



## **Guidelines for integrating the payment module with the TWEC PG system**



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## 1. Introduction

The document is a guide for integrating an online store with the **TranzWare e-Commerce Payment Gateway** (hereinafter referred to as **TWEC PG**). The document is intended for the technician performing the integration.



## 2 Terminology

Term	Definition
<b>Return goods (Refund)</b>	Voluntary return by a trade and service company to the buyer of the amount of the transaction made by him earlier with a payment card on account of the purchase of goods, services Area of responsibility and area of location of software and hardware complexes
<b>Domain</b>	of an information exchange participant provided for by the 3D Secure technology standard <b>Payment gateway</b> An organization providing e-commerce services to trade enterprises (services) on behalf of the acquirer and providing an interface to the acquirer's host
computer for authorization and delivery of transactions	Cancellation of a transaction, as a result of which its result is canceled
<b>Reverse</b>	
<b>Acquirer</b>	1) servicing bank: a financial institution that has contractual relations with trade (service) enterprises; 2) an intermediary organization that has a license from an international payment system or a participant authorized by it to provide services to trade enterprises (services)
<b>Issuer</b>	1) a credit and financial institution that issues payment cards, receives data on transactions made by cardholders, performs authorization, guarantees payment for transactions made by cardholders and transfers transaction amounts to cardholders' accounts; 2) a credit institution (or its branch) that issues bank cards A technology designed to improve the security of payments using bank cards on the Internet
<b>3D Secure</b>	
<b>ACS (Access Control server)</b>	3D Secure and cardholder authentication using 3D Secure technology, hosted in the domain of the issuer or an organization authorized by him and used by them
<b>AReq (Authentication Message)</b> The message may contain:	message sent from 3DS Server to ACS via DS for a Request) to authenticate the cardholder. <ul style="list-style-type: none"> <li>• payment information;</li> <li>• information about the card and its owner;</li> <li>• information about the cardholder's browser;</li> <li>• additional information about the purchase;</li> <li>• cardholder authentication data in the online store; information about the account of the cardholder in the online store</li> </ul>
<b>ARes (Authentication Response)</b>	A message that is an ACS response to an AReq message. The message contains the result of cardholder authentication or a request to request additional information to complete authentication
<b>DS (Directory Server)</b>	A hardware and software complex hosted in the interoperational domain and designed to route requests for authentication of cardholders
<b>PayKiosk</b>	A service that provides an interface for working with a fiscal data operator in accordance with the federal law of the Russian Federation No. 54-FZ



### 3 List of accepted abbreviations

<b>4DBC</b>	4-Digit Batch Code
<b>AAV</b>	Accountholder Authentication Value (for MPS Mastercard - Mastercard SecureCode, Mastercard Identity Check)
<b>ACS</b>	Access Control Server
<b>AEVV</b>	American Express Verification Value
<b>CAVV</b>	Cardholder Authentication Verification Value (for MPS Visa - VbV, MPS JCB -J/Secure)
<b>CVC2</b>	Card Validation Code 2
<b>CVV2</b>	Card Verification Value 2
<b>DSRP</b>	Digital Secure Remote Payment
<b>NSPK-CAV</b>	NSPK Cardholder Authentication Verification (for PS Mir - MirAccept / MirAccept 2.x)
<b>PAResq</b>	Payer Authentication Request
<b>PARes</b>	Payer Authentication Response
<b>TLS</b>	Transport Layer Security
<b>URL</b>	Uniform Resource Locator
<b>VEReq</b>	Verification Enrollment Request
<b>VERes</b>	Verification Enrollment Response
<b>XML</b>	Extensible Markup Language
<b>DB</b>	Database
<b>MPS</b>	International payment system
<b>NSPK</b>	National system of payment cards
<b>OS</b>	Operating system
<b>PP</b>	Software
<b>PS</b>	Payment system
<b>TSP</b>	Trade and service enterprise



## 4 General description of the TWEC PG system

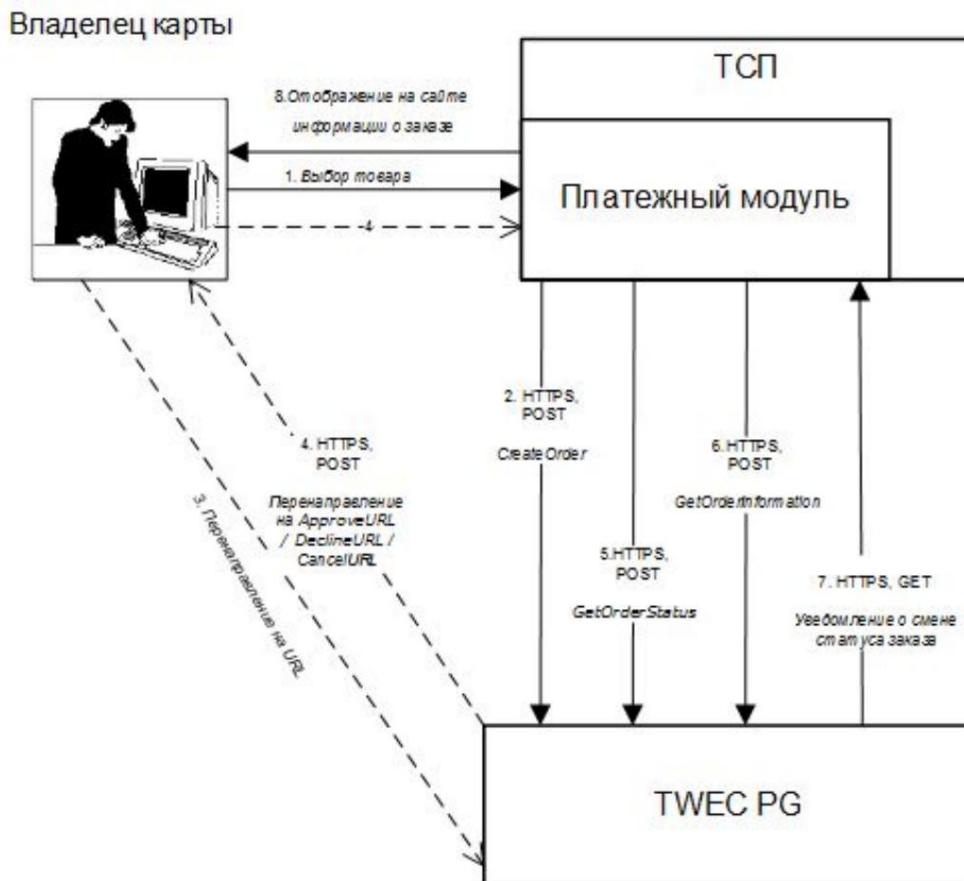
**TWEC PG** is a **TranzWare e-Commerce system module** that implements 3D Secure acquiring functionality in accordance with the **3D Secure v1.0** and **EMV 3D Secure v2.x** protocol standards.

**TWEC PG** is a software package that provides acceptance, processing and accounting of purchases with bank cards via the Internet. The complex provides processing of purchases and work on payment for the order, starting from the moment the order arises and including the analysis of conflict situations, analysis of purchase statistics, etc.

**TWEC PG** supports an interface with an authorization system to perform all the functions of the life cycle of orders (payment for an order, reverse payment, return of goods).

### 4.1 Scheme of interaction

The general scheme of interaction between **TWEC PG** and the payment module during transaction processing is as follows:



1. On the website of the online store, the client (cardholder) selects the necessary product and places an order.

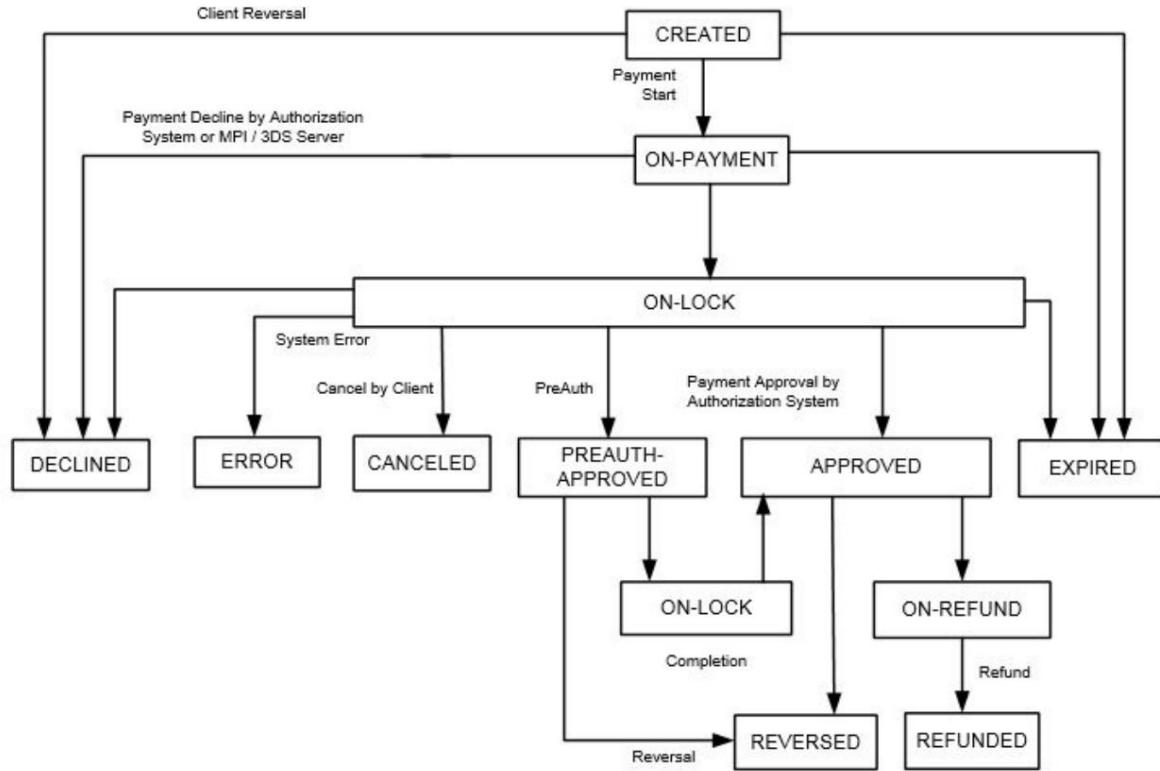


2. The payment module of the online store (TSP) sends a request to **TWEC PG** to perform the **Create Order** operation (**CreateOrder**) specifying the order parameters (amount, currency, interface language, order description, three return URLs - approved operation, rejected operation, canceled operation , and etc.). In response, the online store receives a unique order number, session identifier and URL to which the client must be redirected to work with **TWEC PG**. 3. The online store redirects the client to the **TWEC PG** page to pay for the order. 3D Secure client authentication is performed in ACS and the subsequent procedure for authorizing the transaction with the issuer through the payment system.
  
4. Depending on the result of transaction authorization, **TWEC PG** sets the order to **PREAUTH-APPROVED / APPROVED / CANCELED / DECLINED status** and redirects the client to the payment module page of the online store using the corresponding URL (**ApproveURL / CancelURL / DeclineURL**). The **TWEC PG** also sends an **XMLOut** message to the client containing the order information.
  
5. When going to the URL of the payment module of the online store or after a timeout (if the client did not go to this URL), the payment module of the online store requests information about the status of the order from **TWEC PG** by performing the **Get order status (GetOrderStatus) operation**.
  
- 6.7. The payment module of the online store, having received the order status in the response to the **GetOrderStatus** operation , performs the **Get order information (GetOrderInformation)** operation, or **TWEC PG** sends a notification about the order status change (GET request with the **OrderID, SessionID, Status parameters**) to the payment module of the Internet store via **HTTPS / HTTP**.
  
8. The payment module of the online store displays information about the order on the site.

Through the interaction channel between **TWEC PG** and the payment module of the online store, it is possible to transfer administrative operations in the future (reverse payment, return of goods, etc. with reference to the order number and a unique session identifier).



## 4.2 Order lifecycle



An order can have the following statuses:

- **CREATED** - created (set after generating the **OrderId** and **SessionId** until the payment for the order is made);
- **ON-LOCK** - blocked (to avoid duplication of payment for goods);

**Attention:**

- The **ON-LOCK** status is set at the start of the **PayOrder** procedure. The order has an **ON-LOCK** status until the end of the authorization process, after which the order status changes to **APPROVED** or **DECLINED**. The **ON-LOCK** status is set to an order in the **PREAUTH-APPROVED** status when the
- Completion administrative operation is **initialized**. The order has the **ON-LOCK** status until the end of the post-authorization, after which the order status changes to **APPROVED** or to the **original status** in case of unsuccessful operation.

- **ON-PAYMENT** – on payment (the order is being paid for);

**Attention!** The **ON-PAYMENT** status is set after entering information on the card.

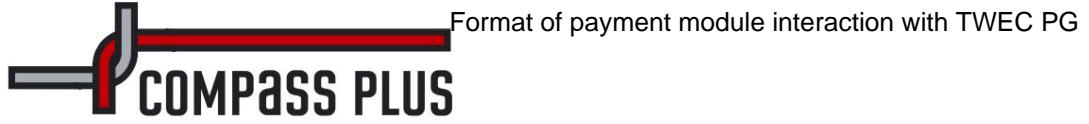
- **APPROVED** - approved (payment was successful);
- **CANCELED** - canceled (the client interrupts the operation);



- **DECLINED** - refusal to pay (for example, if an error *Prefix not found occurred during the execution of the order*); **REVERSED** - reversed; **ON-REFUND** - blocked for the time of the return of goods (to avoid duplication of the return of goods); **Attention!** The **ON-REFUND status** is set when the **Refund**
- administrative operation is initialized . The order has the **ON REFUND** status until the end of the return of the goods, after which the order status changes to **REFUNDED** or to the original status in case of unsuccessful operation.



- **REFUNDED** – goods have been returned; **PREAUTH-**
- **APPROVED** – an authorization transaction for a purchase with pre-authorization has been completed (funds are reserved on the account to complete the operation); **EXPIRED** - the order has expired; **ERROR**
- – error (connection error with **TWEC PG database**, POS driver or TFTP terminal).
-



## 5 Format of payment module interaction with TWEC PG

In **TWEC PG**, there are several options for access points that differ in the format of interaction, direction and purpose.

### 5.1 Messaging using administrative operations

The payment module of the online store interacts with the **TWEC PG** payment gateway using **HTTP** requests that are sent to the payment gateway address provided by the acquiring bank when connecting the store. The following access points can be used during communication:

- **Exec.**
- **ExecPasswordAuth.**

#### 5.1.1 Exec

Authentication is based on the use of two-way (with client and server certificates) **TLS protocol**. The payment gateway server checks whether the online store identifier (**MerchantID**) matches the CN (**Common Name**) value of the client certificate.

