=%3C%3Fxml+version%3D%221.0%22+encoding%3D%22UTF-8%22%3F%3E%0A%3CPSScript+primaryRC%3D%220%22+secondaryRC%3D%220%22%2F%3E&STATE=payment_deposited&ACTION_CODE=0&AUTH_CODE=2" errorCode="0"/>
        </ns1:paymentOrderResponse>
    </soap:Body>
</soap:Envelope>

```

An example of a response in case of a 3DS payment that requires additional authentication on the ACS of the Issuing Bank:

```

<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
    <soap:Body>
        <ns1:paymentOrderResponse
xmlns:ns1="http://engine.paymentgate.ru/webservices/merchant">
            <return errorCode="0" info="BYour payment has been processed, redirecting..." redirect="https://test.paymentgate.ru:443/testpayment/rest/finish3ds.do" acsUrl="https://test.paymentgate.ru/acs/auth/start.do" paReq="eJxVUK1zgjAQ/SsM95KEr1pnjU0LnXqgYxUvvVHYAVQ+DFDUX99EUeshM/t2N2/3vQSmh2Kn/aJo8qqc6MyguoZlXCV5mU70dfj+NNKnHMJMPIorjDuBHAJsmihFLU8metGkBtM5LLwl7jkMTFwSGSaQK5RXRJxFZcshivev809uWzazHCADhALF30fMtGzHfR4BuWAoowJ5iE27yqoayBlCXHVlk47ctS0gVwCd2PGsbesxIX3fG2lVpTs04qoAokpA7jss0hU1kuqQJzzwvf5yZqdPf0uDcHsM/C8WnNIJENUBSdQiNykJGaW0xujYpmNqAznnISrUDtx1XUqlologuCWg3xHkr/UyC9FNLqq4wrAjzUVYmyQ/p3iyHBJr4ZodWDALmByg05K3r7UB7HrXRvnXxvhdufxGKUdH34kiUb15mZ3k+3WSrnz01qXi79Yw67DFQAiKIhw60S4cFl9PAR/gA0Wr9V"/>

```

```

</ns1:paymentOrderResponse>
</soap:Body>
</soap:Envelope>

```

If the payment requires the use of 3-D Secure technology, then once the response to order payment request is received, the Customer must be redirected to ACS. There are two ways to redirect: standard and simplified (see table below).

<b>Redirect types</b>	<b>Description</b>
Standard	<p>To redirect to ACS the merchant must send to the customer to the address specified in the acsUrl parameter with the request body MD=mdorder&amp;PaReq=pareq&amp;TermUrl=redirect, where:</p> <ul style="list-style-type: none"> <li>• mdorder – unique order number in the payment gateway system</li> <li>• pareq – parameter from the response to the payment request,</li> <li>• redirect – parameter from the response to the payment request (return address from ACS) or the Store URL, if the scheme where ACS returns to the Store is used.</li> </ul> <p>The request must be in POST format.</p> <p>Depending on the connection scheme used, the Customer after being authenticated on ACS will be redirected to the Payment Gateway or to the Store. The payment completion processes for each of these cases are described below.</p>
Simplified	<p>In order for the Customer to get to the ACS page, the Merchant redirects him to the Payment Gateway page with the following URL pattern:</p> <pre>&lt;api.payment gateway address&gt;/acsRedirect.do?orderId=&lt;order number&gt;</pre> <p>where:</p> <p>&lt;payment gateway address&gt; - server and context of the payment gateway; Please remember to include <b>api.</b> before the domain name. &lt;Order number&gt; - unique customer order number.</p> <p>Next, the Payment Gateway redirects the Customer (without additional actions on the part of the Customer) to the ACS of the bank, where the Customer is authenticated.</p>

In case of an incorrect payment attempt, the gateway returns the following response.

```

<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns1:paymentOrderResponse
      xmlns:ns1="http://server/webservices/merchant">
      <return info="Operation declined. Please check the data and
available balance of the card and retry."
        redirect="https://yandex.ru?orderId=39f1f59f-1836-7195-8452-1f6900003ad4&lang=ru" errorCode="0"/>
    </ns1:paymentOrderResponse>
  </soap:Body>
</soap:Envelope>

```

The redirect URL is the value passed in the failUrl parameter (or returnUrl, if failUrl is missing).

If payment attempts are exhausted, the gateway returns the following response.

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
    <soap:Body>
        <ns1:paymentOrderResponse
            xmlns:ns1="http://engine.server.ru/webservices/merchant">
            <return errorCode="5" errorMessage="Max payments attempted or
            session timeout occurred"/>
        </ns1:paymentOrderResponse>
    </soap:Body>
</soap:Envelope>
```

### **Return from ACS to Payment Gateway. Standard scheme.**

The issuer's ACS authenticates the cardholder and redirects the client to the payment gateway while passing PARes. The payment gateway authorizes the order if the client is successfully authenticated on ACS, or rejects the pre-authorization if the client is not successfully authenticated on the ACS.

