API DOCUMENTATION

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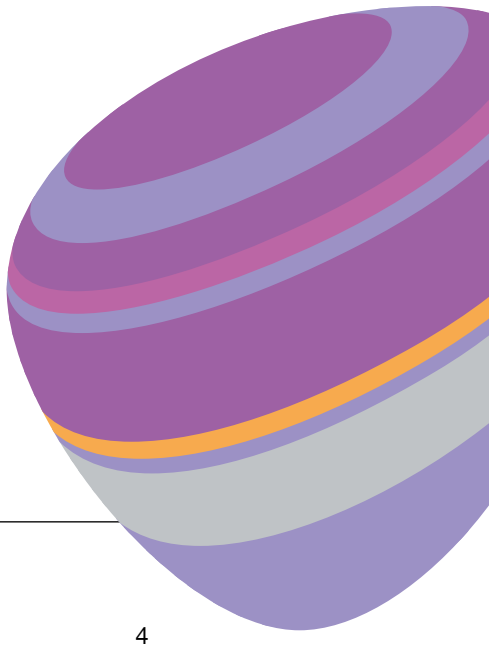


TABEL OF CONTENT

Before you begin 4

Scope of this document 4

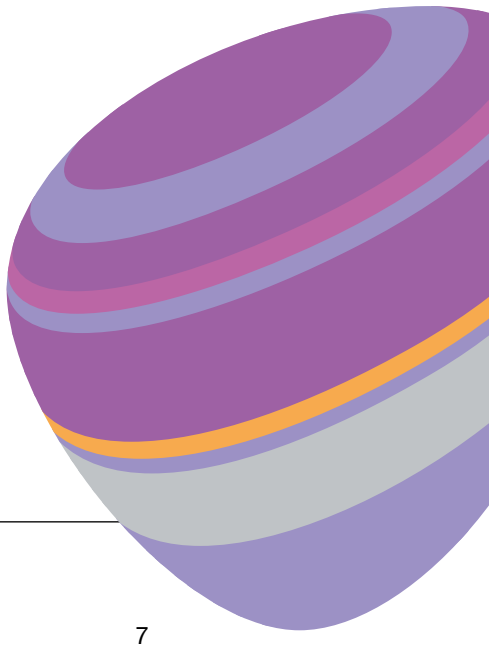
Capabilities of “Common” platform 4

Terms and glossary 5

- Size limits 5
- MT 5
- MO 5
- Bulk 5
- Delivery Report 5
- TON 5
- KeyValue 5
- Character Encoding 5
- IP Addresses 6

Sending MT messages 6

- Base URL 6
- Authentication 6
- HTTP Methods, statuses, and actions 7
  - HTTP Method 7
  - Message sent 7
  - Message sent, no response 7
  - No access 7
  - Invalid request 7
  - Invalid login 7



TABEL OF CONTENT

- Methods 7
- DCS 9
- TON 9
- Error Result Codes 9
- Success Result 10
  - Examples 10

Batch sending MT messages 10

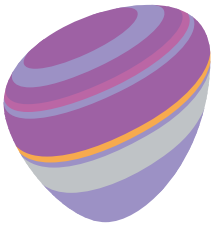
- Batch sending example 13

Scheduled delivery of MT messages 13

- Example 14

Delivery Reports 14

- Result Codes 15
- Delivery Report Example 17



BEFORE YOU BEGIN

Please make sure that Telia has provided you with the following information:

Username, Password, platformId, platformPartnerId

If you will be receiving Delivery Reports for your messages, please provide Telia with an URL and they will also give you a **gateId** to use. For more information on Delivery Reports, see the "Delivery Reports" chapter.

To use Delivery Reports, make sure you have made an opening in any firewalls so that Common can connect to you to transfer Delivery Reports. The addresses to open for are listed below.

SCOPE OF THIS DOCUMENT

This document will describe the Application Programming Interface (API) to send text messages through the Telia "Common" platform. It will also describe the mechanism for delivering, to your platform, Delivery Reports for each message sent.

A separate document describes the API for receiving text messages.

Common is a REST API. This means it uses HTTP verbs to receive commands. A basic familiarity with REST APIs is assumed, as well as a familiarity with JSON.

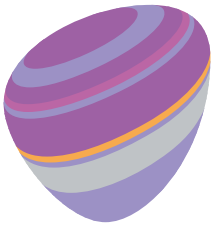
CAPABILITIES OF "COMMON" PLATFORM

Common is a high-capacity, high-availability SMS Gateway designed to let you send and receive SMS Text messages, as well as receive a notification when the text message is received by the end-user.