<b>URL</b>	https://<payment gateway host>/exec
<b>Method</b>	POST
<b>Titles</b>	Content-type: text/xml
<b>Request format / XML</b> according to the xsd schema of the <b>TWEC PG</b> internal protocol (tkpg.xsd) <b>response</b>	
<b>Encoding</b>	UTF-8

#### 5.1.2 ExecPasswordAuth

Authentication is based on the verification of the authentication token passed in the request.

<b>URL</b>	https://<payment gateway host>/ExecPasswordAuth
<b>Method</b>	POST
<b>header request</b>	Content-Type: application/x-www-form-urlencoded;



<b>Request parameters</b>	<ul style="list-style-type: none"> <li>• <b>xmlRequest</b> – XML according to the xsd schema of the <b>TWEC PG</b> internal protocol (tkkpg.xsd); <b>authData</b> - authentication token</li> <li>•</li> </ul>
<b>header response</b>	Content-type: text/xml
<b>XML response</b> format according to the xsd schema of the <b>TWEC PG</b> internal protocol (tkkpg.xsd)	
<b>Encoding</b>	UTF-8

The authentication token is calculated as follows: **authData**

=sha256(sha256(xmlRequest) + "/" + sha256(merchant + "/" + password))

where:

- **sha256** - calculation of a hash from data using the SHA-256 algorithm and converting the resulting hash into HEX format in upper case; **xmlRequest** - a string with an XML request to perform an operation, generated in accordance with the administrative protocol;
- **merchant** - online store identifier in **TWEC PG** ( MerchantID parameter); **password** – merchant password specified in the **TWEC PG settings**.

**Example** of token calculation:

*Initial data:*

- **xmlRequest**

```
<?xml version="1.0" encoding="UTF-8"?>
<TKKPG><Request><Operation>TransactionLog</Operation><Language>RU</Language><Merchant>TEST</Merchant></Request></TKKPG>
```

- **merchant** - TEST

- **password** - 123456

*Result:*

**authData** -

960C6BC22FE2F6FCE7C725967A14CD07874F15D2501C1FB60154C9B0C45364D3

## 5.2 Redirecting the client to the TWEC PG payment page

The payment module of the online store redirects the client to pay for the order to the address received in the **TKKPG/Response/Order/URL** parameter in the response to the request to complete the order creation operation.

<b>URL</b>	https://<payment gateway host>
<b>Method</b>	POST or GET
<b>header request</b>	Content-Type: application/x-www-form-urlencoded;



Format of interaction between the payment module and TWEC

PG Redirecting the client to the payment page

TWEC PG

Request parameters	<ul style="list-style-type: none"> <li>• OrderID - Order ID received in <b>TKKPG/Response/Order/OrderID</b>;</li> <li>• SessionID - session ID received in the <b>TKKPG/ response Response/Order/SessionID</b></li> </ul>
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## 5.3 Notification of the online store about the result transaction authorization

After paying for the order (unsuccessful / successful) or refusing to pay for the order, the **TWEC PG** payment gateway redirects the user to the online store address specified in the payment gateway settings when registering the merchant, or to the corresponding address specified in the **ApproveURL / CancelURL / DeclineURL parameter** when creating the order.

URL	https://<merchant host>
Method	POST
header request	Content-Type: application/x-www-form-urlencoded;
Request parameters	<ul style="list-style-type: none"> <li>• <b>Version</b> – version of the protocol for interaction with <b>TWEC PG</b>. The current version is 1.0.</li> <li>• <b>Message</b> – <b>XMLOut</b> message about the result of transaction authorization. For more information about <b>XMLOut</b> message <b>parameters</b>, see <a href="#">XMLOut Message Parameters</a></li> </ul>

## 5.4 Notification of the online store about the change in the status of the order

The **TWEC PG** payment gateway notifies the online store of a change in the status of an order during its life cycle. Notification of the online store is performed using an **HTTP** request to a special address of the online store (parameter

**ChangeStatusURL**) specified in the **TWEC PG** settings when registering a merchant or when creating an order in the [additional order](#) parameter **TKKPG/Request/Order/AddParams/ChangeStatusURL**.

URL	https://<merchant host>
Method	GET
Request parameters	<ul style="list-style-type: none"> <li>• OrderID - Order ID received in <b>TKKPG/Response/Order/OrderID</b>;</li> <li>• SessionID - session ID received in the <b>TKKPG/ response Response/Order/SessionID</b>;</li> <li>• Status - order status</li> </ul>



## 6 Message format and structure

XML messages must have a structure that matches the XSD schema of the internal **TWEC PG** protocol .

The XML message contains a prologue and a **TKKPG root element**, within which there is a **Request** element or a **Response** element , depending on directions of data exchange.

### 6.1 TKKPG/Request XML Structure

The description of the request structure contains only the main parameters and elements, which are filled in most operations. information about specific query parameters, see [the Operation groups section for details](#).

Legend:

- R (Required) – required element;
- C (Conditional) - a conditional element, depends on the type of operation or on the availability other parameters in the request;
- O (Optional) is an optional element.

Name parameter	Data type Mandatory		Description
operation	xs:string	R	Type of operation. Possible values are described in the <a href="#">enumOperation</a> type
language	xs:string	R	Interface language. according to RFC 1766 two-character language code (for example, <i>RU</i> - Russian, <i>EN</i> - English, etc.)
SessionID	xs:string	O	The session ID used in combination with order number for initiating cancellation operations, receiving order status, etc.
Merchant	xs:string	O	Online Store ID in <b>TWEC P.G.</b> Used in operations: <ul style="list-style-type: none"> <li>• <a href="#">Getting fiscal list order documents (GetCheckList)</a></li> <li>• <a href="#">Getting a list of orders (GetOrders)</a></li> </ul>
order	xs:complexType	C	Information about order. The element containing order parameters
Order/OrderID xs:integer		C	Order ID. Present in certain types of operations with a specific order
order/OrderType	xs:string	O	Type Parameter defines financial transaction that will subsequently formed. Filled in when creating an order. Values are described in enum type <a href="#">enumOrderType</a>
Order/Merchant xs:string		C	Online Store ID in <b>TWEC P.G.</b> Required parameter in operation <a href="#">Create an order (CreateOrder)</a> and some financial transactions



Message Format and Structure  
TKKPG/Request XML Structure

Name parameter	Data type Mandatory		Description
Order/Amount xs:integer		C	Transaction amount in minimum units transaction currency. Required parameter in operation <a href="#">(CreateOrder)</a> <a href="#">Creation of an order</a> <a href="#">order financial operations</a>
Order/Currency xs:integer		C	Order currency. Contains a digital code currencies. Required parameter in operation <a href="#">Create an order (CreateOrder)</a> and <a href="#">some financial transactions</a>
order/ Description	xs:string	O	Text description of the order. Maybe be displayed in the interface on the payment page
order/ ApproveURL	xs:anyURI	O	The URL to which the client will be redirected after approval of the operation
order/ CancelURL	xs:anyURI	O	The URL to which the client will be redirected in case of refusal to purchase
order/ DeclineURL	xs:anyURI	O	The URL to which the client will be redirected in case of unsuccessful operation purchase payment
order/phone	xs:integer	O	Customer phone number (optional) parameter), which will be saved in the database <a href="#">TWECPG</a>
order/ AddParams	xs:complexType	O	An element containing additional order parameters. Composition of parameters determined by the type of operation and type order. For details, see <a href="#">Creating order</a>
Fee	xs:integer	O	Acquiring commission in minimum transaction currency units
Description	xs:string	O	Text description of the transaction. Maybe displayed in the interface
OrigAmount	xs:integer	O	original sum transactions of in minimal units the original transaction currencies
OrigCurrency	xs:integer	O	The original currency of the transaction. Contains digital currency code
Refund	xs:complexType	O	An element containing parameters for operations <a href="#">Return of goods (Refund)</a>
Refund/Amount xs:integer		C	Refund amount in minimum units currencies. Required parameter in operation <a href="#">return of goods</a>
Refund/Currency xs:integer		C	Return currency. Contains a digital code currencies. Required parameter in operation <a href="#">return of goods</a>
Refund/WithFee xs:boolean		O	Sign of the return of the amount of the acquiring commissions. Possible values: <ul style="list-style-type: none"><li>• <i>false</i> (default) - do not return the amount of the acquiring commission;</li><li>• <i>true</i> – return the amount of the acquiring commissions</li></ul>


**Request example :**

```
<?xml version="1.0" encoding="UTF-8"?>
<TKKPG>
  <Request>
    <Operation>CreateOrder</Operation>
    <Language>EN</Language>
    <Order>
      <OrderType>Purchase</OrderType>
      <Merchant>POS_IKEA_2</Merchant>
      <Amount>123456</Amount>
      <Currency>840</Currency>
      <Description>xxxxxxxx</Description>
      <ApproveURL>http://merchant.ru/testshopPageReturn.jsp</ApproveURL>
      <CancelURL>http://merchant.ru/testshopPageReturn.jsp</CancelURL>
      <DeclineURL>http://merchant.ru/testshopPageReturn.jsp</DeclineURL>
      <phone>+79000000011</phone>
    </Order>
  </Request>
</TKKPG>
```

## 6.2 TKKPG/Response XML Structure

The description of the response structure contains only the main parameters and elements, which are filled in most transactions. information about specific response parameters, see the [Operation groups section for more details.](#)

Legend:

- R (Required) – required element;
- C (Conditional) - a conditional element, depends on the type of operation or on the availability other parameters in the response;
- O (Optional) is an optional element.

Name parameter	Data type Mandatory		Description
operation	xs:string	R	Type of operation. Possible values are described in the <a href="#">enumOperation</a> type
Status	xs:string	R	The result of the request. Possible values are declared in the enumerated type <a href="#">enumStatusOperation</a>
order	xs:complexType	FROM	Information about order. Element containing order parameters
Order/OrderID xs:integer		FROM	Identifier number Required parameter in the following types operations: • <a href="#">Creating an order (CreateOrder)</a> . • <a href="#">Reverse payment</a> . • <a href="#">Getting status (GetOrderStatus)</a> order
Order/SessionID xs:string		FROM	The session ID used in set Required parameter in the operation <a href="#">Create order (CreateOrder)</a> number order.



Name parameter	Data type Mandatory		Description
order/ OrderStatus	xs:string	FROM	<p>Order status. Possible values are described in <a href="#">enumOrderStatus</a> enumerated type .</p> <p>Mandatory parameter in operations:</p> <ul style="list-style-type: none"> <li>• <a href="#">Getting status order (GetOrderStatus)</a>.</li> <li>• <a href="#">Getting order information (GetOrderInformation)</a></li> </ul>
Order/URL	xs:anyURI	FROM	<p>URL to be redirected to user (the transition is carried out GET/POST method to the URL specified in answer, with added parameters <b>SessionID</b> and <b>OrderID</b> accepting session ID and number values order accordingly)</p>
AdditionalInfo xs:complexType		O	An element containing an additional order information
AdditionalInfo/ Receipt	xs:string	O	Signed receipt (bank guarantee) perfect authorization (BASE64-encoded)
Reversal	xs:complexType	O	Element containing operation parameters <a href="#">Reverse payment (Reverse)</a>
Reversal/ RespCode	xs:string	FROM	Authorization system response code to payment reverse operation
Reversal/ RespMessage	xs:string	FROM	Authorization system text response
XMLOut	xs:complexType	O	Element, parameters containing store results alerts authorization. For more information, see <a href="#">XMLOut Message Options</a>

**Answer example :**

```
<?xml version="1.0" encoding="UTF-8"?>
<TKKPG>
  <Response>
    <Operation>CreateOrder</Operation>
    <Status>00/<Status>
    <Order>
      <OrderID>828</OrderID>
      <SessionID>ECDE79578768ECFBF2897A0F44CC0CEF</SessionID>
      <URL>https://payment.gateway/url</URL>
    </Order>
  </Response>
</TKKPG>
```

## 6.3 Data types

This section describes the values of the following enumerated data types used in XML messages when interacting with **TWEC PG**:

- [The type of operation enumOperation.](#)
- [Order type enumOrderType.](#)
- [Operation status enumStatusOperation.](#)
- [Order status enumOrderStatus.](#)



### 6.3.1 Operation type enumOperation

Meaning	Description
CreateOrder	Create an order
Completion	post-authorization
reverse	Reverse payment
Refund	Purchase returns
GetOrderStatus	Get order status
GetOrderInformation	Getting order information
GetOrders	Getting a list of orders
GetCheckInfo	Obtaining information about a fiscal document
GetCheckList	Getting a list of fiscal documents by order

### 6.3.2 Order type enumOrderType

Meaning	Description
Purchase	Purchase
PreAuth	Preauthorization

### 6.3.3 Operation status enumStatusOperation

Meaning	Description
00	Operation completed successfully
ten	The operation is not allowed. The online store does not have access to the operation creating an order (or such an online store is not registered)
eleven	Error when working with the UPOP service
thirty	Invalid message format (no required parameters, etc.)
54	Invalid operation
55	Invalid parameters passed
72	Empty POS driver response
96	System error
97	POS driver communication error
98	Error connecting to the MobiCash service



## 6.3.4 Order status enumOrderStatus

Meaning	Description
CREATED	Created
APPROVED	Approved (payment was successful)
PREAUTH-APPROVED	Pre-authorization completed (funds reserved on the account for operation)
EXPIRED	Order expired
ERROR	Error
CANCELED	Canceled (the client aborted the operation)
DECLINED	Payment denied
ON-PAYMENT	On payment
ON-LOCK	Blocked (to avoid duplication of payment for goods)
ON REFUND	Blocked for the duration of the return of the goods (to exclude duplicate return of goods)
REFUNDED	Product returned
REVERSED	reversed



## 7 Operation groups

**TWEC PG** payment gateway supports a number of operations, which are divided into the following groups:

- [Financial operations.](#)
- [Information operations.](#)

### 7.1 Financial transactions

The section presents a set of financial transactions for working with orders: [Creating an order](#)

- [Postauthorization.](#)
- [Reverse payment.](#)
- [Purchase returns.](#)

#### 7.1.1 Creating an order

Creating an order is the initial and mandatory step for working with an order. When creating an order, you must set the value of the **OrderType parameter**, which determines which financial transaction will be subsequently generated. A financial transaction means payment, the actual debiting of funds.

