
Read the Docs Template Documentation

Release 1.0

Read the Docs

Oct 01, 2020

CONTENTS

1	Common information	1
1.1	HTTP notifications to merchant servers	1
1.2	Requests from merchant servers	1
1.3	Carrier identifiers	2
2	Mobile Subscriptions	7
2.1	Starting subscription on Click flow	7
2.2	Starting subscription on PIN flow	9
2.3	Starting subscription via SMS flow (MO SMS)	11
2.4	Renewal of subscription	12
2.5	Deactivation of subscription	13
2.6	Subscriber status checking via API request	14
2.7	Deactivation via API request	15
3	One time payment (OTP)	17
3.1	Order via CLICK, SMS, PIN, USSD	17
3.2	MT SMS delivery report for MT based billing	18
4	SMS Response to order	21

COMMON INFORMATION

Megasyst Aggregation Platform(MAP) offers any merchant(service-provider) to provide either One-time payment(One-time purchase) or Subscription-based content service(s) by using direct mobile carrier connectivities via API with notifications.

The MAP provides following communication channels:

- HTTP notifications to merchant servers,
- HTTP REST API for management and analytics,
- HTTP redirection API for redirecting mobile users via Click(WAP) or PIN-submit(WiFi) flows,
- E-mail notifications.

1.1 HTTP notifications to merchant servers

The MAP notifies merchant by configured HTTP method regarding every significant event(example: starting or stopping of subscription, complaint, withdrawals and etc.) and waits **HTTP 200** status in the response.

HTTP notifications available:

- HTTP or HTTPS protocol
- GET or POST method
- WWW or JSON data format

IMPORTANT

For Country code(provided as two-letter code defined in ISO 3166-1).

1.2 Requests from merchant servers

Merchant can send requests to Megasyst's HTTP API with authorization token in the header.

Header format is:

- Authorization: Partner XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

1.3 Carrier identifiers

1.3.1 Armenia

Carrier	ID
Beeline	28301
Vivacell (MTS)	28305
Ucom	28310

1.3.2 Azerbaijan

Carrier	ID
Azercell	40001
Bakcell	40002
Narmobile	40004

1.3.3 Bahrain

Carrier	ID
Batelco	42601
Viva	42604

1.3.4 Belarus

Carrier	ID
A1 (Velcom)	25701
Life	25704
MTS	25702

1.3.5 Estonia

Carrier	ID
Elisa	24802
EMT	24801
Tele2	24803

1.3.6 Georgia

Carrier	ID
Beeline	28204
Geocell	28201
Magti	28202

1.3.7 Iraq

Carrier	ID
AsiaCell	41800
Korek	41840
Zain	41820

1.3.8 Italy

Carrier	ID
Iliad	22250
Tim	22201
Tre	22299
Vodafone	22210
Wind	22288

1.3.9 Kazakhstan

Carrier	ID
Altel	40107
Beeline	40101
Kcell	40102
Tele2	40177

1.3.10 Latvia

Carrier	ID
Bite	24705
LMT	24701
Tele2	24702

1.3.11 Lithuania

Carrier	ID
Bite	24602
Mediafon	24606
Tele2	24603
Telia	24601

1.3.12 Moldova

Carrier	ID
IDC	25999
Moldcell	25902
Orange	25901
Unite	25903

1.3.13 Morocco

Carrier	ID
INWI	60402
Orange	60400

1.3.14 Philippines

Carrier	ID
Globe	51502
Smart	51503

1.3.15 Poland

Carrier	ID
Orange	26003
Play	26006
Plus	26001
Tmobile	26034

1.3.16 Russia

Carrier	ID
Beeline	25099
MTS	25001
Megafon	25002
Tele2	25020

1.3.17 Tajikistan

Carrier	ID
Babilon-Mobile	43604
Beeline	43605
Megafon	43603
Tcell	43601

1.3.18 Ukraine

Carrier	ID
3Mob	25507
Kyivstar	25502
Lifecell	25506
Vodafone	25501

MOBILE SUBSCRIPTIONS

We divide subscription's activation process on 3 flows:

1. Click flow, also known as HE flow, 3G flow or WAP flow;
2. PIN flow, also known as PIN-submit or WEB flow or App flow;
3. SMS flow, also known as SMS MO flow, SMS MT flow , SMS flow or App flow;

You can use URL with **.html** or **.json** suffix.