A message can be of any length up to the maximum defined by the GSM standard (254 segments) It can contain any character in the UTF-8 2-byte character set. (Unicode 4-byte characters are not supported).

When sending messages, the sender of the message can be set to any string of 2-11 characters, a-Z,0-9 (Must begin with a non-numeric character).

Common tracks the status of each message every step of the way until it is delivered to the end-user's handset, and will provide you with this status through a Delivery Report. Delivery Reports can be sent in JSON, HTTP GET or POST formats. »



TERMS AND GLOSSARY

Size limits
An SMS Text message can be a maximum of 140 bytes. With the most common character encoding, GSM-7, this translates to 160 characters. If your message is longer than 140 bytes, it must be split into multiple messages, and preceded by a header signifying that it is a multipart message. Common can handle this splitting, concatenation, and the overhead unless you want to do it yourself.

MT
Mobile Terminated. Refers to any SMS message which is sent to a mobile phone. (The message is terminated, or "ends", at the phone.)

MO
Mobile Originated. Refers to any SMS message which is sent from a mobile phone. (The message's origin, or beginning, is at the phone.)

Bulk
A message which does not cost money for the end-user to receive. Bulk messages can set their Source (the "From"-field) of the message to any text, 2-11 characters a-Z. Using this feature to impersonate other parties will lead to a termination of your account.

Delivery Report
For each MT message we send, we can send you an acknowledgement when the message is confirmed received by the end-user's handset. If the message fails for any reason, we will inform you about this. Delivery reports are mandatory for charged messages, optional for bulk.

TON
Type of Number. This identifies how systems shall interpret your Source (your "From"-field). It can be a Shortcode, an alphanumeric string, or a phone number (MSISDN). Same applies for the Destination, or recipient, of the message, though destination will almost always be an MSISDN.

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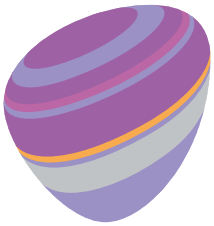

KeyValue
Map with string key and string value where you may specify unique parameters.

Character Encoding
All communication to and from Common will be using UTF-8 encoding.

IP Addresses
If Common needs to connect to your system to deliver Delivery Reports, it will connect from the following six hosts. Please make an exception for them in your firewall if necessary.

HOSTNAME	IP ADDRESS
socks1.sp247.net	195.84.162.34
socks2.sp247.net	194.71.165.71
socks3.sp247.net	195.84.162.16
socks4.sp247.net	194.71.165.98
socks5.sp247.net	195.84.162.3
socks6.sp247.net	194.71.165.122

SENDING MT MESSAGES

Base URL
https://wsx.sp247.net/sms

Authentication
Authenticate in the HTTP request using Basic Authentication with the username and password provided by Support.

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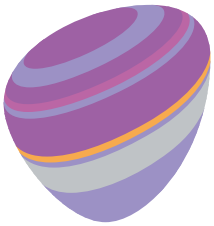

HTTP Methods, statuses, and actions

HTTP METHOD	MESSAGE SENT	MESSAGE SENT, NO RESPONSE	NO ACCESS	INVALID REQUEST	INVALID LOGIN
POST	**200 OK** Returns Send-Response	**204 No Content**	**403 Forbidden** Returns Error-Response	**400 Bad Request** Returns Error-Response	**401 Unauthorized** Returns Error-Response

Methods

POST /sms/send

Submits a message object for delivery to a mobile phone. Set Content-Type: application/json in your request header and POST a JSON object with the following properties:

PARAMETER	DATA TYPE	DESCRIPTION
Source	String	Required. This is the source number from where the message should be sent. The format is depending on the specified sourceTON.
SourceTON	TON	This is the source type of number. See allowed TON values below. Default ALPHANUMERIC.
Destination	String	Required. This is the destination number. The format is depending on the specified destinationTON. Remember that MSISDNS include the country code and a leading plus sign. (+)
DestinationTON	TON	This is the destination type of number. See allowed TON values below. Default MSISDN.
Dcs	DCS	**Advanced.** This is the Data Coding Scheme that should be used when sending the SMS. See allowed DCS values in a separate table. Default TEXT.
UserDataHeader	String	**Advanced.** This value may be specified when sending concatenated SMS, WAP-push, etc. The format is hex encoded 8-bit bytes. More information about valid UDH for long SMS may be given by Support upon request. We recommend setting DCS to TEXT and letting Common handle splitting and concatenation of messages if you do not have a specific reason to do it yourself.