Possible parameter values:

- *Purchase* (default). With the specified value, a purchase order is created.
  - *PreAuth*. With the specified value, a purchase order with pre-authorization is created. A purchase with pre-authorization occurs in two stages: 1. An authorization transaction is performed. Funds are reserved on the account for the amount of the operation, the parameters of the original transaction are stored in the reservation table - check number (InvoiceNumber), SequenceNumber, confirmation code (ApprovalCode).
2. Completion of pre-authorization (post-authorization) is performed using administrative operation [Postauthorization \(Completion\)](#).

The XML request has the format: <?

```
xml version="1.0" encoding="UTF-8"?>
<TKPG> <Request> <Operation>CreateOrder</
  Operation> <Language></Language>
  <Order> <OrderType> </OrderType>
  <Merchant><Merchant> <Amount></Amount>
  <Currency></Currency> <Description></
    Description> <ApproveURL></ApproveURL>
  <CancelURL></CancelURL>
```



```
<DeclineURL></DeclineURL>
<phone></phone>
<AddParams></AddParams>
<Positions></Position>
<Fee></Fee>
</Order>
</Request>
</TKPG>
```

## Description of request parameters:

Name parameter	Data type Mandatory		Description
Order/Positions/position/ PaymentSubjectType	xs:integer	O	<p>Position type. Possible values:</p> <ul style="list-style-type: none"> <li>• 1 (default) – product; 2 - excisable</li> <li>• goods;</li> <li>• 3 - work; 4 -</li> <li>• service; 5 - bet</li> <li>• in gambling; 6 - win in gambling;</li> <li>•</li> <li>• 7 - lottery ticket; 8 - winning</li> <li>• the lottery; 9 - granting the right</li> <li>• to use RIA; 10 - payment;</li> <li>•</li> <li>• 11 - agency fee;</li> <li>• 12 - composite position;</li> <li>• 13 is another position.</li> </ul> <p><b>Attention:</b></p> <ul style="list-style-type: none"> <li>• The parameter should be set if the <b>PayKiosk service is used</b>. If the parameter is not set, then the value specified in the <b>TWEC PG</b> settings will be used.</li> </ul>
Order/Positions/Position/Quantity	xs:integer	C	<p>Number of positions.</p> <p><b>Attention!</b> The parameter is required if the service is used <b>PayKiosk</b></p>
Order/Positions/Position/Price	xs:integer	C	<p>Position unit cost. The cost is indicated in the maximum units of the transaction currency through the separator "." (for example, 13.50). <b>Attention:</b></p> <ul style="list-style-type: none"> <li>• The parameter is required if the <b>PayKiosk service is used</b>. The transaction currency code (Currency <b>query parameter</b>) must be equal to 643</li> </ul>
Order/Positions/Position/Tax	xs:integer	O	<p>VAT tax rate per item. Possible values:</p> <ul style="list-style-type: none"> <li>• 1 (default) – VAT rate 18%; 2 – VAT rate 10%;</li> <li>•</li> </ul>



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Name parameter	Data type Mandatory		Description
			<ul style="list-style-type: none"> <li>• 3 - estimated VAT rate 18/118; 4 - estimated VAT</li> <li>• rate 10/110; 5 - VAT rate 0%; 6 - position is not subject to VAT.</li> <li>•</li> </ul> <p><b>Attention:</b></p> <ul style="list-style-type: none"> <li>• The parameter should be set if the <b>PayKiosk service is used</b>. If the parameter is not set, then the value specified in the <b>TWEC</b></li> <li>• <b>PG</b> settings will be used.</li> </ul>
Order/Positions/ Position/Text	xs:string	C	<p>Position name. The maximum value is 128 characters. Parameter is mandatory if the service is used <b>PayKiosk</b></p> <p><b>Attention!</b></p>
Order/Positions/ position/ PaymentType	xs:integer	O	<p>Item payment type. Possible values:</p> <ul style="list-style-type: none"> <li>• 1 - the amount indicated in the fiscal document is payable in cash;</li> <li>• 2 (default) - the amount indicated in the fiscal document is subject to payment using electronic means of payment;</li> <li>• 14 - the amount indicated in the fiscal document is subject to payment by the previously made preliminary payment (taking into account the advance payment and / or previous payments);</li> <li>• 15 - the amount indicated in the fiscal document is subject to subsequent payment (on credit); 16 - the amount indicated in the fiscal document is subject to payment by the counter</li> <li>• provision of the position by the buyer, exchange and in another similar way.</li> </ul> <p><b>Attention:</b></p> <ul style="list-style-type: none"> <li>• The parameter should be set if the <b>PayKiosk service is used</b>. If the parameter is not set, then the value specified in the <b>TWEC</b></li> <li>• <b>PG</b> settings will be used.</li> </ul>
Order/Positions/ position/ PaymentMethodType	xs:integer	O	<p>Position payment method. Possible values:</p> <ul style="list-style-type: none"> <li>• 1 - (on default) complete advance payment before the transfer of the position;</li> <li>• 2 - partial advance payment until the position is transferred;</li> <li>• 3 - advance;</li> <li>• 4 - full payment, taking into account the advance payment at the time of transfer of the position;</li> </ul>



Name parameter	Data type Mandatory		Description
			<ul style="list-style-type: none"> <li>• 5 – partial payment of the position at the time of its transfer, followed by payment on credit;</li> <li>• 6 - position transfer without payment with subsequent payment on credit;</li> <li>• 7 – payment for a position on credit after its transfer.</li> </ul> <p><b>Attention:</b></p> <ul style="list-style-type: none"> <li>• The parameter should be set if the <b>PayKiosk service is used</b>. If the parameter is not set, then the value specified in the <b>TWEC PG</b> settings will be used.</li> </ul>

**Attention!** If the **PayKiosk service is used**, then the **Order/Positions** element must be added to the request , in which, using the **Position** parameter , the list of positions to be transferred to the online cash register (CRE) with a fiscal accumulator is specified. If the request does not contain the **Order/Positions element**, then this element is added to the request with one **Position parameter**, which contains the **PaymentSubjectType**, **Tax**, **PaymentMethodType** , **PaymentType** parameters with the values used by default or overridden in the **TWEC PG settings**.

In this case, the value of the parameter:

- **Price** is set equal to the amount of the transaction (request parameter **Amount**); **Quantity** is set to 1; **Text** is set to the value of the **Description query parameter**.
- 

For a description of the **Fee**, **OrigCurrency**, **OrigAmount**, **DeclineURL**, **CancelURL**, **ApproveURL**, **Description**, **Currency**, **Amount**, **Merchant**, **phone**, **OrderType** , and **Language** parameters, see [TKKPG/ Request XML Request Structure](#).

The result of the **CreateOrder** operation is the creation of an order in **TWEC PG**. The order status is set to **CREATED**. In response , **TWEC PG** sends the following parameters to the payment module:

- unique order number **OrderId**; Session ID.
- 

The **TWEC PG** response is:

```
<?xml version="1.0" encoding="UTF-8"?>
<TKKPG> <Response> <Operation>CreateOrder</
Operation> <Status></Status> <Order>
<OrderId></OrderId> <SessionID ></
SessionID> <URL></URL> </Order> </
Response> </TKKPG>
```



For a description of the response options, see [TKKPG/Response XML Response Structure](#).

When creating an order, it is possible to set additional order parameters in the **Order/AddParams** element. The **AddParams** element is optional, and the set of additional parameters is optional and is listed below.

Parameter name	Description
user_email	Client's e-mail (additional parameter), which will be saved in the <b>Email</b> field in the <b>TWEC PG</b> DB Cardholder's account type. Possible values:
AcctType	<ul style="list-style-type: none"> <li>• 1 – Checking;</li> <li>• 2 - Savings;</li> <li>• 4 - Credit;</li> <li>• 8 -Bonus</li> </ul>
OrderExpirationPeriod	<p>Order lifetime (in minutes). If the specified period has expired when checking an order with the status <b>CREATED</b>, <b>ON-LOCK</b> or <b>ON-PAYMENT</b>, then the order status changes to <b>EXPIRED</b>, and when making a payment, the client will be redirected to the <b>DeclineURL</b>.</p> <p><b>Attention:</b></p> <ul style="list-style-type: none"> <li>• If the value of the <b>OrderExpirationPeriod</b> parameter is not set when creating an order, then the value of a similar parameter in the <b>TWEC PG settings</b> will be used.</li> <li>• If a value is specified with a syntax error or not specified, the default value of 30 minutes will be used.</li> <li>• If the parameter is set to a negative value or 0, no order expiration check is performed</li> </ul>
INN	<p>TSP TSP, for which the fiscal document is generated. The maximum value is 12 characters.</p> <p><b>Attention:</b></p> <ul style="list-style-type: none"> <li>• The parameter should be set if the service is used <b>PayKiosk</b>. If</li> <li>• the parameter is not set, then the value specified in the <b>TWEC PG settings</b> will be used.</li> </ul>
DeviceGroup	<p>Identifier of the group of devices with which the fiscal document will be generated. Registration of a fiscal document on the side of the fiscal data operator is performed after a successful payment. The maximum value is 32 characters. By default, the parameter is set to <i>Main</i>.</p> <p><b>Attention:</b></p> <ul style="list-style-type: none"> <li>• The parameter should be set if the service is used <b>PayKiosk</b>. If</li> <li>• the parameter is not set, then the value specified in the <b>TWEC PG settings</b> will be used.</li> </ul>



Parameter name	Description
TaxationSystem	<p>The taxation system used by the merchant when calculating the amount of a transaction, taking into account the VAT tax rate. Possible values:</p> <ul style="list-style-type: none"> <li>• 0 (default) - general (DOS); 1 - simplified</li> <li>• "Income" (USN "Income"); 2 - simplified "Income minus expense" (USN "Income minus expense"); 3 - single tax on imputed income (UTII); 4 - single agricultural tax (UST);</li> <li>•</li> <li>•</li> <li>• 5 - patent (PSN).</li> </ul> <p><b>Attention:</b></p> <ul style="list-style-type: none"> <li>• The parameter should be set if the service is used <b>PayKiosk.</b> If</li> <li>• the parameter is not set, then the value specified in the <b>TWEC PG</b> settings will be used.</li> </ul>
key	<p>The name of the key with which the request for the formation of a fiscal document is signed on the side of the fiscal data operator. The name of the key is provided by official representatives of the <b>PayKiosk service.</b></p> <p><b>Attention:</b></p> <ul style="list-style-type: none"> <li>• The parameter should be set if the service is used <b>PayKiosk.</b> If</li> <li>• the parameter is not set, then the value specified in the <b>TWEC PG</b> settings will be used.</li> </ul>
CustomerContact	<p>Phone number or e-mail address of the buyer to which the electronic fiscal document will be sent. The telephone number is indicated in the format +&lt;Numbers&gt;, where &lt;Numbers&gt; is a sequence of digits assigned to a telephone network subscriber. The e-mail address is specified in the format &lt;Name&gt;@&lt;DomainName&gt;, where &lt;Name&gt; is the name of the mailbox, and &lt;DomainName&gt; is the domain name of the server where the mailbox is located. The maximum value of the parameter is 64 characters.</p> <p><b>Attention:</b></p> <ul style="list-style-type: none"> <li>• The parameter should be set if the service is used <b>PayKiosk.</b> If</li> <li>• the parameter is not specified, then the value of the <b>phone</b> parameter or the <b>UserEmail</b> parameter will be used. At the same time, if none of the <b>phone</b> and <b>UserEmail</b> parameters are set, then when paying for the order, the required field <b>E-mail</b> will be displayed on the page for entering information on the card</li> </ul>
<b>Parameters for Recurring Payments</b>	
Purchase.Recur.frequency	<p>The minimum number of days between periodic payments. The format of the parameter is a number with a length of 1-4 characters. <b>Attention!</b> The parameter is not used if the client authentication using the <b>EMV 3D Secure v2</b> protocol is used to make recurring payments</p>
Purchase.Recur.endRecur	<p>The date after which recurring payments cannot be made. The parameter format is YYYYMMDD. The <b>TWEC PG</b> specifies the card expiration date in this parameter when sending a PReq message to the ACS if:</p>



Parameter name	Description
	<ul style="list-style-type: none"> <li>• the value of the parameter received from the payment module is a date that does not match the format of the parameter (for example, 0 or -1) the expiration date of the card precedes the date specified in this parameter by the payment module</li> </ul> <p><b>Attention:</b></p> <ul style="list-style-type: none"> <li>• The value of the parameter is checked when creating an order for a recurring payment performed without the participation of the payment module. If the parameter specifies a date prior to the order creation date, then the order creation operation is not performed.</li> <li>• The parameter is not used if the client authentication using the <b>EMV 3D Secure v2</b> protocol is used to make recurring payments</li> </ul>
Purchase.Recur.period	<p>The period of time after which the next periodic payment is made. The parameter format is MI-HDMY. The minimum value of the period is 1 minute, the maximum is 1 year.</p> <p><b>Attention!</b> The parameter must be filled in when performing <a href="#">periodic payments without the participation of the payment module</a></p>
Purchase.Recur.removeOnDecline	<p>Flag for retrying payment for the order, if the status of the order was <b>DECLINED</b>. Possible values:</p> <ul style="list-style-type: none"> <li>• <i>true</i> – do not retry payment for the order and remove the order from the list of periodic payments;</li> <li>• <i>false</i> (default) – retry payment order.</li> </ul> <p><b>Attention!</b> The parameter is optional and is used when performing <a href="#">periodic payments without the participation of the payment module</a></p>
MITAttributes	<p>Signs of a transaction initiated with the input of card data (or their equivalent) from the merchant's data warehouse. The parameter specifies a number in decimal notation, which corresponds to a number in binary notation formed according to the following bitmask format:</p> <ul style="list-style-type: none"> <li>• bit 1 - Merchant Initiated Transaction, Credential on file entry mode. A sign of a transaction initiated by the merchant with the input of card data (or their equivalent) from the merchant's data warehouse.</li> <li>• bit 2 - Customer Initiated Transaction, Credential on file entry mode. A sign of a transaction initiated by the cardholder with the input of card data (or their equivalent) from the merchant's data warehouse.</li> <li>• bit 3 - Credential on file Initial transaction. Sign of the original transaction, for which the merchant saves card data (or their equivalent) for subsequent transactions.</li> <li>• bit 4 - Deferred operation. Sign of a pending operation.</li> <li>• bit 5 - Terminated. Sign of canceled subscription.</li> </ul> <p>For example, to indicate the attribute of the original transaction, you must specify the number 4 in the decimal number system in the <i>MITAttributes</i> parameter , which corresponds to the number 00100 in the binary number system.</p> <p><b>Attention!</b> The parameter must be set by merchants using recurring payments</p>



Parameter name	Description
<b>Parameters for notifying an online store about an order status change</b>	
ChangeStatusURL	<p>URL that will be sent to when the order status changes GET request over <b>HTTPS / HTTP protocol</b>. When filling in a parameter, you can use macros:</p> <ul style="list-style-type: none"> <li>• %ORDERID% – when generating the URL, the macro is replaced by the order ID; %SESSIONID% – when generating the URL, the macro is replaced by the session ID; %STATUS% – when generating the URL, the macro is replaced with the status of the order.</li> <li>• </li> </ul>

## 7.1.2 Post-authorization

The operation is performed to complete the pre-authorization for the specified amount. **Attention!**

The amount of pre-authorization completion should not exceed the amount of the original transaction. In some cases, the amount of pre-authorization completion may exceed the amount of the original transaction, depending on the settings of the authorization system. When the operation is performed, the status of the order is checked. If the order status is not equal

**PREAUTH-APPROVED**, then the **Completion** operation fails and error 30 (bad message format) is returned to the client. After a successful completion of the **Completion** operation , a new status is set - **APPROVED**. Thus, the **status of the order changes**.