2.1 Starting subscription on Click flow

Common steps:

1. User wants to subscribe the premium service on merchant's landing page;
2. User redirects to `http://{BASE_URL}/start/{KEYWORD}?{YOUR_CUSTOM_PARAMS}`;
3. User accepts subscription service terms and conditions by clicking confirmation button;
4. Megasyst's platform checks the confirmation parameters on `http://{BASE_URL}/callback`
5. Megasyst's platform redirects user to the callback URL of the service with `YOUR_CUSTOM_PARAMS` and result parameters (for JSON requests these data returns directly without redirect):
 - **ad_channel**, ad channel identifier (by default: SYSTEM)
 - **carrier**, mobile network
 - **country**, country
 - **event = SUBSCRIPTION**
 - **flow = CLICK**
 - **id**, event identifier
 - **keyword**, trigger keyword
 - **service**, premium service identifier
 - **status = SUCCESSFUL** or **ALREADY_SUBSCRIBED**, other values indicate the inability to subscribe for some reason
 - **subscriber**, end user identifier or MSISDN

`YOUR_CUSTOM_PARAMS` can contains any parameters that you wish to see in asynchronous notifications in **data** parameter, also it can contains custom **callback** or **callback_on_error** URLs.

Example:

```
ad_channel=SYSTEM&
carrier=12345&
country=XX&
event=SUBSCRIPTION&
flow=CLICK&
id=12345678901234567890&
keyword=KEYWORD&
service=MYSERVICE&
status=SUCCESSFUL&
subscriber=12345678900
```

5. Megasyst notificates merchant by HTTP with following parameters:

- **ad_channel**, ad channel identifier (by default: SYSTEM)
- **carrier**, mobile network
- **country**, country
- **currency**, partner earning currency (not included if payment is separate)
- **data**, order request data in format “{KEYWORD}?{YOUR_CUSTOM_PARAMS}”
- **event = SUBSCRIPTION**
- **flow = CLICK**
- **free_period**, free time for using the premium service (in seconds)
- **id**, event identifier
- **ip**, end user IP address
- **keyword**, trigger keyword
- **need_mt_sms = 1** (if this order needs additional MT SMS from partner)
- **previous_order**, previous order identifier if it exists
- **price**, partner earning amount (not included if payment is separate)
- **payment_schedule**, period of time for renew the premium subscription service (EVERYDAY, EVERYWEEK, WORKDAYS or other string value)
- **service**, premium service identifier
- **sn**, mobile service number
- **status = SUCCESSFUL** (other values indicate the inability to subscribe for some reason)
- **subscriber**, end user identifier or MSISDN
- **subscriber_currency**: end user currency (not included if payment is separate)
- **subscriber_price**: end user price (not included if payment is separate)
- **time**, time string (YYYY-MM-DD HH:MM:SS UTC)
- **user_agent**, end user browser agent

Example:

```
ad_channel=SYSTEM&
carrier=12345&
country=XX&
currency=XXX&
```

(continues on next page)

(continued from previous page)

```

data=KEYWORD?your=custom_param&
event=SUBSCRIPTION&
flow=CLICK&
free_period=86400&
id=12345678901234567890&
ip=1.2.3.4&
keyword=KEYWORD&
price=0.1&
payment_schedule=EVERYDAY&
service=MYSERVICE&
sn=1234&
status=SUCCESSFUL&
subscriber=12345678900&
subscriber_currency=XXX&
subscriber_price=0.1&
time=2020-01-01+01%3A01%3A01+UTC
user_agent=Mozilla/5.0+ (Macintosh; +Intel+Mac+OS+X+10_15_5) +AppleWebKit/605.1.
↪15+ (KHTML, +like+Gecko)

```

6. User receives confirmation SMS with subscription service information.

2.2 Starting subscription on PIN flow

Common steps:

1. User wants to subscribe the premium service on merchant's landing page or in app;
2. User redirects to `http://{BASE_URL}/start/{KEYWORD}?{YOUR_CUSTOM_PARAMS}`;
3. User inputs its MSISDN and selects its network in a web form and click a button to send a confirmation code (this step can be skipped if `YOUR_CUSTOM_PARAMS` has **subscriber** and **carrier** parameters);
4. User inputs its code from SMS in a web form and click a button to confirm the subscription process (this step can be skipped for JSON requests with **pin** parameter in `YOUR_CUSTOM_PARAMS`);
5. Megasyst's platform checks the confirmation code on `http://{BASE_URL}/callback` (with **pin** parameter)
6. Megasyst's platform redirects user to the callback URL of the service with `YOUR_CUSTOM_PARAMS` and result parameters (for JSON requests these data returns directly without redirect):
 - **ad_channel**, ad channel identifier (by default: SYSTEM)
 - **carrier**, mobile network
 - **country**, country
 - **event = SUBSCRIPTION**
 - **flow = PIN**
 - **id**, event identifier
 - **keyword**, trigger keyword
 - **service**, premium service identifier
 - **status = SUCCESSFUL** or **ALREADY_SUBSCRIBED**, other values indicate the inability to subscribe for some reason
 - **subscriber**, end user identifier or MSISDN

YOUR_CUSTOM_PARAMS can contains any parameters that you wish to see in asynchronous notifications in **data** parameter, also it can contains custom **callback** or **callback_on_error** URLs.