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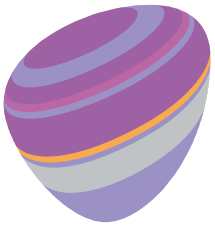

PARAMETER	DATA TYPE	DESCRIPTION
UserData	String	This is the message content itself. The DCS specifies the format (encoding) on this value. Note that messages that messages of more than 140 bytes must be split into multiple messages. Common will do that automatically if DCS is TEXT (default).
UseDeliveryReport	Boolean	True indicates that a delivery report should be sent back when the message has come to a final state. (Delivered or failed) Defaults to TRUE, and it is recommended to use delivery reports.
DeliveryReport-Gates	List <String>	One or more gates that should be used for sending delivery reports. If you do not specify any Gates to deliver Delivery Reports to, make sure to set useDeliveryReport to FALSE. See the chapter on delivery reports for more information.
RelativeValidity-Time	Long	This specifies how long the message is supposed to live. If the message takes longer to deliver to the handset than the validityTime, the message will be discarded. The value is specified in milliseconds. Default is 48 hours (172800000).
AbsoluteValidity-Time	Date	The absolute time when a message should expire. Minimum 15 minutes and maximum 48h in the future. Formatted according to RFC3339, e.g. 2010-03-30T12:59:40+02:00. Overrides relativeValidityTime if both are set.
PlatformId	String	Your platformId. Provided to you by Support.
PlatformPartnerId	String	Your platformPartnerId. Provided to you by Support.
RefId	String	Your own internal transaction ID. Not used for anything except as a reference. Optional.
MoReferenceId	String	A reference to the ID of the MO message which triggered the MT message. Required for some operators.
Custom-Parameters	KeyValue	**Advanced.** Additional parameters may be specified if needed. Support will advise you if you need to use custom parameters.
IgnoreResponse	Boolean	Indicates whether you want a response in the body when you submit the message. This is not a delivery report, only a confirmation of message submission. Default is true.

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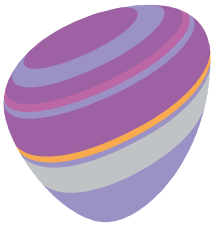

DCS
Data Coding Scheme sets the encoding used for the message. Default and recommended is TEXT.

DCS VALUE	DESCRIPTION
GSM	GSM-7 default alphabet encoding.
BINARY	8-bit binary data.
UCS2	UCS-2 encoding
TEXT	Server side handling of encoding and segmenting. Recommended.

TON
TON stands for Type of Number and designates how a number is to be interpreted.

TON VALUE	DESCRIPTION
Shortnumber	Shortnumber; 1-14 digits depending on country.
Alphanumeric	Up to 11 valid GSM characters. Some operators and some handsets don't accept all characters. Safe characters are a-z, A-Z, 0-9.
Msisdn	A mobile number, international format, starting with +.

Error Result Codes

RESULT CODE	DESCRIPTION
106000	Unknown Error. Please contact Support and include your whole transaction.
106100	Invalid authentication. Please check your username and password.
106101	Access denied. Please check your username and password.
106200	Invalid or missing platformId. Please check your platformId.
106201	Invalid or missing platformPartnerId. Please check your platformPartnerId.
106300	No gates available. Please contact Support and include your whole transaction.
106301	Specified gate available. Please check your gateId.

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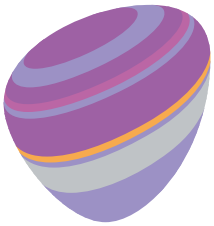


Success Result
On a successful request, Common will reply with HTTP 200 OK, or HTTP 204 No Content if “ignoreResponse” is set to TRUE.

In the body you will find the messageId of the message:

{”messageId”:”Dcshuhod0PMAAAFQ+/PbnR3x”,”resultCode”:1005,”description”:”Queued”}

Please note that this is not a delivery report. Save the messageId; when the delivery report arrives, it will include the same messageId.

Examples
In these examples, the platformId and platformPartnerId and deliveryReportGates are set to invalid values. The values that are correct for you will be provided by Support.

A minimal example, including only required fields. This would send the message “Hello world” to the Norwegian phone number +4799999999, and not use a delivery report. The sender is set to “LINK”.

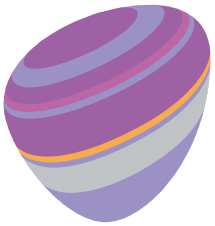
This JSON would be POSTed to https://wsx.sp247.net/sms/send

```
{
 ”source”: ”LINK”,
 ”destination”: ”+4799999999”,
 ”userData”: ”Hello world”,
 ”platformId”: ”0”,
 ”platformPartnerId”: ”0”,
 ”useDeliveryReport”: false
}
```

BATCH SENDING MT MESSAGES

If you want to send many messages at one time, you can use the Batch Sender to send multiple messages at once, reducing connection overhead. You will receive an array of responses when you submit, with the **messageId** and **refId** of each message posted.