The XML request has the following

```
format: <?xml version="1.0" encoding="UTF-8"?>
><TKKPG> <Request> <Operation>Completion</
Operation> <Language></Language> <Order>
<Merchant> </Merchant> <OrderId></
OrderId> <AddParams></AddParams> </
Order> <SessionId></SessionId>
<Amount></Amount> <Currency></
Currency> <Description></Description>
<Fee></Fee> </Request> </TKKPG>
```

For a description of the request parameters, see [TKKPG/Request XML Request Structure](#).

The **TWEC PG** response is: <?xml

```
version="1.0" encoding="UTF-8"?> <TKKPG>
<Response> <Operation>Completion</
Operation> <Status>00</Status>
<POSResponse> <l name="ResponseCode"
value="001"/>
```



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```
<f name="F" value="491385 A"/> <f name="R"
value="D"/> <f name="a"
value="&F1000#&C643#&R01#/> <f name="h" value="0010010090"/
> <f name="t" value="4634791"/>
</POSResponse>
</Response>
</TKKPG>
```

Description of response options:

Name parameter	Data type Mandatory		Description
Status	xs:string	R	For a description of the parameter, see <a href="#">TKKPG/ Response XML Response Structure POS Driver Response Code</a>
POSResponse/ response code	xs:integer	R	

### 7.1.3 Reverse payment

The operation is used to cancel (annul) the payment, if funds were reserved on the account for the amount of the operation and the status was set for the order **APPROVED** or **PREAUTH-APPROVED**.

The XML request has the following format: <?

```
xml version="1.0" encoding="UTF-8"?> <TKKPG>
<Request> <Operation>Reverse</Operation>
<Language></Language> <Order> <Merchant> </
Merchant> <OrderId></OrderId> <Positions> <Position>
<PaymentSubjectType></PaymentSubjectType>
<Quantity></Quantity> <Price></Price> <Tax></Tax>
<Text></Text> <PaymentType></PaymentType>
<PaymentMethodType></PaymentMethodType> < /
Position> </Positions> </Order> <Amount></Amount>
<Description></Description> <SessionID>< /
SessionID> </Request> </TKKPG>
```

Description of request parameters:

Name parameter	Data type Mandatory		Description
Order/Positions/ position/ PaymentSubjectType	xs:integer	O	Position type. Possible values: 1 (default) – item; 2 <ul style="list-style-type: none"> <li>• - excisable goods; 3 - work; 4 - service;</li> <li>•</li> <li>•</li> <li>•</li> </ul>



Name parameter	Data type Mandatory		Description
			<ul style="list-style-type: none"> <li>• 5 - bet in gambling;</li> <li>• 6 - win in gambling;</li> <li>• 7 - lottery ticket;</li> <li>• 8 - winning the lottery;</li> <li>• 9 - granting the right use of RIA;</li> <li>• 10 - payment;</li> <li>• 11 - agency fee;</li> <li>• 12 - composite position;</li> <li>• 13 is another position.</li> </ul> <p><b>Attention:</b></p> <ul style="list-style-type: none"> <li>• The parameter should be set if using the <b>PayKiosk service</b>.</li> <li>• If the parameter is not set, then used meaning, specified in the <b>TWEC PG settings</b></li> </ul>
Order/Positions/ Position/Quantity	xs:integer	C	<p>Number of positions.</p> <p><b>Attention!</b> Parameter required if used <b>paykiosk</b> service</p>
Order/Positions/ Position/Price	xs:integer	C	<p>Cost Cost position units. indicated in maximum units of currency order with delimiter character ". " (for example, 13.50).</p> <p><b>Attention:</b></p> <ul style="list-style-type: none"> <li>• The parameter is required, if <b>PayKiosk</b> is used . service</li> <li>• Order currency code must be equal to 643</li> </ul>
Order/Positions/ Position/Tax	xs:integer	O	<p>VAT tax rate per item. Possible values:</p> <ul style="list-style-type: none"> <li>• 1 (default) - VAT rate eighteen%;</li> <li>• 2 – VAT rate 10%;</li> <li>• 3 - estimated VAT rate 18/118;</li> <li>• 4 - estimated VAT rate 10/110;</li> <li>• 5 - VAT rate 0%;</li> <li>• 6 - position is not subject to VAT.</li> </ul> <p><b>Attention:</b></p> <ul style="list-style-type: none"> <li>• The parameter should be set if using the <b>PayKiosk service</b>.</li> <li>• If the parameter is not set, then used meaning, specified in the <b>TWEC PG settings</b></li> </ul>
Order/Positions/ Position/Text	xs:string	C	<p>Position name. Maximum value - 128 characters.</p>



Name parameter	Data type Mandatory		Description
			<p><b>Attention!</b> Parameter required if used is paykiosk service</p>
Order/Positions/ position/ PaymentType	xs:integer	O	<p>Position payment type. Possible values:</p> <ul style="list-style-type: none"> <li>• 1 - the amount indicated in the fiscal document payable. In cash;</li> <li>• 2 (default) – amount, specified in fiscal document, payable with using electronic means of payment;</li> <li>• 14 - the amount indicated in fiscal document, subject to payment before contributed advance payment (taking into account advance payment and/or previous payments);</li> <li>• 15 - the amount indicated in fiscal document, subject to subsequent payment (on credit);</li> <li>• 16 - the amount indicated in fiscal document, subject to counter payment position buyer, exchange and in another similar way.</li> </ul> <p><b>Attention:</b></p> <ul style="list-style-type: none"> <li>• The parameter should be set if using the PayKiosk service.</li> <li>• If the parameter is not set, then used meaning, specified in the TWEC PG settings</li> </ul>
Order/Positions/ position/ PaymentMethodType	xs:integer	O	<p>Position payment method. Possible values:</p> <ul style="list-style-type: none"> <li>• 1 (default) - full preliminary before payment moment of position transfer;</li> <li>• 2 - partial preliminary payment before delivery positions;</li> <li>• 3 - advance;</li> <li>• 4 - full payment including advance payment at the time of transfer of the position;</li> <li>• 5 - partial payment of a position in moment of its transfer with subsequent payment on credit;</li> <li>• 6 – position transfer without payment from subsequent payment on credit;</li> <li>• 7 – payment of the position on credit after her transmission.</li> </ul>



Name parameter	Data type Mandatory		Description
			<p><b>Attention:</b></p> <ul style="list-style-type: none"> <li>• The parameter should be set if the <b>PayKiosk service is used</b>. If the parameter is not set, then the value will be used specified in the <b>TWEC PG</b> settings</li> </ul>

For a description of the **SessionID**, **Description**, **Amount**, **Language**, **Merchant**, and **OrderID** parameters, see [TKKPG/Request XML Request Structure](#).

When using the **PayKiosk** service to perform a full payment reverse, the request to perform a payment reverse must not contain the **Positions** element and the **Amount parameter**. As a result of performing a full reverse payment to the service

**PayKiosk** sends a fiscal document with a complete list of positions passed in the **Positions** element of the original purchase request. If the reverse amount from the **Amount** parameter and the order amount ( **Amount parameter**) from the original purchase request do not match, and the request to reverse payment contains the **Positions** element containing a list of non-cancellable positions, then a partial payment reverse is performed, after which the **PayKiosk** service sends a fiscal document with a list of canceled order items. Before performing a partial payment reversal, a check is made to see if the amount of the reverse ( **Amount request parameter**) matches the amount of the cost of non-cancellable positions ( **Price request parameter**) passed in the request.

The **TWEC PG** response is:

```
<?xml version="1.0" encoding="UTF-8"?>
<TKKPG> <Response> <Operation>Reverse</
Operation> <Status></Status> <Order>
<OrderID></OrderID> </ Order> <Reversal>
<RespCode></RespCode> <RespMessage></
RespMessage> </Reversal> </Response>
</TKKPG>
```

For a description of the response options, see [TKKPG/Response XML Response Structure](#).

#### 7.1.4 Return of goods

The operation is used to cancel and return payment for a specific order, when, in case of successful payment, the order status was set to **APPROVED** and the funds were debited from the account.

The XML request has the format:

```
<?xml version="1.0" encoding="UTF-8"?>
<TKKPG> <Request> <Operation>Refund</
Operation>
```



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```

<Language></Language>
<Order>
  <Merchant></Merchant>
  <OrderID></OrderID>
  <AddParams></AddParams>
  <Positions>
    <Position>
      <PaymentSubjectType></PaymentSubjectType>
      <Quantity></Quantity>
      <Price></Price>
      <Tax></Tax>
      <Text></Text>
      <PaymentType></PaymentType>
      <PaymentMethodType></PaymentMethodType>
    </Position>
  </Positions>
</Order>
<Description></Description>
<SessionID></SessionID>
<Refund>
  <Amount></Amount>
  <Currency></Currency>
  <WithFee></WithFee>
</Refund>
</Request>
</TKKPG>
  
```

#### Description of request parameters:

Name parameter	Data type Mandatory		Description
Order/Positions/position/ PaymentSubject type	xs:integer	O	<p>Position type. Possible values: 1 (default) – item;</p> <ul style="list-style-type: none"> <li>• 2 - excisable goods; 3 - work;</li> <li>•</li> <li>•</li> <li>• 4 - service;</li> <li>• 5 - bet in gambling; 6 - win in gambling; 7 - lottery ticket;</li> <li>•</li> <li>• 8 - winning the lottery;</li> <li>• 9 - granting the right to use RIA;</li> <li>• 10 - payment;</li> <li>• 11 - agency fee; 12 - composite position;</li> <li>•</li> <li>• 13 is another position.</li> </ul> <p><b>Attention:</b></p> <ul style="list-style-type: none"> <li>• The parameter should be set, the <b>PayKiosk</b> if <b>service is used</b>. If the parameter is not set, then</li> <li>• the value specified in the <b>TWEC PG</b> settings will be used.</li> </ul>
Order/Positions/position/ Quantity	xs:integer	C	<p>Number of positions.</p> <p><b>Attention!</b> The parameter is required if the <b>PayKiosk</b> service is used</p>



Name parameter	Data type Mandatory		Description
Order/Positions/ Position/Price	xs:integer	C	<p>Position unit cost. Price indicated in maximum currency units return with delimiter character ". " (for example, 13.50).</p> <p><b>Attention:</b></p> <ul style="list-style-type: none"> <li>The parameter is required if using the <b>PayKiosk service</b>.</li> <li>Return currency code (request parameter <b>Currency</b>) must be equal to 643</li> </ul>
Order/Positions/ Position/Tax	xs:integer	O	<p>VAT tax rate per item. Possible values:</p> <ul style="list-style-type: none"> <li>1 (default) – VAT rate 18%;</li> <li>2 – VAT rate 10%;</li> <li>3 - estimated VAT rate 18/118;</li> <li>4 - estimated VAT rate 10/110;</li> <li>5 - VAT rate 0%;</li> <li>6 - position is not subject to VAT.</li> </ul> <p><b>Attention:</b></p> <ul style="list-style-type: none"> <li>The parameter should be set, the <b>PayKiosk service is used</b>. if</li> <li>If the parameter is not set, then use the value specified in <b>TWEC PG settings</b></li> </ul>
Order/Positions/ Position/Text	xs:string	C	<p>Position name. value is 128 characters. Maximum</p> <p><b>Attention!</b> The parameter is required, if you use the <b>PayKiosk service</b></p>
Order/Positions/ position/ PaymentType	xs:integer	O	<p>Position payment type. Possible values:</p> <ul style="list-style-type: none"> <li>1 - the amount indicated in the fiscal document payable in cash cash;</li> <li>2 (default) – the amount specified in fiscal document, payable with using electronic funds payment;</li> <li>14 - the amount indicated in the fiscal document payable before paid in advance (with taking into account the advance and / or previous payments);</li> <li>15 - the amount indicated in the fiscal document, subject to subsequent payment (on credit);</li> <li>16 - the amount indicated in the fiscal document, payable to counter provision by the buyer of the position, exchange or otherwise.</li> </ul> <p><b>Attention:</b></p> <ul style="list-style-type: none"> <li>The parameter should be set, the <b>PayKiosk service is used</b>. if</li> <li>If the parameter is not set, then use the value specified in <b>TWEC PG settings</b></li> </ul>



Name parameter	Data type Mandatory		Description
Order/Positions/position/ PaymentMethod type	xs:integer	O	<p>Position payment method. Possible values: 1 (default) – full</p> <ul style="list-style-type: none"> <li>• advance payment until the position is transferred;</li> <li>• 2 - partial advance payment until the position is transferred;</li> <li>• 3 - advance;</li> <li>• 4 - full payment, taking into account the advance payment at the time of transfer of the position;</li> <li>• 5 – partial payment of the position at the time of its transfer, followed by payment on credit; 6 - position transfer without payment with subsequent payment on credit; 7 – payment for a position on credit after its transfer.</li> <li>•</li> </ul> <p><b>Attention:</b></p> <ul style="list-style-type: none"> <li>• The parameter should be set, the <b>PayKiosk service is used</b>. If the parameter is not set, then if</li> <li>• the value specified in the <b>TWEC PG</b> settings will be used.</li> </ul>

For a description of the **Language**, **Merchant**, **Currency**, **WithFee**, **OrderID**, **Description**, **SessionID**, and **Amount** parameters, see [TKPG/ Request XML Request Structure](#).

The request can use the **Order/AddParams** element, which specifies additional order parameters. For a description of the options, see [Creating an order](#).

