# SMSHUB Agent Protocol

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## **Description**

Requests 1-3 are sent by the smshub server to the agent server. You can use both the http and https protocols. Each request has a key parameter. The key can be obtained in your personal account.

URL - https://SMSHUB,

there SMSHUB may be agent.ru:port/smshub or agent.ru/smshub.php

The requirements are as follows:

- the request/response format must be JSON
- use UTF-8 encoding.
- use the user-agent header in each request to the smshub server.
- use the gzip compression method in each request/response.

#### Field types:

int number is an integer value in the range from -2,147,483,648 to 2,147,483,647 Uint number is an unsigned integer value in the range from 0 to 2,147,483,647 long number is an integer value in the range from -9 223 372 036 854 775 808 to 9 223 372 036 854 775 807

**Ulong** number is an unsigned integer value in the range from 0 to 9 223 372 036 854 775 807

**cur** number is a real value containing 2 decimal signs for rubles or 4 decimal signs for dollars, e.g. 134.66

**boolean** is a literal accepting the true or false values **string** is a string value of unlimited length

# General actions on the example of the vk service (VKontakte)

- 1. One every 10-20 seconds the smshub server will send a GET\_SERVICES request (request 1).
- 2. Furthermore, if your server returns a non-zero VK quantity we will send a GET\_NUMBER request to your server based on the order of priority (request 2).
- 3. For example, you give us the number 79281234567 for VK. From this moment onwards you are required to start sending all incoming messages meant for 79281234567 to the smshub server (request 4).
  - The logic behind deciding whether a message is for VK or another service must be in one place. We have the constantly updating FILTER for SMS. It is easier to keep that filter up-to-date in one place.
- 4. After using the phone number we will send you the finish activation status. A status equal to 3 means that a user has successfully received an SMS and that the reward has been added to your agent balance.
  - Please read Appendix 4 for information about other statuses.

## 1. Quantity request (GET\_SERVICES)

The request provides information about how many numbers are available for selling. A POST request is performed by the smshub server to the agent server.

#### Request fields:

Field	Туре	Necessity	Description/Value
action	string	Required	GET_SERVICES
key	string	Required	Protocol key

#### Response fields:

Field	Туре	Necessity	Описание
status	string	Required	The response status. Appendix 5
countryList	array	Required	List of countries

#### countryList:

Поле	Тип	Обязательность	Описание
country	string	Required	Appendix 1
operatorMap	Associative array	Required	Key - Operator Appendix 2 value is an associative array of services*

<sup>\*</sup>An Associative array of services: key is the short name of the service (see appendix 3), value is the quantity of numbers available for the service (type-int).

**WARNING**. It is required and expected that you return the current quantity of simultaneously available sim cards. For example, if you have a sim bank with 512 ports, but there are only 60 gsm modules, you must send back a quantity of 60, but not 512. If you violate this condition, the system will automatically block number reception from your server for 30 minutes.

```
Request example:
 "action": "GET_SERVICES",
 "key": "123"
Response example:
 "countryList": [
    "country": "russia",
"operatorMap": {
    "beeline": {
  "vk": 10,
  "ok": 15,
        "wa": 20
      },
"megafon": {
        "vk": 0,
        "ok": 10,
        "wa": 32
      }
           }
    "country": "ukraine",
"operatorMap": {
     "life": {
    "vk": 0,
        "ok": 10,
"wa": 32
 ], '
"status": "SUCCESS"
```

## 2. Number request (GET\_NUMBER)

A POST request is performed by the smshub server to the agent server.

Request fields:

Field	Туре	Necessity	Description/Value
action	string	Required	GET_NUMBER
key	string	Required	protocol key
country	string	Required	Appendix 1
service	string	Required	Appendix 3
operator	string	Required	Appendix 2
sum	cur	Required	The amount that you will receive for a successfully sold service
currency	uint	Required	Appendix 6
exceptionPhoneSet	array	Optional	The list of prefixes that you must NOT provide when a number is requested

## Response fields:

Field	Туре	Necessity	Description
status	string	Required	Response status. Appendix 5
number	Ulong	Required	Phone number with the country code
activationId	Ulong	Required	Activation Id in the agent's system

<sup>\*</sup> If we include any data in exceptionPhoneSet, for instance 7918 and 7928, that means that you exclude all phone numbers with these prefixes from your pool of available numbers (in this case 7918 and 7928). The length of the prefixes can be different and can be more than the default prefix length of the country code (for example: 792831).

```
Request example:
{
  "country": "russia",
  "operator": "mts",
  "service": "vk",
  "sum": 20.00,
  "action": "GET_NUMBER",
  "currency": 643,
  "key": "1234"
```

## 3. Finishing activation (FINISH\_ACTIVATION)

A POST request is performed by the smshub server to the agent

#### Request fields:

Field	Туре	Necessity	Description/Value
action	string	Required	FINISH_ACTIVATION
key	string	Required	protocol key
activationId	Ulong	Required	Activation Id received in the second request
status	Uint	Required	Activation status. Appendix 4

#### Response fields:

Field	Туре	Necessity	Description
status	string	Required	Response status. Appendix 5

\* The control of the activation process is done only by the smshub server. Sometimes, for some possible reason (e.g. network issues), we may not receive a response from your server. Therefore, when the smshub server sends the finish activation request again you must check the activation by id on your side and, if you have this activation, send SUCCESS response status (idempotence law).

```
Request example:
{
    "activationId": 100,
    "status": 3,
    "action": "FINISH_ACTIVATION",
    "key": "123"
}

Response example:
{
    "status": "SUCCESS"
}
```