Example:

```
ad_channel=SYSTEM&
carrier=12345&
country=XX&
event=SUBSCRIPTION&
flow=PIN&
id=12345678901234567890&
keyword=TRIGGER&
service=MYSERVICE&
status=SUCCESSFUL&
subscriber=12345678900
```

6. Megasyst notificates merchant by HTTP with following parameters:

- **ad_channel**, ad channel identifier (by default: SYSTEM)
- **carrier**, mobile network
- **country**, country
- **currency**, partner earning currency (not included if payment is separate)
- **data**, order request data in format “{KEYWORD}?{YOUR_CUSTOM_PARAMS}”
- **event = SUBSCRIPTION**
- **flow = PIN**
- **free_period**, free time for using the premium service (in seconds)
- **id**, event identifier
- **ip**, end user IP address
- **keyword**, trigger keyword
- **need_mt_sms = 1** (if this order needs additional MT SMS from partner)
- **previous_order**, previous order identifier if it exists
- **price**, partner earning amount (not included if payment is separate)
- **payment_schedule**, period of time for renew the premium subscription service (EVERYDAY, EVERYWEEK, WORKDAYS or other string value)
- **service**, premium service identifier
- **sn**, mobile service number
- **status = SUCCESSFUL** (other values indicate the inability to subscribe for some reason)
- **subscriber**, end user identifier or MSISDN
- **subscriber_currency**: end user currency (not included if payment is separate)
- **subscriber_price**: end user price (not included if payment is separate)
- **time**, time string (YYYY-MM-DD HH:MM:SS UTC)
- **user_agent**, end user browser agent

Example:

```

ad_channel=SYSTEM&
carrier=12345&
country=XX&
currency=XXX&
data=TRIGGER?your=custom_param_value&
event=SUBSCRIPTION&
flow=PIN&
free_period=86400&
id=12345678901234567890&
ip=1.2.3.4&
keyword=TRIGGER&
price=0.1&
payment_schedule=EVERYDAY&
service=MYSERVICE&
sn=1234&
status=SUCCESSFUL&
subscriber=12345678900&
subscriber_currency=XXX&
subscriber_price=0.1&
time=2020-01-01+01%3A01%3A01+UTC
user_agent=Mozilla/5.0+ (Macintosh; +Intel+Mac+OS+X+10_15_5) +AppleWebKit/605.1.
↪15+ (KHTML, +like+Gecko)

```

7. User receives confirmation SMS with subscription service information.

2.3 Starting subscription via SMS flow (MO SMS)

Common steps:

1. User wants to subscribe the premium service on merchant's landing page or in app;
2. User sends SMS with a keyword to a short number;
3. Megasyst notifies merchant by HTTP with following parameters:
 - **ad_channel**, ad channel identifier (by default: SYSTEM)
 - **carrier**, mobile network
 - **country**, country
 - **currency**, partner earning currency (not included if payment is separate)
 - **data**, SMS body
 - **event = SUBSCRIPTION**
 - **flow = SMS**
 - **free_period**, free time for using the premium service (in seconds)
 - **id**, event identifier
 - **keyword**, trigger keyword
 - **need_mt_sms = 1** (if this order needs additional MT SMS from partner)
 - **previous_order**, previous order identifier if it exists
 - **price**, partner earning amount (not included if payment is separate)

- **payment_schedule**, period of time for renew the premium subscription service (EVERYDAY, EVERY-WEEK, WORKDAYS or other string value)
- **service**, premium service identifier
- **sn**, mobile service number
- **status** = **SUCCESSFUL** (other values indicate the inability to subscribe for some reason)
- **subscriber**, end user identifier or MSISDN
- **subscriber_currency**: end user currency (not included if payment is separate)
- **subscriber_price**: end user price (not included if payment is separate)
- **time**, time string (YYYY-MM-DD HH:MM:SS UTC)