When using the **PayKiosk** service to perform a full return of goods, the request for the return of goods must not contain the **Positions** element and the **Amount parameter**. As a result of a full return of goods for service

**PayKiosk** sends a fiscal document with a complete list of positions passed in the **Positions** element of the original purchase request. If the refund amount from the **Amount** parameter and the order amount ( **Amount parameter**) from the original request to complete the purchase do not match, and the request to return the goods contains the **Positions** element containing a list of non-refundable positions, then a partial return of the goods is performed, after which the **PayKiosk** service sends a fiscal document with a list of returned items for the order. Before performing a partial return of goods, the following is carried out:

- Checking if the refund amount ( **Amount query parameter**) matches the cost of non-refundable items ( **Price query parameter**) passed in the request.
- Checking the amount of the order and the amount of all return operations performed earlier on the order, taking into account the amount of the current return of the goods. If the total amount of goods return operations for an order is greater than the order amount, then the current goods return operation is rejected.



The **TWEC PG** response is:

```
<?xml version="1.0" encoding="UTF-8"?> <TKKPG>
<Response> <Operation>Refund</Operation>
<Status></Status> </Response> </TKKPG>
```

For a description of the **Status** parameter, see [TKKPG/Response XML Response Structure](#).

## 7.2 Information operations

The section presents a set of information operations for working with orders:

- [Get order status. Get order](#)
- [information.](#)
- [Getting a list of orders. Obtaining](#)
- [information about a fiscal document. Obtaining a list of fiscal](#)
- [documents by order.](#)

### 7.2.1 Get order status

The operation is used to get the order status.

The XML request has the following

```
format: <?xml version="1.0" encoding="UTF-8"?>
> <TKKPG> <Request>
  <Operation>GetOrderStatus</Operation>
  <Language></Language> <Order> <Merchant> </
  Merchant> <OrderId></OrderId> </Order>
  <SessionID></SessionID> </Request> </TKKPG>
```

For a description of the request parameters, see [TKKPG/Request XML Request Structure](#).

The **TWEC PG** response is:

```
<?xml version="1.0" encoding="UTF-8"?>
<TKKPG> <Response>
  <Operation>GetOrderStatus</Operation>
  <Status></Status> <Order> <OrderId></
  OrderId> <OrderStatus></OrderStatus> </
  Order> <AdditionalInfo> <Receipt></Receipt> </
  AdditionalInfo>
```



```
</Response>
<TKKPG>
```

For a description of the response options, see TKKPG [XML Response Structure/Response.](#)

## 7.2.2 Obtaining order information

The operation is used to obtain complete information about the order with the possibility  
 View all advanced options and completed operations.

The XML request has the format:

```
<?xml version="1.0" encoding="UTF-8"?>
<TKKPG>
  <Request>
    <Operation>GetOrderInformation</Operation> <Language></
    Language>
    <Order>
      <Merchant></Merchant>
      <OrderID></OrderID>
    </Order>
    <SessionID></SessionID>
    <ShowParams></ShowParams>
    <ShowOperations></ShowOperations>
    <ShowPositions></ShowPositions>
    <ClassicView></ClassicView>
  </Request>
</TKKPG>
```

Description of request parameters:

Name parameter	Data type Mandatory		Description
ShowParams	xs:complexType	O	Possibility view additional order options. Possible values: <ul style="list-style-type: none"> <li>• <i>true</i> - will be added to the response an <b>OrderParams</b> element containing names and values of additional order parameters;</li> <li>• <i>false</i> (default) - in response values additional order parameters will be missing</li> </ul>
ShowOperations	xs:complexType	O	Ability to view a list of all order operations. Possible values: <ul style="list-style-type: none"> <li>• <i>true</i> - will be added to the response element <b>OrderOperations</b>, containing a list of operations order;</li> <li>• <i>false</i> (default) - in response will be absent element <b>OrderOperations</b></li> </ul>
ShowPositions	xs:complexType	O	Ability to view a list of all order items transferred to online cash desk (CCP) with fiscal drive.



Name parameter	Data type Mandatory		Description
			<p>Possible values:</p> <ul style="list-style-type: none"> <li>• <i>true</i> – the <b>Positions</b> element containing the list of order positions will be added to the response; <i>false</i> (default) - will not be included in the response</li> <li>•</li> </ul> <p style="text-align: right;"><b>Positions</b></p>
Classic View	xs:string	O	<p>Display response in standard form.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>• <i>true</i> - the response is displayed in standard form (i.e., there is element <b>TKKPG/Response</b> containing the rest of the response parameters);</li> <li>• <i>false</i> (default) - the response is displayed without the <b>TKKPG/ Response</b> element (i.e. all response parameters are contained in the <b>Order</b> element )</li> </ul>

For a description of the **SessionID**, **OrderID**, **Merchant**, and **Language** parameters, see [TKKPG/ Request XML Request Structure](#).

The **TWEC PG** response has a different form depending on the value of the parameter **ClassicView** in request:

- if the value of the **ClassicView** parameter is not specified or is *false*:

```
<?xml version="1.0" encoding="UTF-8"?> <Order>
<row>

  <id></id>
  <SessionID></SessionID>
  <createDate></createDate>
  <lastUpdateDate></lastUpdateDate> <payDate></
  payDate>
  <MerchantID></MerchantID>
  <Amount></Amount>
  <Currency></Currency>
  <OrderLanguage></OrderLanguage>
  <Description></Description>
  <ApproveURL></ApproveURL>
  <CancelURL></CancelURL>
  <DeclineURL></DeclineURL>
  <Orderstatus></Orderstatus>
  <Receipt></Receipt>
  <tvoid></tvoid>
  <RefundAmount></RefundAmount>
  <RefundCurrency></RefundCurrency>
  <ExtSystemProcess></ExtSystemProcess>
  <OrderType></OrderType>
  <Fee></Fee>
  <RefundDate></RefundDate>
  <TWODate></TWODate>
  <TWOTime></TWOTime>
  <OrderOperations>
    <row>
      <id></id>
```



```

<PackageId></PackageId>
<createDate></createDate>
<MerchantID></MerchantID>
<OperType></OperType>
<OperName></OperName>
<OrderId></OrderId>
<Amount></Amount>
<Currency></Currency>
<Approval></Approval>
<twold></twold> </row>
<row> <id></id>

<PackageId></PackageId>
<createDate></createDate>
<MerchantID></MerchantID>
<OperType></OperType>
<OperName></OperName>
<OrderId></OrderId>
<Amount></Amount>
<Currency></Currency>
<Approval></Approval>
<twold></twold> </row>

</OrderOperations>
<Positions>
  <Position>
    <Quantity></Quantity>
    <Price></Price>
    <Tax></Tax>
    <Text></Text>
    <PaymentType></PaymentType>
    <PaymentMethodType></PaymentMethodType>
    <PaymentSubjectType></PaymentSubjectType>
  </Position>
</Positions>
</row>
</Order>
  
```

- if the value of the **ClassicView** parameter is *true*:

```

<?xml version="1.0" encoding="UTF-8"?>
<TKPG> <Response>
  <Operation>GetOrderInformation</Operation>
  <Status></Status> <Order>

    <row>
      <id></id>
      <SessionID></SessionID>
      <createDate></createDate>
      <lastUpdateDate></lastUpdateDate>
      <payDate></payDate>
      <MerchantID></MerchantID>
      <Amount></Amount>
      <Currency></Currency>
      <OrderLanguage></OrderLanguage>
      <Description></Description>
      <ApproveURL></ApproveURL>
      <CancelURL></CancelURL>
      <DeclineURL></DeclineURL>
      <Orderstatus></Orderstatus>
      <Receipt/>
      <twold/>
      <RefundAmount></RefundAmount>
    </row>
  </Order>
</Status>
</Response>
</TKPG>
  
```



```

<RefundCurrency></RefundCurrency>
<ExtSystemProcess></ExtSystemProcess>
<OrderType></OrderType>
<Fee></Fee>
<RefundDate></RefundDate>
<TWODate></TWODate>
<TWOTime></TWOTime>
<OrderParams>
  <row>
    <PARAMNAME></PARAMNAME>
    <VAL></VAL> </
  row>
</OrderParams>
<OrderOperations>
  <row>
    <id></id>
    <PackageId></PackageId>
    <createDate></createDate>
    <MerchantID></MerchantID>
    <TERMINALID/>
    <OperType></OperType>
    <OperName></OperName>
    <OrderId></OrderId>
    <Amount></Amount>
    <Currency/>
    <Approval/>
    <twold/> </row>
  </OrderOperations>
<Positions>
  <Position>
    <Quantity></Quantity>
    <Price></Price>
    <Tax></Tax>
    <Text></Text>
    <PaymentType></PaymentType>
    <PaymentMethodType></PaymentMethodType>
    <PaymentSubjectType></PaymentSubjectType>
  </Position>
</Positions> </
  row>
</Order>
</Response>
</TKKPG>
  
```

#### Description of response options:

Name parameter	Data type Mandatory		Description
order/row/id	xs:integer	R	Unique order number
Order/row/createDate	xs:integer	C	Order creation date
Order/row/lastUpdateDate	xs:integer	C	Date the order was last modified
Order/row/payDate xs:integer		C	Date of first payment for the order
order/row/Merchant ID	xs:string	C	TSP ID in <b>TWEC PG</b>
Order/row/Amount xs:integer		C	Order price



Name parameter	Data type Mandatory		Description
order/row/Currency	xs:integer	C	Order currency
order/row/OrderLanguage	xs:string	C	Order interface language. Filled in according two-character (for example, RU - Russian, EN - English, UK - Ukrainian, etc.) with RFC 1766 code language
order/row/Description	xs:string	C	Order Description
order/row/ApproveURL	xs:anyURI	C	URL to be redirected to client after approval of the transaction. If the parameter is not set in the operation <a href="#">Creating an order (CreateOrder)</a> , then value will be used specified in the <b>TWEC PG</b> settings
order/row/CancelURL	xs:anyURI	C	URL to be redirected to client in case of refusal (clicking on button <b>Cancel / Cancel</b> ). If a parameter not set in operation <a href="#">Creating an order (CreateOrder)</a> , then value will be used specified in the <b>TWEC PG</b> settings
order/row/DeclineURL	xs:anyURI	C	URL to be redirected to client in case of unsuccessful carrying out the payment transaction. If a parameter not set in operation <a href="#">Creating an order (CreateOrder)</a> , then value will be used specified in the <b>TWEC PG</b> settings
order/row/twoid	xs:integer	C	The transaction number in the authorization system made according to the latest operations in the order
order/row/RefundAmount	xs:integer	C	Amount of return transactions
order/row/RefundCurrency	xs:integer	C	Currency of return transactions
order/row/ExtSystemProcess	xs:integer	C	Sign of the use of external transaction processing systems
order/row/OperType	xs:string	C	<a href="#">Order type</a>
order/row/fee	xs:integer	O	Acquiring commission
order/row/RefundDate	xs:integer	C	Order return date
order/row/TWODate	xs:integer	C	Date on the check
order/row/TWOTime	xs:integer	C	Time on check
order/row/OrderParams	xs:complexType	O	Contains names of additional order parameters and values



Name parameter	Data type Mandatory		Description
order/row/ OrderOperations	xs:complexType	O	Contains a list of all transactions order
Order/row/Positions	xs:complexType	O	Contains a list of all items by order transferred to the online cashier (CRE) with fiscal accumulator

For a description of the **Receipt**, **OrderStatus**, and **SessionID** parameters, see [Structure XML response TKPG/Response.](#)

### 7.2.3 Getting a list of orders

The operation is used to filter and sort merchant orders.

The XML request has the format:

```
<?xml version="1.0" encoding="UTF-8"?>
<TKPG>
<Request>
  <Operation>GetOrders</Operation>
  <Language></Language>
  <Merchant></Merchant>
  <OrdersFilter>
    <Period>
      <Start></Start>
      <End></End>
    </Period>
    <LastCount></LastCount>
    <StartFrom></StartFrom>
    <Status></Status>
    <Amount>
      <Min></Min>
      <Max></Max>
    </Amount>
    <Currency></Currency>
    <Description></Description>
    <AddParams>
      <Item id=" val="/" />
    </AddParams>
    <OrderBy></OrderBy>
    <OrderingDirection></OrderingDirection>
    <OrderId></OrderId>
  </OrdersFilter>
</Request>
</TKPG>
```

Description of request parameters:

Parameter name	Data type	obligatory	Description
OrdersFilter/Period	xs:integer	R	Order creation period
OrdersFilter/Period/Start xs:integer		C	Order start date. The parameter is required if specified <b>OrdersFilter/LastCount</b>
OrdersFilter/Period/End xs:integer		O	Order end date



Parameter name	Data type	obligatory	Description
OrdersFilter/LastCount xs:integer		C	<p>Quantity withdrawn records, after filtration.</p> <p>The parameter not is required if specified parameter <b>OrdersFilter/Period/Start</b>.</p> <p><b>Attention!</b> If the value parameter missing or exceeds the setting in <b>TWEC PG</b> value parameter that determines number that are operations, returned to response to an execution request <b>order list</b> <b>Receipt</b> operations <b>(GetOrders)</b>, the last parameter is used meaning</p> <p>then</p>
OrdersFilter/StartFrom xs:integer		O	Position, output which result filtration
OrdersFilter/Status	xs:string	O	<a href="#">Order status</a>
OrdersFilter/Amount	xs:integer	O	Sum transaction units in minimal transaction currencies
OrdersFilter/Amount/Min xs:integer		O	Minimum sum transactions
OrdersFilter/Amount/Max xs:integer		O	Maximum sum transactions
OrdersFilter/Currency	xs:integer	O	Transaction currency code (for example, 643 - rubles, 840 - U.S. dollars)
OrdersFilter/Description xs:string		O	Text description of the order
OrdersFilter/AddParams xs:complexType		O	<a href="#">Extra options</a> <a href="#">order</a>
OrdersFilter/OrderBy	xs:string	O	<p>Sort orders by one of the options:</p> <ul style="list-style-type: none"> <li>• id;</li> <li>• SessionID;</li> <li>• createDate;</li> <li>• lastUpdateDate;</li> <li>• payDate;</li> <li>• Merchant ID</li> <li>• Amount;</li> <li>• currency;</li> <li>• orderLanguage;</li> <li>• description;</li> <li>• ApproveURL;</li> <li>• CancelURL;</li> <li>• DeclineURL;</li> </ul>



Parameter name	Data type	obligatory	Description
			<ul style="list-style-type: none"> <li>• orderstatus;</li> <li>• recipe;</li> <li>• RefundAmount;</li> <li>• RefundCurrency;</li> <li>• RefundDate;</li> <li>• Fee.</li> </ul> <p><b>Attention!</b> Sort by parameters several not supported</p>
OrdersFilter/ OrderingDirection	xs:string	O	Direction sorting. Possible values: <ul style="list-style-type: none"> <li>• ACS (default) - ascending;</li> <li>• DESC - descending</li> </ul>
OrdersFilter/OrderId	xs:integer	O	Order number

For a description of the **Merchant** and **Language** parameters, see [TKKPG/Request XML Request Structure](#).