## 4. SMS delivery to the smshub server (PUSH\_SMS)

A POST request is performed by the agent server to the smshub server. https://agent.unerio.com/agent/api/sms

#### Request fields:

Field	Туре	Necessity	Description/Value
action	string	Required	PUSH_SMS
key	string	Required	Protocol key
smsld	Ulong	Required	SMS Id in the agent's system
phone	Ulong	Required	The phone number that receives the SMS, with the country code
phoneFrom	string	Required	The phone number from which the SMS was sent (it can be a letter naming)
text	string	Required	SMS text

#### Response fields:

Field	Туре	Necessity	Description
status	string	Required	Response status. Appendix 5

```
Request example:

{
    "smsId": 1,
    "phoneFrom": "Vk",
    "phone": 79281234567,
    "text": "VK: 33708 – your code for VKontakte registration», "action":
    «PUSH_SMS",
    "key": "12345"
}

Response example:
{
    "status": "SUCCESS"
}
```

If you receive a response with the SUCCESS status then mark the SMS as successfully delivered in your database and do not send it again. If the returned status is different from SUCCESS then keep sending the SMS again with 10-seconds delays until you receive a response with the SUCCESS status.

## **Protocol testing**

#### **MUST-READ**

After implementing the protocol the smshub developers will test it. Write your url address to the smshub support when you are ready. From that moment onwards your server must be available 24/7. We will start the test as soon as possible.

You must pre-test implementation of protocol. Firstly send your url to our support. After that open the link <a href="https://agent.unerio.com/docs.html">https://agent.unerio.com/docs.html</a>. You can test methods of getting numbers, getting quantity, finishing activation, and also you can check the efficiency of sms delivery to our server.

List of tests to be conducted:

### 1. Correct processing of finishing activation request.

Activation is managed ONLY by smshub. For reasons beyond our control (network problems), we may not receive a response from you about a successful status change. Therefore, if smshub sends the finishing activation status again, you should check if the activation exists according to your id, and if it does, then send status SUCCESS. Also, you should NOT complete the activation by yourself. Only the finishing request from smshub should complete the activation on your side.

#### 2. SMS test.

Once a text message has entered your database, you should forward it to us as soon as possible. If you receive a text message, send it to us immediately.

If you receive a response with the status SUCCESS, then mark the text message as successfully delivered in your database and do not send it again. If you get a status different from SUCCESS, then repeat the request with a delay of 10 seconds until you get the status SUCCESS.

If you send one and the same SMS after we reply with SUCCESS status - test failed.

#### 3. Types of fields.

Carefully check the types of fields you send through the protocol. If the protocol description says that the field is of numeric type, and you send *smsld*: «123» - **test failed**.

#### 4. A phone number should contain the country code.

The number field in the phone number request and the phone field in the sms delivery request must be NUMERIC and with the country CODE.

#### 5. Time of providing a number from you should be minimal

If the time of providing a number exceeds 3 seconds – test failed.

## 6. The quantity of numbers returned by request 1 should reflect the real situation.

If you return 100 vk numbers and there are actually 30 of them, then 70 requests will return with a NO\_NUMBERS response – **test failed**.

## 7. Testing excluding prefixes.

You must process the exceptionPhoneSet field correctly when requesting GET\_NUMBER. If you provide a phone number which prefix is on the list – **test failed**.

## **Appendix 1. List of countries**

Full list of countries https://smshub.org/countries

If you provide country that is not present in the list, please contact our technical support.

## **Appendix 2. List of operators**

Full list of operators https://smshub.org/countries

If you provide an operator that is not present in the list, please contact our technical support.

\*\*"Any" operator should only be returned if you do not have a an opportunity to divide operators by some specific country.

If you provide a country with operators division, you cannot return any for that country.

If you have started to provide a country with operators division, it will not be possible to change response for this country to "any" without contacting tech support.

If you have started to provide a country without operator division, i.e. you send any, it will not be possible to switch to operator division for this country without contacting technical support.

## Appendix 3. List of abbreviated services' names

Full list of services https://smshub.org/countries

## **Appendix 4. Activation status**

Used when activation finishing is requested.

Status	Value
1	No longer provide numbers for that service
3	Successfully sold
4	Cancelled
5	Returned

- **Status 1** Number cancelation. No need to provide a number anymore. Possible reason for cancelation is that the number has already been sold for this service earlier.
- **Status 3** The number has been successfully sold for the service. User has successfully received sms and you have received a reward in your smshub account.
- **Status 4** Number canceled. You can give this number to us 3 more times (that is only 4 times in total if it was canceled with status 4).

Possible reason for cancelation is that the number is not suitable for the user or was already registered in the service earlier.

**Status 5** - Refund to a user for the number. There are cases when the user is refunded for activation. In this case we will notify you about it with status 5.

## Appendix 5. Request status

Status field value in the requests' responses:

status	Description
SUCCESS	Request successfully completed
ERROR	Error occured during the request perfomance. You need to fill the error field with the error description.
NO_NUMBERS	No numbers available. You can only return the status to a number receiving request.

```
General format of a successful response to a request:

{
    "status": "SUCCESS",
    //data
}

General format of a response when an error occurs:

{
    "status": "ERROR",
    "error": "error description"
}
```

## **Appendix 6. Currency**

Indicates the currency with which the number is purchased. It is transmitted in the ISO-4217 numeric format.

List of supported currencies and values:

Currency name	Parameter value
Russian ruble	643
US Dollar	840