Example:

```
ad_channel=SYSTEM&
carrier=12345&
country=XX&
currency=XXX&
data=trigger+123&
event=SUBSCRIPTION&
flow=SMS&
free_period=86400&
id=12345678901234567890&
keyword=TRIGGER&
price=0.1&
payment_schedule=EVERYDAY&
service=MYSERVICE&
sn=1234&
status=SUCCESSFUL&
subscriber=12345678900&
subscriber_currency=XXX&
subscriber_price=0.1&
time=2020-01-01+01%3A01%3A01+UTC
```

4. User receives confirmation SMS with service subscription information.

2.4 Renewal of subscription

Megasyst notificates merchants by HTTP with following parameters:

- **ad_channel**, ad channel identifier (by default: SYSTEM)
- **carrier**, [mobile network](#)
- **country**, country
- **currency**, partner earning currency
- **delay** = **DELAYED** (presents only if payment was postponed)
- **data**, same data from the subscription order
- **event** = **RENEWAL**
- **flow** = **CLICK** or **PIN** or **SMS** or **USSD**
- **id**, event identifier

- **ip**, end user IP address (if it's known)
- **keyword**, trigger keyword
- **order**, id of subscription order
- **previous_order**, previous order identifier if it exists
- **price**, partner earning amount
- **service**, premium service identifier
- **share** = **FULL** or **PART** (presents only for successful payments)
- **sn**, mobile service number
- **status** = **SUCCESSFUL** (if funds are not deducted then FAILED or WAITING)
- **subscriber**, end user identifier or MSISDN
- **subscriber_currency**: end user currency
- **subscriber_price**: end user price
- **time**, time string (YYYY-MM-DD HH:MM:SS UTC)
- **user_agent**, end user browser agent (if it's known)

Example:

```
ad_channel=SYSTEM&
carrier=12345&
country=XX&
currency=XXX&
data=trigger+123&
event=RENEWAL&
flow=MOSMS&
id=12345678901234567891&
keyword=TRIGGER&
order=12345678901234567890&
price=0.1&
service=MYSERVICE&
sn=1234&
status=SUCCESSFUL&
subscriber=12345678900&
subscriber_currency=XXX&
subscriber_price=0.1&
time=2020-01-01+01%3A01%3A01+UTC
```

In case of subscription renewal, user could be notified with SMS, however it depends on the exact carrier(s) subscription rules.

2.5 Deactivation of subscription

User may stop/deactivate active subscription at any time. Megasynt notifies partners by HTTP with next parameters:

- **ad_channel**, ad channel identifier (by default: SYSTEM)
- **carrier**, [mobile network](#)
- **country**, country
- **data**, SMS body or URL with parameters

- **event** = UNSUBSCRIPTION
- **flow** = SMS
- **id**, event identifier
- **keyword**, trigger keyword
- **previous_order**, previous order identifier if it exists
- **previous_order_data**, SMS body or URL with parameters if it exists
- **service**, premium service identifier
- **sn**, mobile service number
- **status** = **SUCCESSFUL** (other values indicate the inability to stop subscription for some reason)
- **subscriber**, end user identifier or MSISDN
- **time**, time string (YYYY-MM-DD HH:MM:SS UTC)

Example:

```
ad_channel=SYSTEM&
carrier=12345&
country=XX&
data=trigger+123&
event=UNSUBSCRIPTION&
flow=SMS&
id=12345678901234567892&
keyword=TRIGGER&
previous_order=12345678901234567890&
service=MYSERVICE&
sn=1234&
status=SUCCESSFUL&
subscriber=12345678900&
time=2020-01-01+01%3A01%3A01+UTC
```

User receives confirmation SMS about unsubscription.

2.6 Subscriber status checking via API request

Merchant can check a subscriber status via HTTP API by request with authorization token in the header.

Request format:

1. URL part
 - **GET /subscriptions/{SERVICE}/{SUBSCRIBER}**
2. Header part
 - **Authorization: Partner XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX**

SERVICE - the subscription service identifier

SUBSCRIBER - numeric phone number or another identifier of subscriber.

Optional GET parameters:

sn - mobile service number

Response format:

1. Header part
 - **HTTP 200** (or other values in case of errors)
2. Body part is JSON object of
 - **status** = **SUBSCRIBED** or **UNSUBSCRIBED**
 - **order_time** - last order time (if subscribed)
 - **payment_time** - last successful payment (if subscribed)
 - **error**, error message if exists

2.7 Deactivation via API request

Some connections allow you to deactivate subscriptions using the HTTP API request. Please consult the availability of this option with your manager!

Every deactivation request should be send via HTTP API by request with authorization token in the header.