The **TWEC PG** response is:

```
<?xml version="1.0" encoding="UTF-8"?> <Orders>

<row>
  <id></id>
  <SessionID></SessionID>
  <createDate></createDate>
  <lastUpdateDate></lastUpdateDate>
  <payDate></payDate>
  <MerchantID></MerchantID>
  <Amount></Amount>
  <Currency></Currency>
  <OrderLanguage></OrderLanguage>
  <Description></Description>
  <ApproveURL></ApproveURL>
  <CancelURL></CancelURL>
  <DeclineURL></DeclineURL>
  <Orderstatus></Orderstatus>
  <Receipt/>
  <twold/>
  <RefundAmount></RefundAmount>
  <RefundCurrency></RefundCurrency>
  <PaidWithMobicash></PaidWithMobicash>
  <RefundDate></RefundDate>
  <ExtSystemProcess></ExtSystemProcess>
  <OrderType/>
  <Fee></Fee> </
<row> <row> <id></id>

  <SessionID></SessionID>
  <createDate></createDate>
  <lastUpdateDate></lastUpdateDate>
  <payDate></payDate>
  <MerchantID></MerchantID>
  <Amount></Amount>
  <Currency></Currency>
  <OrderLanguage></OrderLanguage>
  <Description></Description>
```



```

<ApproveURL></ApproveURL>
<CancelURL></CancelURL>
<DeclineURL></DeclineURL>
<Orderstatus></Orderstatus>
<Receipt/>
<twold/>
<RefundAmount></RefundAmount>
<RefundCurrency></RefundCurrency>
<PaidWithMobicash></PaidWithMobicash>
<RefundDate></RefundDate>
<ExtSystemProcess></ExtSystemProcess>
<OrderType/>
<Fee></Fee> </
row>
</Orders>
  
```

For a detailed description of the parameters, see [Get Order Information](#). The response also contains the **PaidWithMobicash** parameter - a sign of an order paid through the **MobiCash service**.

## 7.2.4 Obtaining information about a fiscal document

The operation is used when interacting with the **PayKiosk** service to obtain from the service or the **TWEC PG** database complete information about a specific fiscal document (receipt) generated as part of an order. If the fiscal document has already been processed in the **PayKiosk service**, then information about the fiscal document will be requested from the database. If the fiscal document has not yet been processed, a request for the status of the fiscal document will be sent to the **PayKiosk** service. Upon receipt of the status "processed" from the **PayKiosk** service, the data on the fiscal document will be stored in the database and further information on the fiscal document will be requested from the database.

The XML request has the format:

```

<?xml version="1.0" encoding="UTF-8"?> <TKKPG>
<Request> <Operation>GetCheckInfo</Operation>
<Order> <Merchant></Merchant> <OrderID></
OrderID> <CheckID></CheckID> </Order> </
Request> </TKKPG>
  
```

Description of request parameters:

Name parameter	Data type Mandatory		Description
Merchant	xs:string	R	For a description of the <b>Merchant</b> and <b>OrderID</b> parameters, see <a href="#">TKKPG/Request XML Request Structure</a>
OrderID	xs:integer		
CheckID	xs:integer	R	Fiscal document identifier in the <b>PayKiosk service</b> .  <b>Attention!</b> The identifier can be obtained using the operation



Name parameter	Data type Mandatory		Description
			<p><a href="#">Getting a list of fiscal order documents on (GetCheckList)</a>. Also as ID can be used transaction number ( twold parameter), on which was formed fiscal document</p>

The **TWEC PG** response is:

```
<?xml version="1.0" encoding="UTF-8"?>
<FiscalDocument>
  <row>
    <id></id>
    <OrderId></OrderId>
    <DeviceSN></DeviceSN>
    <DeviceRN></DeviceRN>
    <FsNumber></FsNumber>
    <OfdName></OfdName>
    <OfdWebsite></OfdWebsite>
    <OfdInn></OfdInn>
    <FnsWebsite></FnsWebsite>
    <CompanyInn></CompanyInn>
    <CompanyName></CompanyName>
    <DocumentNumber></DocumentNumber>
    <DocumentIndex></DocumentIndex>
    <ShiftNumber></ShiftNumber>
    <ProcessedAt></ProcessedAt>
    <Fp></Fp>
    <Processed></Processed>
    <Change></Change>
  </row>
</FiscalDocument>
```

Description of response parameters:

Name parameter	Data type Mandatory		Description
row/id	xs:integer	R	Document ID fiscal
row/OrderId	xs:integer	R	Order ID for which fiscal document received
row/DeviceSN	xs:integer	O	Device serial number, s which formed fiscal document
row/DeviceRN	xs:integer	O	Registration number of the device, with which formed fiscal document
row/FsNumber	xs:integer	O	Fiscal accumulator number
row/OfdName	xs:string	O	Name of the operator of fiscal data
row/OfdWebsite	xs:anyURI	O	Fiscal data website address operator
row/OfdInn	xs:integer	O	TIN of the fiscal data operator



Name parameter	Data type Mandatory		Description
row/FnsWebsite	xs:anyURI	O	FTS website address
row/CompanyInn xs:integer		O	TIN of the merchant for which the fiscal document
row/CompanyName xs:string		O	Name of TSP
row/DocumentNumber	xs:integer	O	Fiscal document number
row/DocumentIndex	xs:integer	O	Fiscal document number for shift
row/ShiftNumber xs:integer		O	shift number
row/ProcessedAt xs:integer		O	Fiscal registration time documents in the fiscal drive
row/Fp	xs:integer	O	fiscal sign
row/Processed	xs:string	R	Document fiscal status. Possible values: <i>true</i> - processed, <i>false</i> - not processed
row/Change	xs:integer	O	Change

## 7.2.5 Obtaining a list of fiscal documents by order

The operation is used when interacting with the **PayKiosk** service to receive a list of fiscal documents (checks) by order from the **TWEC PG database**.

The XML request has the format:

```
<?xml version="1.0" encoding="UTF-8"?>
<TKKPG>
  <Request>
    <Operation>GetCheckList</Operation>
    <Order>
      <Merchant></Merchant>
      <OrderId></OrderId>
    </Order>
  </Request>
</TKKPG>
```

For a description of the query parameters, see [TKKPG XML Request Structure/request](#)

The **TWEC PG** response is:

```
<?xml version="1.0" encoding="UTF-8"?>
<Fiscal Documents>
  <row>
    <id></id>
    <OrderId></OrderId>
    <DeviceSN></DeviceSN>
    <DeviceRN></DeviceRN>
    <FsNumber></FsNumber>
    <OfdName></OfdName>
    <OfdWebsite></OfdWebsite>
    <OfdInn></OfdInn>
    <FnsWebsite></FnsWebsite>
    <CompanyInn></CompanyInn>
```



```

<CompanyName></CompanyName>
<DocumentNumber></DocumentNumber>
<DocumentIndex></DocumentIndex>
<ShiftNumber></ShiftNumber>
<ProcessedAt></ProcessedAt>
<Fp></Fp>
<Processed></Processed>
<Change></Change>
</row>
<row>
  <id></id>
  <OrderId></OrderId>
  <DeviceSN></DeviceSN>
  <DeviceRN></DeviceRN>
  <FsNumber></FsNumber>
  <OfdName></OfdName>
  <OfdWebsite></OfdWebsite>
  <OfdInn></OfdInn>
  <FnsWebsite></FnsWebsite>
  <CompanyInn></CompanyInn>
  <CompanyName></CompanyName>
  <DocumentNumber></DocumentNumber>
  <DocumentIndex></DocumentIndex>
  <ShiftNumber></ShiftNumber>
  <ProcessedAt></ProcessedAt>
  <Fp></Fp>
  <Processed></Processed>
  <Change></Change>
</row>
</FiscalDocuments>
  
```

## Description of response options:

Name parameter	Data type	obligatory	Description
row/id	xs:integer	R	Document ID fiscal
row/OrderId	xs:integer	R	ID of the order for which the fiscal receipt was received document
row/DeviceSN	xs:integer	O	Device serial number, s which formed fiscal document
row/DeviceRN	xs:integer	O	Registration number device with which fiscal document
row/FsNumber	xs:integer	O	Fiscal accumulator number
row/OfdName	xs:string	O	Name of fiscal data operator
row/OfdWebsite	xs:anyURI	O	Fiscal data website address operator
row/OfdInn	xs:integer	O	TIN of the fiscal operator data
row/FnsWebsite	xs:anyURI	O	FTS website address
row/CompanyInn	xs:integer	O	TSP TSP, a document is being formed for whom fiscal



Name parameter	Data type	obligatory	Description
row/CompanyName xs:string		O	Name of TSP
row/ DocumentNumber	xs:integer	O	Fiscal document number
row/ DocumentIndex	xs:integer	O	Fiscal document number for shift
row/ShiftNumber xs:integer		O	shift number
row/ProcessedAt xs:integer		O	Fiscal registration time document drive in fiscal
row/Fp	xs:integer	O	fiscal sign
row/Processed	xs:string	R	Fiscal processing status document. Possible values: <i>true</i> - processed, <i>false</i> - not processed
row/Change	xs:integer	O	Change



## 8 Applications

### 8.1 Typical scenarios for working with TWEC PG

This section describes the standard procedure for performing the following operations:

- [Purchase of goods.](#)
- [Purchase with pre-authorization.](#)
- [Periodic payment without participation of the payment module.](#)

#### 8.1.1 Purchase of goods

The purchase of goods consists of the following stages:

1. The payment module of the online store initiates the operation in **TWEC PG**  
[CreateOrder](#) with OrderType set to *Purchase*. XML request **example :**

```
<?xml version="1.0" encoding="UTF-8"?>
<TKKPG> <Request> <Operation>CreateOrder</
  Operation> <Language>RU</Language>
  <Order> <OrderType>Purchase</OrderType>
  <Merchant>test</Merchant> <Amount>2500</
  Amount> <Currency>840</Currency>
  <Description>xxxxxxxx</Description>
  <ApproveURL>/
  testPaymentModulePageReturn.jsp</
  ApproveURL> <CancelURL>/
  testPaymentModulePageReturn.jsp </
  CancelURL> <DeclineURL>/testPaymentModulePageReturn.jsp</
  DeclineURL> <AddParams> <ChangeStatusURL>http://127.0.0.1:5000/
  testPaymentModuleChangeStatus.jsp</

  ChangeStatusURL>
  </AddParams>
  </Order>
  </Request>
</TKKPG>
```

2. **TWEC PG** generates order id, session id and forms

An XML response containing the generated data, as well as the **URL** to which the payment module should redirect the client. **TWEC PG** XML response example:

```
<?xml version="1.0" encoding="UTF-8"?>
<TKKPG> <Response> <Operation>CreateOrder</
  Operation> <Status>00</Status> <Order>

  <OrderId>828</OrderId>
  <SessionId>ECDE79578768ECFBF2897A0F44CC0CEF</SessionId>
  <URL>https://TWPG.bank.com/index.jsp</URL> </Order> </Response> </
TKKPG>
```



3. The payment module receives an XML response to the create order operation and [redirects the client's browser to the TWEC PG page](#), the address of which is contained in the [URL parameter](#), to complete the payment. When going to this address, you must pass the following parameters:

- **OrderID** – order identifier received in the **OrderId** parameter; **SessionID** –
- session identifier received in the **SessionId** parameter.

An example of a call using the **GET method**:

```
https://TWPG.bank.com/index.jsp?  
ORDERID=828&SESSIONID=ECDE79578768ECFBF2897A0F44CC0CEFF
```

4. **TWEC PG** notifies the online store about the order status change using an **HTTP request** with the **OrderID**, **SessionID**, **Status parameters**, which is sent to the online store address specified when creating the order in [an additional order parameter](#).

An example of a call using the **GET method**:

```
http://127.0.0.1:5000/testPaymentModuleChangeStatus.jsp?  
ORDERID=828&SESSIONID=ECDE79578768ECFBF2897A0F44CC0CEFF&STATUS=ON-PAYMENT
```

Or the payment module requests information about the order status by performing the [GetOrderStatus](#) operation with a frequency of 3-5 s.

XML request example :

```
<?xml version="1.0" encoding="UTF-8"?>  
<TKKPG> <Request>  
  <Operation>GetOrderStatus</Operation>  
  <Language>RU</Language> <Order>  
    <Merchant>test</Merchant> <OrderId>828</OrderId>  
    <SessionID>ECDE79578768ECFBF2897A0F44CC0CEFF</SessionID> </Request> </TKKPG>
```

**TWEC PG** XML response example:

```
<?xml version="1.0" encoding="UTF-8"?>  
<TKKPG> <Response>  
  <Operation>GetOrderStatus</Operation>  
  <Status>00</Status> <Order> <OrderId>828</OrderId> <OrderStatus>ON-PAYMENT</OrderStatus> </Order> <AdditionalInfo>  
    <Receipt>BASE64-encode-info</Receipt> </AdditionalInfo> </Response> </TKKPG>
```

5. If 3D Secure authentication is used, **TWEC PG** sends requests to ACS to authenticate the client, after which it performs the transaction authorization procedure with the issuer through the payment system.
6. Depending on the result of transaction authorization, **TWEC PG** sets the order to [APPROVED / CANCELED / DECLINED status](#) and [redirects the client to the payment module page of the online store at the appropriate URL \(ApproveURL / CancelURL / DeclineURL\)](#).



7.TWEC PG sends an [authorization result notification to the online store](#) . 8. The payment module, having received the order status in the response to the **GetOrderStatus** operation or from the notification about the order status change, performs the **GetOrderInformation** operation.