### **Returns from ACS to the store. Scheme involving additional Finish 3DS method**

The Issuer's ACS authenticates the cardholder and redirects the Customer back to the Store. The PARes received from ACS is passed to the Store, then the Store passes it to the gateway using the finishThreeDS method.

Description of finishThreeDS method is given below:

Request parameters:

Name	Type	Mandatory	Description
md	AN..30	Yes	Order number received on its registration.
paRes	ANS	Yes	Response to the payer's authentication request.

Response parameters:

Name	Type	Mandatory	Description
returnUrl	ANS..512	Yes	The URL to which the user is to be redirected in case of a successful payment (and also in case of a failed payment where the failUrl parameter is not passed). The address must be specified in full including the protocol used (for example, <b>https://test.ru</b> instead of <b>test.ru</b> ). Otherwise, the user will be redirected to the address of the following type: <b>http://&lt;payment_gateway_address&gt;/&lt;merchant_address&gt;</b> .
errorCode	ANS..3	No	Error code.
errorMessage	AN..512	No	Error description in the language passed in the language parameter in the request.

If errorCode=0 and info=«Your order is proceeded, redirecting» – payment was successful. In other cases with an error see the errorMessage message.

Error codes (errorCode field):

Error code	Error text
0	Request processing took place without system errors
5	Access denied
5	The user must change the password
7	Order is not found
7	System error

Request example:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:mer="http://engine.paymentgate.ru/webservices/merchant">
    <soapenv:Header/>
    <soapenv:Body>
        <mer:finishThreeDs>
            <request language="ru" md="8b5b7ee5-eb5a-4cf4-81ec-7153f7ca2864" paRes="eJzFV2mzokoS/Ssd/T4at1kEkRe0EcW+WCClGh5jBwVRwfXXD2r37ft6eiZ6ZuLFEGFYn KjMyp0Zp4pinPyaJLydRN01WTEwaZogSz4V8dfPi/k8JKg5+kahYfBGYPjyLcRD+i2g8GEzRdBv EA/r5gNsJLmZZAuyZB0F28EkU4GwWQaYAk6vS5CFMXxJULGk0GfxJuiPq2wL+gXnEG+v05rX6M80 LUrJogurKKvCJxaoCiDfHtlquSq8CuKQV4DBvlhsekeo2ZiMBbxCvJgeP0EV0eFucFnI7xnN3iAX xnkMY0JgzZ4ShGojRKf8KwPwn8T2zJIE+c0T/cgaruJt8kSVJLmkE+YsyUrWtyim6rBTFnkPc3J hnP9SmZZkzE3scM8i08c3BaoR8ebHom3xPK0P6KaYvql2E9caZpg7ZrVjsG+TZioqDvVwAAlp3Hx N6y2ESR/LwE35+J7nMKk0TFCiWnoKb/pxUos/paThn1CPWvAIM8QkGehV0xdpGdpsWuyaexKk/N1 895257/RJBhGL4M8y/1NUPwiQiC0sg0IW6K7I/PL6skVk5p/R+ZccGpPhVRUBb3oJ26AiZtXef3 mP7lRvHenjCEEvg3iZXbxFGnN4eCDrHyMkn8munH5j9zio/B3ttgrcmD7DHAj85WjFWkiaPjkg+b S3l6+c/fLMZfJEltFvfRPm9ko8evvtzg7JLVuNlpj0tnlvwfrbnbtQ7I+7At0SQfn63e41k0Hew //G7VXIDwl7TfT1ejePNAdVXfkIMMqH7mYgy9QkoRea8wW61M+L1ElSy0UdhP0U5W4jqZPbaGjuy lHf5GicEpcYW/MiskkxU96wNYCLI6CaFt1TqSuhcc55kyRpTwjn01gISSgKYVaLqhTPh05uRL2qX dYQva6F5f46nkA+HrDRxjxiUft+3Sv7NVaLy68fivSNpZbcXqz8Swx80AavEZdc2yKdumXaB6Cic LXDcSC7ZGBQWJAptKticRPue7IpZGUKASpx9kWwlnP0mwLLmFkABjNwdqGymuzY0aB0HwiBgc92v GuamjDE/M5X870k3qE5DNwLXwuDbtqu0Qo02LxsocPJ7DnmsFuI0yhkCZ+fMgN500gHgML7doRip WHKE4P3d2wweWENwVEC2FZgc8i5LhwFHgvv7XDonoeVeJx580R54H2whsHYKzq8oIFwfJpC0aoR FKJrn21D+fmk02XA2/uVK3eK3kf6eDJGUzUUAVSQW1xAJNouIiuPJmh1HbQ9WrQS0L9sHLN3FII /TZ3/ce0LqIH6XAz8/9dvFM0vUdqefIF53ofW520FLjkXBF6tAfeXFuoWh6ksvFYLhdejdLEVAz0 z97DpSacHG7DbkPBzeMjGWHEZHkIu0MdJPh6GRX1wov+9LwlSopS733sLRRSbmw3VReJrcSZJAFQ DpkgfLkJptTLSzUYNmdI0rH+TynTYyV0qKmulHTE7zcxZjcqVAGj/zEymCdoZSAfze33tpH8zBV0 2wGznzWWhIG1d3eBRMC4plnLoeyiYu3nWfl0V2AcErkEx8hvxxKLbSEgR+etrww5EPgm21U0X2s/ NyPwzMuYTBFCZu6T/VS3zVSwBKst+3vnkpWQ0lAjwrKulYI8Ea33nQynKuuDna7DBQx1FFtl4Ms IxabtUjiVwdlcZJii5q8tpUa9l3Z50XLbzrQhENAqRjYfYzyUM20Fye04Kul0lP35x+F9TN0t8Q9 3hrEFbjswN93VmdvSGMHm8NTdvUlaGug9Amp+4rub07UhSBjI4wifdnZf5Sqqf7Q6rFD6l0XS4hs iIPf3/lKr07+469lepfsoGzeF/kurmweubVKWhVD09n6SY/swXTHynbtMBz7GF0bkxeXs5HDtxK xLHICgCeZ2zyIUbH09YN5080/GCCLWv3tf2gII28JZYIndcfkuWLJ/x0sbvgMDVoWZh55o6VFVP6 Vh1qcsxXrctqElNuXp0YuiLGTkb20SrHDvtepk3LVzG22yrSh5wuaunBlBt7vswRBzoyleE48N N0hb2a+P/YD29VkMyg8MAFbE1Lx5MY+0cd8Znosa9uJgYBzHyPKblPnIJMxJRZs/YxoPDs88iXbu Agc9pSxz16niXSrm9aJuBhUYx/89uzJsUUvgSicBeVv2jptjjN5ctw280rpz9590uYjLgsKrAMmb
```

