Direct Carrier Billing Protocol
Protocol for information exchange between the system and the merchant

Used Requests

The following HTTP requests are used for information exchange between the System and the Merchant:

Request Direction	Format	URL
Merchant → System	Merchant's request to the System for payment from a mobile account, POST	URL_SYSTEM/partner/SERVICE_ID/pay
System → Merchant	System's request to the Merchant for payment notification, POST	Provided by the partner
Merchant → System	Merchant's request to the System to obtain payment status, POST	URL_SYSTEM/partner/SERVICE_ID/check_pay
Merchant → System	Merchant's request to the System for a refund of a previously completed payment, POST	URL_SYSTEM/partner/SERVICE_ID/make_refund
Merchant → System	Request for an operations registry for a specified period, GET	Described in the request details below

URL_SYSTEM – provided upon connection.
SERVICE_ID – provided upon connection, unique for each mobile network operator.

HTTP request from the Merchant to the System for payment from a mobile account

Parameter	Description
orderid	Unique transaction ID on the Merchant's platform. String, up to 20 characters long.
goodphone	Merchant ID. Unique for each mobile network operator, assigned upon connection. String, up to 20 characters long.
ctn	11-digit mobile phone number of the buyer used for payment. For example, 79031234567.
smstext	<Merchant Prefix><space><Account/Order Number in the Merchant's system><space> <Amount to be paid> Merchant Prefix. Unique for each mobile network operator, assigned upon connection. Alphanumeric, up to 20 characters long.
dt	(date and time) – date of the request in the format yyyyMMddHHmmss. Moscow time.
control	MD5 hash (orderid+goodphone+ctn+smstext+dt+secret), where "+" represents concatenation.
merchant_site	Address of the Partner's website from which the payment is made.

The system verifies the request from a security perspective. If the security check fails, the system returns HTTP Status 404 to the Merchant's request.

In all other cases, the system generates a response in XML format, encoded in UTF-8 (Content-Type: application/xml):

```
<?xml version="1.0" encoding="UTF-8"?>
<response>
        <result>result</result>
        <descr>description</descr>
        <id>id</id>
</response>
```

Parameter	Description	Mandatory Parameter
result	Result code of the request processing.	*
descr	0 – successful initiation, in all other cases – error.	
id	Description of the returned result.	Mandatory for result=0

HTTP request from the System to the Merchant for payment notification

Parameter	Description
id	Unique request identifier in the system. Matches the one received above.
phone	11-digit mobile phone number of the buyer used for payment, for example, 79031234567.
result	Payment status: • 0 – successful payment / successful refund; • Any value other than 0 – error code.
control	MD5 hash (id+phone+result+secret), where "+" represents concatenation.
cmd	For the described request, cmd = status.

In response to the HTTP request, the Merchant generates a response in XML format, encoded in UTF-8 (Content-Type: text/plain):

```
<?xml version="1.0" encoding="UTF-8"?>
<response>
        <result>result</result>
        <descr>description</descr>
</response>
```

Parameter	Description	Mandatory Parameter
result	Result code of the request processing. It can have the following values: **0** – the request was successfully received and processed by the Merchant. **1** – temporary error during request processing (the request should be retried later). **2** – permanent error during request processing (e.g., incorrect request parameters).	*
descr	Error description during request processing.	

Repeated HTTP requests from the System to the Merchant for payment notification are made in case of a temporary error during request processing in the following mode:
Intervals between attempts (seconds) - 10, 30, 60, 60, 60, 60, 60, 300, 300, 300, 3600.
Within a period of 5 days.

HTTP request from the Merchant to the System to obtain payment status

Parameter	Description
orderid	Unique transaction ID on the Merchant's platform. String, up to 20 characters long.
dt	(date and time) – request creation date in the format yyyyMMddHHmmss. Moscow time.
control	MD5 hash (orderid+dt+secret), where "+" represents concatenation.

The system verifies the request from a security perspective. If the security check fails, the system returns HTTP Status 404 to the Merchant's request.
In all other cases, the system generates a response in XML format, encoded in UTF-8 (Content-Type: application/xml):

```
<?xml version="1.0" encoding="UTF-8"?>
<response>
        <result>result</result>
        <sum>sum</sum>
        <error>error</error>
        <descr>description</descr>
        <id>id</id>
</response>
```

Parameter	Description
result	Result code of the request processing (0 – success, 1 – error).
error	0 — operation successful. 1 — operation in progress. 2 — payment error. 3 — operation with the specified orderid not found. 4 — a refund has been processed for the operation (partial or full). -1 — system error.
sum	Paid amount.
descr	Error description.
id	Unique request identifier in the system. Not empty if result=0.
refund_details	Array of successfully processed refund operations.

Explanation: The system's response will include the status of the original successful operation, as well as an array of successful statuses for processed refund operations (only final successful ones).

Example of a response for an operation in which a partial refund was processed:

```
<?xml version='1.0' encoding='UTF-8'?>
<response>
    <result>0</result>
    <error>0</error>
    <descr></descr>
    <sum>100.00</sum>
    <id>11111</id>
    <refund_details>
        <refund>
            <result>0</result>
            <sum>50.00</sum>
            <error>4</error>
            <descr></descr>
            <id>11112</id>
        </refund>
    </refund_details>
</response>
```

HTTP request from the Merchant to the System for a refund of a previously completed payment

Parameter	Description
orderid	Unique transaction ID on the Merchant's platform. String, up to 20 characters long.
amount	Refund amount (not exceeding the amount of the "parent" operation).
dt	(date and time) – request creation date in the format YYYYMMDDHHmmss / YYYY-MM-DD HH:mm:ss.
control	MD5 hash (orderid + amount + dt + secret), where "+" represents concatenation, and secret is a secret code assigned to each partner account.

The system verifies the request from a security perspective. If the security check fails, the system returns HTTP Status 404 to the Merchant's request.
In all other cases, the system generates a response in XML format, encoded in UTF-8 (Content-Type: application/xml).

Example response:
```
<?xml version='1.0' encoding='UTF-8'?>
<response>
        <result>0</result>
        <id>135224120</id>
        <orderid>1211129343412test5</orderid>
</response>
```

Parameter	Description	Mandatory Parameter
id	Operation ID in the system.	Mandatory for result=0

result	Result code of the request rocessing.
	Possible values:
	   0 – successful refund,
	   2 – refund is being processed,
	   Any other value – error.
		*

orderid	Unique transaction ID on the Merchant's platform.	
descr	Description of the returned result.	In case of an error

HTTP request for the operations registry for a specified period

Parameter	Parameter Name
TYPE (xml, json, csv)	Registry type
SERVICE_ID (number)	Partner ID in the system
DT_START (dd.mm.yyyy hh:mm)	Start date and time of the period
DT_END (dd.mm.yyyy hh:mm)	End date and time of the period
HASH (DT_START+DT_END+SecretKey)	Checksum

The request is sent to -

URL_SYSTEM/reestr/TYPE?SERVICE_ID=SERVICE_ID&DT_START=DT_START&DT_END=DT_END
&HASH=HASH

In response to the request, the registry for the specified period will be provided in the requested format