XML request example :

```
<?xml version="1.0" encoding="UTF-8"?>
<TKKPG> <Request>
  <Operation>GetOrderInformation</Operation>
  <Operation> <Language>RU</Language> <Order>
    <Merchant>test</Merchant> <OrderId>828</OrderId> </Order>
    <SessionID>ECDE79578768ECFBF2897A0F44CC0CEF</SessionID>
    <ShowParams>true</ShowParams>
    <ShowOperations>false</ShowOperations>
    <ShowPositions>false</ShowPositions>
    <ClassicView>true</ClassicView> </Order> </Request> </TKKPG>
```

TWEC PG XML response example:

```
<?xml version="1.0" encoding="UTF-8"?>
<TKKPG> <Response>
  <Operation>GetOrderInformation</Operation>
  <Status>00</Status> <Order>

    <row>
      <id>828</id>
      <SessionID>ECDE79578768ECFBF2897A0F44CC0CEF</SessionID>
      <createDate>2018-02-14 14:15:37</createDate> <lastUpdateDate>2018-02-14
        14:33:26</lastUpdateDate> <payDate>null</payDate> <MerchantID>test</
        MerchantID> <Amount>2500</Amount> <Currency>840</Currency>
        <OrderLanguage>RU</OrderLanguage> <Description>xxxxxx</Description>
        <ApproveURL>/testPaymentModulePageReturn.jsp</ApproveURL>
        <CancelURL>/testPaymentModulePageReturn.jsp</CancelURL> <DeclineURL>
        testPaymentModulePageReturn.jsp</DeclineURL> <Orderstatus>APPROVED</
        Orderstatus> <RefundAmount>0</RefundAmount> <RefundCurrency> null</
        RefundCurrency> <ExtSystemProcess>0</ExtSystemProcess>
        <OrderType>Purchase</OrderType> <Fee>0</Fee> <RefundDate>0000-00-00
        00:00:00</RefundDate> <TWOTime>null </TWOTime> <OrderParams>

      <row>
        <PARAMNAME>AcctType</PARAMNAME>
        <VAL>4</VAL> </
        row>
      </OrderParams> </
      row>
    </Order>
  </Response>
</TKKPG>
```



9. The payment module displays on the site information about the order received in response to the **GetOrderInformation** operation.

To perform subsequent actions on an order, you can use operations such as **Refund**, **Reverse**, **GetOrderInformation**, **GetOrderStatus**.

### 8.1.2 Purchase with pre-authorization

Purchase with pre-authorization consists of the following stages: 1. Pre-authorization:

- 1.1. The payment module initiates the **CreateOrder** operation in **TWEC PG** with the specified the *PreAuth* value in the OrderType parameter .

XML request example :

```
<?xml version="1.0" encoding="UTF-8"?>
<TKKPG> <Request> <Operation>CreateOrder</
  Operation> <Language>RU</Language>
  <Order>

    <OrderType>PreAuth</OrderType>
    <Merchant>test</Merchant>
    <Amount>2500</Amount> <Currency>840</
      Currency> <Description>xxxxxxxx</
      Description> <ApproveURL>/
      testPaymentModulePageReturn.jsp</ApproveURL > <CancelURL>/
      testPaymentModulePageReturn.jsp</CancelURL > <DeclineURL>/
      testPaymentModulePageReturn.jsp</DeclineURL > <AddParams>
      <ChangeStatusURL>http://127.0.0.1:5000/testPaymentModuleChangeStatus.jsp</

    ChangeStatusURL>
      </AddParams>
    </Order>
  </Request>
</TKKPG>
```

- 1.2. **TWEC PG** generates an order identifier, a session identifier and generates an XML response containing the generated data, as well as the **URL** to which the payment module should redirect the client. **TWEC PG** XML response example:

```
<?xml version="1.0" encoding="UTF-8"?>
<TKKPG> <Response> <Operation>CreateOrder</
  Operation> <Status>00</Status> <Order>
  <OrderID>828</OrderID>

  <SessionID>ECDE79578768ECFBF2897A0F44CC0CEF</SessionID>
  <URL>https://TWPG.bank.com/index.jsp</URL> </Order> </Response> </
  TKKPG>
```



- 1.3. The payment module receives an XML response to the order creation operation and **redirects the client's browser to the [TWEC PG page](#)**, the address of which is contained in the **URL parameter**, to complete the payment. When navigating to this address, you must pass the following parameters: **OrderID** – order identifier received in the **OrderID parameter**; **SessionID**
- – session identifier received in the **SessionID parameter**.
  -

An example of a call using the **GET method**:

```
https://TWPG.bank.com/index.jsp?
ORDERID=828&SESSIONID=ECDE79578768ECFBF2897A0F44CC0CEFF
```

- 1.4. **TWEC PG** notifies the online store about the order status change using an **HTTP request** with the **OrderID, SessionID, Status parameters**, which is sent to the online store address specified when creating the order in [an additional order parameter](#).

An example of a call using the **GET method**:

```
http://127.0.0.1:5000/testPaymentModuleChangeStatus.jsp?
ORDERID=828&SESSIONID=ECDE79578768ECFBF2897A0F44CC0CEFF&STATUS=ON-PAYMENT
```

Or the payment module requests information about the order status by performing the **GetOrderStatus** operation with a frequency of 3-5 s.

XML request example : <?xml

```
version="1.0" encoding="UTF-8"?> <TKKPG>
<Request> <Operation>GetOrderStatus</
Operation> <Language>RU</Language>
<Order> <Merchant>test</Merchant>
<OrderID>828</OrderID> </Order>
<SessionID>ECDE79578768ECFBF2897A0F44CC0CEFF</
SessionID> </Request> </TKKPG>
```

**TWEC PG** XML response example: <?xml

```
version="1.0" encoding="UTF-8"?> <TKKPG>
<Response> <Operation>GetOrderStatus</
Operation> <Status>00</Status> <Order> <
OrderID>828</OrderID> <OrderStatus>ON-
PAYMENT</OrderStatus> </Order>
<AdditionalInfo> <Receipt>BASE64-encode-
info</Receipt> </AdditionalInfo> </Response>
</TKKPG>
```

- 1.5. If 3D Secure authentication is used, **TWEC PG** sends requests to ACS to authenticate the client, after which it performs the procedure for authorizing the transaction with the issuer through the payment system.



1.6. Depending on the result of transaction authorization, **TWEC PG** sets the order to the **PREAUTH-APPROVED/DECLINED/CANCELED status** and redirects the client to the payment module page of the online store at the appropriate URL ([ApproveURL / CancelURL / DeclineURL](#)).

**1.7. TWEC PG** sends a [result notification to the](#) online store [authorization](#)

1.8. The payment module, having received the order status in the response to the **GetOrderStatus** operation or from the notification about the order status change, performs the **GetOrderInformation operation**.

XML request **example** : <?xml

```
version="1.0" encoding="UTF-8"?> <TKKPG>
<Request> <Operation>GetOrderInformation</
  Operation> <Language>RU</Language>
  <Order> <Merchant> test</Merchant> <OrderId>828</
    OrderId> </Order>
  <SessionID>ECDE79578768ECFBF2897A0F44CC0CEF</
    SessionID> <ShowParams>true</ShowParams>
    <ShowOperations>false</ShowOperations>
    <ShowPositions>false</ShowPositions> <
      ClassicView>true</ClassicView> </Request> </TKKPG>
```

**TWEC PG** XML response example: <?xml

```
version="1.0" encoding="UTF-8"?> <TKKPG>
<Response> <Operation>GetOrderInformation</
  Operation> <Status>00</Status> <Order> <
    row>

    <id>828</id>
    <SessionID>ECDE79578768ECFBF2897A0F44CC0CEF</SessionID>
    <createDate>2018-02-14 14:15:37</createDate> <lastUpdateDate>2018-02-14
    14:33:26</lastUpdateDate> <payDate>null</payDate> <MerchantID>test</
      MerchantID> <Amount>2500</Amount> <Currency>840</Currency>
      <OrderLanguage>RU</OrderLanguage> <Description>xxxxxx</Description>
      <ApproveURL>/testPaymentModulePageReturn.jsp</ApproveURL>
      <CancelURL>/testPaymentModulePageReturn.jsp</CancelURL> <DeclineURL>/
        testPaymentModulePageReturn.jsp</DeclineURL> <Orderstatus>PREAUTH-
        APPROVED</Orderstatus> <RefundAmount>0</RefundAmount> <
        RefundCurrency>null</RefundCurrency> <ExtSystemProcess>0</
        ExtSystemProcess> <OrderType>PreAuth</OrderType> <Fee>0</Fee>
        <RefundDate>0000-00-00 00:00:00</RefundDate> <TWOTime>null</
        TWOTime> <OrderParams> <row> <PARAMNAME>AcctType</PARAMNAME>
        <VAL>4</VAL> </row> </OrderParams>
```



```
</row>
<Order>
</Response>
</TKKPG>
```

- 1.9. The payment module displays on the site information about the order received in response to the **GetOrderInformation** operation.

2. Post-authorization:

- 2.1. The payment module initiates the **Completion** operation in **TWEC PG** indicating \_\_\_\_\_ values of the **OrderId** and **SessionId** parameters received in response to the operation pre-authorization.

XML request **example** :

```
<?xml version="1.0" encoding="UTF-8"?>
<TKKPG>
<Request>
<Operation>Completion</Operation>
<Language>RU</Language>
<Order>
  <Merchant>test</Merchant>
  <OrderId>828</OrderId>
</Order>
<SessionId>ECDE79578768ECFBF2897A0F44CC0CEF</SessionId>
<Description>xxxxxx</Description>
</Request>
</TKKPG>
```

**TWEC PG** XML response example:

```
<?xml version="1.0" encoding="UTF-8"?>
<TKKPG> <Response> <Operation>Completion</Operation>
<Operation> <Status>00</Status>

<POSResponse>
  <l name="ResponseCode" value="001"/>
  <f name="F" value="491385 A"/>
  <f name="R" value="D"/> <f
  name="a" value="&F1000#&C643#&R01#"/> <f
  name="h" value="0010010090"/> <f name="t"
  value="4634791"/>
</POSResponse>
</Response> </TKKPG>
```

- 2.2. **TWEC PG** sends the **Completion** transaction to the authorization system.

- 2.3. Depending on the response of the authorization system, **TWEC PG issues an order APPROVED/DECLINED/CANCELED status .**

To follow up on an order, you can use the following:

operations like **Refund**, **Reverse**, **GetOrderInformation**, **GetOrderStatus**.

### 8.1.3 Periodic payment without participation of the payment module

The first payment for an order consists of the following steps:

1. The payment module initiates the **CreateOrder** operation in **TWEC PG** with the specified \_\_\_\_\_ the **Purchase** value in the **OrderType** parameter and those specified in the **AddParams** element additional parameters **OrderExpirationPeriod**, **Purchase.Recur.frequency**, **Purchase.Recur.endRecur**, **Purchase.Recur.period** and \_\_\_\_\_



### Purchase.Recur.removeOnDecline (for a description of the parameters, see [Create an order](#)).

XML request example : <?xml

```

version="1.0" encoding="UTF-8"?> <TKKPG>
<Request> <Operation>CreateOrder</
<Operation> <Language>RU</Language>
<Order> <OrderType> Purchase</
<OrderType> <Merchant>test</Merchant>
<Amount>2500</Amount> <Currency>840</
<Currency> <Description>xxxxxxxx</
<Description> <ApproveURL>/
    testPaymentModulePageReturn.jsp</
<ApproveURL> <CancelURL >/
    testPaymentModulePageReturn.jsp</
<CancelURL> <DeclineURL>/testPaymentModulePageReturn.jsp</
<DeclineURL> <AddParams> <ChangeStatusURL>http://127.0.0.1:5000/
    testPaymentModuleChangeStatus.jsp</
<ChangeStatusURL>
    <Purchase.Recur.frequency>0</Purchase.Recur.frequency>
    <Purchase.Recur.endRecur>20181014</Purchase.Recur.endRecur>
    <Purchase.Recur.period>2-0-2-0-0</ Purchase.Recur.period>
    <Purchase.Recur.removeOnDecline>true</Purchase.Recur.removeOnDecline> </
<AddParams> </Order> </Request> </TKKPG>
```

### 2.TWEC PG generates order id, session id and forms

An XML response containing the generated data, as well as the **URL** to which the payment module should redirect the client.

**TWEC PG** XML response example:

```

<?xml version="1.0" encoding="UTF-8"?>
<TKKPG> <Response> <Operation>CreateOrder</
<Operation> <Status>00</Status> <Order>
    <OrderId>828</OrderId>

    <SessionID>ECDE79578768ECFBF2897A0F44CC0CEF</SessionID>
    <URL>https://TWPG.bank.com/index.jsp</URL> </Order> </Response> <
TKKPG>
```

### 3. The payment module receives an XML response to the create order operation and [redirects the client's browser to the TWEC PG page](#), the address of which is contained in the **URL parameter**, to complete the payment. When going to this address, you must pass the following parameters:

- **OrderId** – order identifier received in the **OrderId parameter**; **SessionID** –
- session identifier received in the **SessionID parameter**.

An example of a call using the **GET method**:

```
https://TWPG.bank.com/index.jsp?
ORDERID=828&SESSIONID=ECDE79578768ECFBF2897A0F44CC0CEFF
```



4. **TWEC PG** notifies the online store about the order status change using an **HTTP** request with the **OrderID, SessionID, Status parameters**, which is sent to the online store address specified when creating the order in **an additional order parameter**.

An example of a call using the **GET** method:

```
http://127.0.0.1:5000/testPaymentModuleChangeStatus.jsp?  
ORDERID=828&SESSIONID=ECDE79578768ECFBF2897A0F44CC0CEFF&STATUS=ON-PAYMENT
```

Or the payment module requests information about the order status by performing the **GetOrderStatus** operation with a frequency of 3-5 s.

XML request **example** : <?xml

```
version="1.0" encoding="UTF-8"?> <TKKPG>  
<Request> <Operation>GetOrderStatus</  
Operation> <Language>RU</Language>  
<Order> <Merchant> test</Merchant>  
<OrderID>828</OrderID> </Order>  
<SessionID>ECDE79578768ECFBF2897A0F44CC0CEF</  
SessionID> </Request> </TKKPG>
```

**TWEC PG** XML response example: <?xml

```
version="1.0" encoding="UTF-8"?> <TKKPG>  
<Response> <Operation>GetOrderStatus</  
Operation> <Status>00</Status> <Order> <  
OrderID>828</OrderID> <OrderStatus>ON-  
PAYMENT</OrderStatus> </Order>  
<AdditionalInfo> <Receipt>BASE64-encode-  
info</Receipt> </AdditionalInfo> </Response>  
</TKKPG>
```

5. If 3D Secure authentication is used, **TWEC PG** sends requests to ACS to authenticate the client, after which it performs the transaction authorization procedure with the issuer through the payment system.
6. Depending on the result of transaction authorization, **TWEC PG** sets the order to **APPROVED / CANCELED / DECLINED status** and redirects the client to the payment module page of the online store **at the appropriate URL (ApproveURL / CancelURL / DeclineURL)**.