Request format:

1. URL part
 - **DELETE** /subscriptions/{SERVICE}/{SUBSCRIBER}
2. Header part
 - **Authorization: Partner** XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

SERVICE - the subscription service identifier

SUBSCRIBER - numeric phone number or another identifier of subscriber.

Response format:

1. Header part
 - **HTTP 200** (or other values in case of errors)
2. Body part is JSON object of
 - **status** = **SUCCESSFUL** or **FAILED**
 - **error**, error message if exists

For a quick test you can use CURL tool in next format:

```
curl -X DELETE -H "Authorization: Partner XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX"
"{BASE_URL}/subscriptions/{SERVICE}/{SUBSCRIBER}"
```


ONE TIME PAYMENT (OTP)

3.1 Order via CLICK, SMS, PIN, USSD

The platform notifies partners by HTTP with next parameters:

- **ad_channel**, ad channel identifier (by default: SYSTEM)
- **carrier**, mobile network
- **country**, country
- **currency**, partner earning currency (not included for billing by MT SMS)
- **data**, SMS body or other data
- **event = OTP**
- **flow = CLICK or PIN or SMS or USSD**
- **id**, event identifier
- **keyword**, trigger keyword
- **need_mt_sms = 1** (if this order needs additional MT SMS from partner)
- **price**, partner earning amount (not included for billing by MT SMS)
- **service**, premium service identifier
- **sn**, mobile service number
- **status = SUCCESSFUL** (if funds should be deducted but not deducted then **FAILED** or **WAITING**)
- **subscriber**, end user identifier or MSISDN
- **subscriber_currency**: end user currency (not included for billing by MT SMS)
- **subscriber_price**: end user price (not included for billing by MT SMS)
- **time**, time string (YYYY-MM-DD HH:MM:SS UTC)

Example of notification in WWW data format:

```
ad_channel=SYSTEM&
carrier=12301&
country=XX&
currency=XXX&
data=keyword+123&
event=OTP&
flow=SMS&
id=12345678901234567890&
```

(continues on next page)

(continued from previous page)

```
keyword=KEYWORD&
need_mt_sms=1&
price=0.1&
service=MYSERVICE&
sn=1234&
status=SUCCESSFUL&
subscriber=123456789012&
subscriber_currency=XXX&
subscriber_price=1.0&
time=2020-01-01+01%3A01%3A01+UTC
```

3.2 MT SMS delivery report for MT based billing

The platform notificates partners by HTTP with next parameters:

- **ad_channel**, ad channel identifier (by default: SYSTEM)
- **carrier**, mobile network
- **country**, country
- **currency**, partner earning currency
- **data**, SMS body or other data
- **event = OTP**
- **flow = SMS**
- **id**, event identifier
- **keyword**, trigger keyword
- **order**, id of OTP order
- **price**, partner earning amount
- **service**, premium service identifier
- **sn**, mobile service number
- **status = FAILED** or **SUCCESSFUL** or **WAITING** (based on MT SMS delivery status)
- **subscriber**, end user identifier or MSISDN
- **subscriber_currency**: end user currency
- **subscriber_price**: end user price
- **time**, time string (YYYY-MM-DD HH:MM:SS UTC)

Example of notification in WWW data format:

```
ad_channel=SYSTEM&
carrier=12301&
country=XX&
currency=XXX&
data=keyword+123&
event=OTP&
flow=SMS&
id=12345678901234567890&
```

(continues on next page)

(continued from previous page)

```
keyword=KEYWORD&
price=0.1&
service=MYSERVICE&
sn=1234&
status=SUCCESSFUL&
subscriber=123456789012&
subscriber_currency=XXX&
subscriber_price=1.0&
time=2020-01-01+01%3A01%3A01+UTC
```


SMS RESPONSE TO ORDER

Merchant should send MT SMS as response to End-user either for One-time payment or Subscription order, related to own service(s) only. No Bulk SMS sending is allowed!

Every MT SMS should be send via HTTP API by request with authorization token in the header to Megasyst's server.

Request format:

1. URL part
 - **POST /mailings**
2. Header part
 - **Authorization: Partner XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX**
3. Body part (parameters in WWW serialization format)
 - **body**, text of MT SMS
 - **service**, premium service identifier
 - **subscriber**, end user identifier or MSISDN

Response format:

1. HTTP response code
 - **200**, if request is processable
 - **403**, if service not found
 - **410**, if subscriber's SMS not found
 - **422**, if request has wrong parameters set
 - **429**, if subscriber was already informed
2. Body part is JSON object of
 - **status** = **SUCCESSFUL** or **FAILED**
 - **error**, error message (optional)