```
jLyq/6c6sUCrvVZtG9LdGZut70slfUyu3DD4ZAP/Poc4K7VLEHXaFK7JLxyU/ioI+PsZayQe7W5s
Qf91PmeJFcmoWVidQlQ0xEkG6Q3Rx4iaCChVonB3J5ktD8uuAiIxv3GwA0NrwSrmWjRmJmbfDW
RdpmZsd8UU4boPzvsFdD8HP0WZBVa0p3/xiZ/6eTFnyIV0X+y7T7fZ61zjaUqieygI1dehY48wt5
w/75le7198jmZdkswm/HeEBEJNEb/ApWQF/Ys47Ngi8YHzbaR8+RPdY0qYDf/N03F76/MDVtAphv
NHB0FTyItyYRRUM4amouLm9GNtzFkb8/hanqHK7pTdIC2l3GncU7WEIV2eeye1Do2yI4JCxjXZc7
0o5Lo1aUo+ER0xbMVibdyMcJHLcgNCi7rsk2MeVpQWUVuKq0rZ6ZZD070aPSMu3i5zTT+s8a0aaG
CipQFhRMQr/++n4y02Pk0VgkchKIAD/8mSBd7RPp6ovAtea407Q0q4jqKejJ1b5FVPNppD3FiFnK
XaXziiYB3mejm2na5q0pQrphEVwvNcnhRaoI8nZ2tq1D0VpuMt83h3PzgzX8hbvacINCxbZnLPM8
DrRh2CnD2k6coG4KQ+zPdbJTlljBrsVGyXa5bgx6woxZzfa2WvndjXG8sL81cmC/PgeRN6/EX98P
T6vnc9L8u0e9PHy/A9JE/bD"/>
    </mer:finishThreeDs>
</soapenv:Body>
</soapenv:Envelope>
```

Response example:

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
    <soap:Body>
        <ns1:finishThreeDsResponse
            xmlns:ns1="http://engine.paymentgate.ru/webservices/merchant">
            <return errorCode="0"
                returnUrl="http://ya.ru?orderId=8b5b7ee5-eb5a-4cf4-81ec-7153f7ca2864"/>
        </ns1:finishThreeDsResponse>
    </soap:Body>
</soap:Envelope>
```