7. **TWEC PG** sends an authorization result notification to the online store . 8. The payment module, having received the order status in the response to the **GetOrderStatus** operation or from the notification about the order status change, performs the **GetOrderInformation operation**.

XML request **example** :

```
<?xml version="1.0" encoding="UTF-8"?>  
<TKKPG> <Request>  
 <Operation>GetOrderInformation</  
Operation> <Language>RU</Language>
```



```
<Order>
  <Merchant>test</Merchant>
  <OrderId>828</OrderId>
</Order>
<SessionID>ECDE79578768ECFBF2897A0F44CC0CEF</SessionID>
<ShowParams>true</ShowParams>
<ShowOperations>false</ShowOperations>
<ShowPositions>false</ShowPositions>
<ClassicView>true</ClassicView>
</Request>
</TKKPG>
```

**TWEC PG XML response example:**

```
<?xml version="1.0" encoding="UTF-8"?>
<TKKPG> <Response>
  <Operation>GetOrderInformation</Operation>
  <Status>00</Status> <Order>

    <row>
      <id>828</id>
      <SessionID>ECDE79578768ECFBF2897A0F44CC0CEF</SessionID>
      <createDate>2018-02-14 14:15:37</createDate> <lastUpdateDate>2018-02-14
      14:33:26</lastUpdateDate> <payDate>null</payDate> <MerchantID>test</
      MerchantID> <Amount>2500</Amount> <Currency>840</Currency>
      <OrderLanguage>RU</OrderLanguage> <Description>xxxxxxxx</Description>
      <ApproveURL>/testPaymentModulePageReturn.jsp</ApproveURL>
      <CancelURL>/testPaymentModulePageReturn.jsp</CancelURL> <DeclineURL>/
      testPaymentModulePageReturn.jsp</DeclineURL> <Orderstatus>APPROVED</
      Orderstatus> <RefundAmount>0</RefundAmount> <RefundCurrency> null</
      RefundCurrency> <ExtSystemProcess>0</ExtSystemProcess>
      <OrderType>Purchase</OrderType> <Fee>0</Fee> <RefundDate>0000-00-00
      00:00:00</RefundDate> <TWOTime>null </TWOTime> <OrderParams>
```

```
    <row>
      <PARAMNAME>AcctType</PARAMNAME>
      <VAL>4</VAL> </
    row>
  </OrderParams> </
row>
</Order>
</Response>
</TKKPG>
```

9. The payment module displays on the site information about the order received in response to the **GetOrderInformation** operation.

Each next payment for the order will be made automatically after the expiration of the time period specified when creating the order in the additional parameter **Purchase.Recur.period** of the **AddParams** element .



## 8.2 Examples of implementing administrative operations in PHP

An example of the implementation in the PHP programming language of administrative operations **Create an order** and **Get the status of an order** sent to an access point  
**Exec:**

```
<?
php // //

Post can be moved to a separate function that uses sockets (no third party libraries needed) // The function returns a
simplexml object containing the parsed response xml. // function PostQW($hostname,$port,$data){ $path = '/Exec';
$content = ""; // Establish a connection to the server $hostname $fp = fsockopen($hostname, $port, $errno, $errstr,
30); // Check connection establishment if (!$fp) die('<p>' . $errstr . '</p>');

// HTTPS request header $headers
= 'POST ' . $path . ' HTTP/1.0\r\n'; $headers .=
'Host: ' . $hostname . "\r\n"; $headers .= "Content-
type: application/x-www-form-urlencoded\r\n"; $headers .= 'Content-Length:
'.strlen($data)."\r\n\r\n";

// Send an HTTPS request to the server
fwrite($fp, $headers . $data); // Get response
while ( !feof($fp) ) $inStr= fgets($fp, 1024); //
Strip HTTPS response headers. This line
can be commented out if you need to parse
the header // In this case, you need to cut the answer if (substr($inStr,0,7)!=="<TKPG>") continue; // $content .=
$inStr; } // Close the connection fclose($fp); // // You can use the simplexml library to parse the response //
Simplexml documentation - https://us3.php.net/manual/en/book.simplexml.php $xml =
simplexml_load_string($content); // Load data from string return ($xml); } // Create an Xml order to describe the
order parameters: $data='<?xml version="1.0" encoding="UTF-8"?>'; $data.= "<TKPG>"; $data.= "<Request>";
$data.= "<Operation>CreateOrder</Operation>"; $data.= "<Language>RU</Language>"; $data.= "<Order>";
$data.= "<OrderType>Purchase</OrderType>"; $data.= "<Merchant>POS_1</Merchant>"; $data.= "<Amount>2500</
Amount>"; $data.= "<Currency>840</Currency>"; $data.= "<Description>xxxxxxxx</Description>";
$data.= "<ApproveURL>/testshopPageReturn.jsp</ApproveURL>"; $data.= "<CancelURL>/testshopPageReturn.jsp</
CancelURL>"; $data.= "<DeclineURL>/testshopPageReturn.jsp</DeclineURL>"; $data.= "</Order></Request><
TKPG>"; //
```



```

// Create Order -
$hostname = '10.7.2.60'; // Server address with a servlet for working with orders
$port="5556"; // Port
// Information about the results of order creation in the Response object
// Examples of getting the required fields:
$xml=PostQW($hostname,$port,$data);
>Status=$xml->Response->Status; $OrderID=$xml-
>Response->Order->OrderID; $SessionID=$xml->Response-
>Order->SessionID;
// Query the status of the order just received
$data=<?xml version="1.0" encoding="UTF-8"?>;
$data.= "<TKKPG>";
$data.= "<Request>";
$data.= "<Operation>GetOrderStatus</Operation>";
$data.= "<Order>";
$data.= "<Merchant>POS_1</Merchant>";
$data.= "<OrderID>".$OrderID."</OrderID>";
$data.= "</Order>";
$data.= "<SessionID>".$SessionID."</SessionID>";
$data.= "</Request></TKKPG>";
$xml=PostQW($hostname,$port,$data);
$OrderStatus=$xml->Response->Order->OrderStatus;
?>
  
```

## 8.3 XMLOut message parameters

The table shows a set of **XMLOut** message parameters with results transaction authorization:

Name parameter	Required Example value		Description
OrderID	Yes	4584-87854	Unique order number
OrderIDEncrypted	Not	@encrypted@1@039F750B64668D86	Encrypted number value order
TransactionType	Yes	Purchase	Type of transaction
OrderStatus	Yes	APPROVED or DECLINED	Order status
OrderStatusScr	Yes	Approved or Rejected	Text description of the state order
PAN	Yes	455555XXXXXX5487 Masked	card number
brand	Yes	VISA MC AmEx JCB MIR	Payment system
language	Not	RU - Russian EN - English UK - Ukrainian etc.	Language of the interface To be completed in accordance with RFC 1766 two-character language code
PurchaseAmount	Yes	15210	Transaction amount transferred payment module, in the minimum transaction currency units (RUR - pennies, USD - cents, etc.). AT in case of transaction correction - modified transaction amount



Name parameter	Required	Example value	Description
PurchaseAmountScr	Yes	152.10	Amount transactions, formatted display to client for
Fee	Not	100	Commission amount in minimum transaction currency units (RUR - pennies, USD - cents, etc. e)
FeeScr	Not	1.00	Commission amount, formatted for display to the client (RUR - rubles, USD - dollars, etc. e)
Currency	Yes	643 - rubles 840 - US dollars etc.	Transaction currency code
CurrencyScr	Yes	U.S. dollar Russian ruble etc.	Text description currencies transactions
Name	Not	Sidorov Ivan I.	Client's name on the map
TranDateTime	Yes	15/02/2003 15:37 Date	and transaction fulfillment time
ApprovalCode	Yes	548789	Confirmation code (receipt number)
ApprovalCodeScr	Yes	548789	Confirmation code
ThreeDSVerification	Yes	Y N U A	Map check execution flag using 3D Secure technology. Status execution of U/A transactions contained in the PAREs message.  <b>Attention!</b> Parameter missing from XML message, for if fulfillment transactions used by EMV 3D authentication client Secure v2.x
ResultOperation	Yes	operation result operation result	
ThreeDSStatus	Not	APPROVED or DECLINED	Check status by technology 3D secure. To be filled in if performing the check.  <b>Attention!</b> Parameter missing from XML message, for if fulfillment transactions used by EMV 3D authentication client Secure v2.x
response code	Not	0402	Transaction result code. If during installation connections with authorization the system is not connected, then returns meaning ResponseCode=001 parameter
ResponseDescription	Not	Not enough funds on the account	Description of the authorization denial. Transmitted in interface language client. To be filled in if transaction rejection
Response_g	Not	Russia	The text field that in additional information (for example, currency



Name parameter	Required Example value		Description
			account, account number, country card holder, etc.). Meaning transferred from the authorization systems
AcqFee	Not	100	The amount of the acquiring commission in minimum units of currency transactions (RUR - kopecks, USD - cents, etc. e)
AcqFeeScr	Not	1.00	The amount of the acquiring commission, formatted for display to the client (RUR - rubles, USD - dollars, etc. e)
Merchant TranID	Not	31333435373837393 0383734303 0303030303030	Unique transaction number client. Parameter generated <b>TWEC PG</b>
OrderDescription	Not	Purchase	Text description of the order
Response_f	Yes	123456	Prepaid code
ShopOrderId	Not	87854	Order number in the payment system module
AuthorizationRespons eCode	Yes	**	Authorization host response code

This document is signed with a bank certificate (depending on settings).

An example of a final XML message for notifying stores of the result transaction authorization:

```
<Message date="25/01/2017 10:15:58">
  <Version>1.0</Version>
  <OrderId>5973</OrderId>
  <TransactionType>Purchase</TransactionType>
  <RRN>713091</RRN>
  <PAN>4555XXXXXX1903</PAN>
  <PurchaseAmount>5000</PurchaseAmount>
  <Fee>100</Fee>
  <FeeScr>1.00</FeeScr>
  <Currency>840</Currency>
  <TranDateTime>25/01/2017 10:15:58</TranDateTime>
  <ResponseCode>001</ResponseCode>
  <ResponseDescription>Successful transaction </ResponseDescription>
  <Brand>VISA</Brand>
  <OrderStatus>APPROVED</OrderStatus>
  <ApprovalCode>340623 A</ApprovalCode>
  <AcqFee>0</AcqFee>
  <AcqFeeScr>0</AcqFeeScr>
  <ResultOperation>Result of operation</ResultOperation>
  <MerchantTranID>31333435373837393038373430303030303030</MerchantTranID>
  <OrderDescription>xxxxxxxx</OrderDescription>
  <ApprovalCodeScr>340623</ApprovalCodeScr>
  <PurchaseAmountScr>50.00</PurchaseAmountScr>
  <CurrencyScr> US Dollar</CurrencyScr>
  <OrderStatusScr>Approved</OrderStatusScr>
  <ThreeDSVerificaion>Y</ThreeDSVerificaion>
  <ThreeDSStatus>Approved</ThreeDSStatus>
  <Name>Sidorov Ivan I.</Name>
  <ShopOrderId>40727</ShopOrderId>
  <OrderIDEncrypted>@encrypted@1@039F750B64668D86</OrderIDEncrypted>
  <AuthorizationResponseCode>1</AuthorizationResponseCode>
</Message>
```



**Attention!** If you use the ability to add an external map to the database authorization system after a successful transaction, then in the final The XML message is added to the **CardRegistrationResponse** element:

```
<CardRegistrationResponse>
  <MaskedPAN>123456*****3452</MaskedPAN>
  <CardUID>9215EA569F97E711842***5056B3006F</CardUID>
  <Brand>MC</Brand>
</CardRegistrationResponse>
```

where:

- **MaskedPAN** - masked card number of the sender / payer;
- **CardUID** – sender's/payer's card identifier;
- **Brand** – name of the IPS to which the sender's card belongs / payer.

## 8.4 Parameters for connecting to a test TWEC PG server

### Connection options

Access addresses to the test payment gateway are shown in the table:

Payment gateway addresses	URL
The address of the payment gateway page to which redirects the client to execute order payment	<a href="https://pg.compassplus.com:3464/index.jsp">https://pg.compassplus.com:3464/index.jsp</a>
Access point address to the payment gateway for fulfillment of administrative requests for client certificate	<a href="https://pg.compassplus.com:3444/exec">https://pg.compassplus.com:3444/exec</a>
Access point address to the payment gateway for fulfillment of administrative requests for password	<a href="https://pg.compassplus.com:3464/ExecPasswordAuth">https://pg.compassplus.com:3464/ExecPasswordAuth</a>

### test cards

Information about test cards is given in the table:

Card number	Term actions (YYMM)	CVV2/CVC2 value	Test Scenario
7777770000000020	1907	729	The card is not subscribed to 3-D Secure program
7777770000000038	1907	475	The card is not subscribed to 3-D Secure program
7777770000000046	1907	158	On the account not enough funds for the operation for
7777770000000053	1908	423	On the account not enough funds for the operation for
7777770000000061	1907	843	Exceeded use limit available Money



Card number	Term actions (YYMM)	CVV2/CVC2 value	Test Scenario
77777700000000079	1907	357	Exceeded use limit available Money
77777700000000087	1908	135	Authorization unavailable host
77777700000000095	1907	376	Authorization unavailable host
77777700000000004	1907	151	The card is subscribed to the program 3D Secure, successful performing an operation
77777700000000012	1907	409	The card is subscribed to the program 3D Secure, successful performing an operation

Additional information on test cards:

- The brand of the card is VISA.
- Financial confirmation for the transaction is not required.
- CVV2 / CVC2 input validation is not performed.
- Requires 3-D Secure authentication.
- Transactions with status "A" (Attempt) are rejected, the order is set **DECLINED** status .
- Making a purchase is prohibited if the card is not subscribed to 3-D Secure.
- The purchase is prohibited if the card has not passed the 3-D Secure verification.
- The purchase is prohibited if there is no response from the IPU.
- Static authentication is used by card password, the value of which is *test*.

## Test RFTs

List of merchants (**MerchantID**), requests from which should be sent to the access point  
<https://pg.compassplus.com:3444/Exec> :

- test;
- test1;
- test2;
- test3;
- test4.

**Attention!** When sending a request to an **Exec** access point , merchant authentication performed on a client certificate.



List of merchants (**MerchantID**), requests from which should be sent to the access point <https://pg.compassplus.com:3464/ExecPasswordAuth>:

- test5;
- test6;
- test7;
- test8;
- test9.

**Attention!** When sending a request to the **ExecPasswordAuth** access point, merchant authentication is performed using the password 12345.