Sending a batch MT message is similar to sending a single MT message, except that certain parameters are moved into a **sendRequestMessages** parameter, which you then post an array of. »



The names and types and functions of all parameters except sendRequestMessages are the same as if you were sending a single MT message. Delivery reports are handled normally.

The URL for submitting batch messages is https://wsx.sp247.net/sms/sendbatch

PARAMETER	DATA TYPE	DESCRIPTION
UseDeliveryReport	Boolean	True indicates that a delivery report should be sent back when the message has come to a final state. (Delivered or failed). Defaults to TRUE, and it is recommended to use delivery reports.
DeliveryReportGates	List <String>	One or more gates that should be used for sending delivery reports. If you do not specify any Gates to deliver Delivery Reports to, make sure to set useDeliveryReport to FALSE. See the chapter on delivery reports for more information.
RelativeValidityTime	Long	This specifies how long the message is supposed to live. If the message takes longer to deliver to the handset than the validityTime, the message will be discarded. The value is specified in milliseconds. Default is 48 hours (172800000).
AbsoluteValidityTime	Date	The absolute time when a message should expire. Minimum 15 minutes and maximum 48h in the future. Formatted according to RFC3339, e.g. 2010-03-30T12:59:40+02:00. Overrides relativeValidityTime if both are set.
PlatformId	String	Your platformId. Provided to you by Support.
PlatformPartnerId	String	Your platformPartnerId. Provided to you by Support.
CustomParameters	KeyValue	**Advanced.** Additional parameters may be specified if needed. Support will advise you if you need to use custom parameters.
IgnoreResponse	Boolean	Indicates whether you want a response in the body when you submit the message. This is not a delivery report, only a confirmation of message submission. Default is true.
SendRequestMessages	List <sendRequestMessages>	An array of messages. The maximum amount of messages allowed within the array is 1000. See the following table for its contents.

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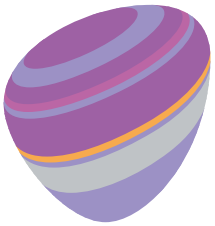

sendRequestMessages:

PARAMETER	DATA TYPE	DESCRIPTION
Source	String	Required. This is the source number from where the message should be sent. The format is depending on the specified sourceTON.
SourceTON	TON	This is the source type of number. See allowed TON values below. Default ALPHANUMERIC.
Destination	String	Required. This is the destination number. The format is depending on the specified destinationTON. Remember that MSISDNS include the country code and a leading plus sign. (+)
DestinationTON	TON	This is the destination type of number. See allowed TON values below. Default MSISDN.
Dcs	DCS	**Advanced.** This is the Data Coding Scheme that should be used when sending the SMS. See allowed DCS values in a separate table. Default TEXT.
UserDataHeader	String	**Advanced.** This value may be specified when sending concatenated SMS, WAP-push, etc. The format is hex encoded 8-bit bytes. More information about valid UDH for long SMS may be given by Support upon request. We recommend setting DCS to TEXT and letting Common handle splitting and concatenation of messages if you do not have a specific reason to do it yourself.
UserData	String	**Advanced.** Additional parameters may be specified if needed. Support will advise you if you need to use custom parameters.
IgnoreResponse	Boolean	This is the message content itself. The DCS specifies the format (encoding) on this value. Note that messages that messages of more than 140 bytes must be split into multiple messages. Common will do that automatically if DCS is TEXT (default).
RefId	String	Your own internal transaction ID. Not used for anything except as a reference. Optional.
MoReferenceId	String	A reference to the ID of the MO message which triggered the MT message. Required for some operators.

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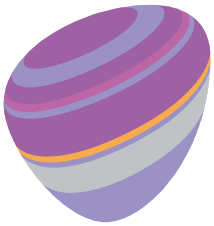


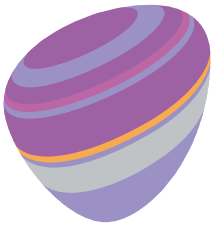
Batch sending example
The following JSON would send a message to two recipients at the same time.


```
{
 ”platformId”: ”0”,
 ”platformPartnerId”: ”0”,
 ”useDeliveryReport”: true,
 ”deliveryReportGates”: [
  ”BVIdZyQt”
 ],
 ”sendRequestMessages”: [
  {
   ”source”: ”2333”,
   ”sourceTON”: ”SHORTNUMBER”,
   ”destination”: ”+4746910822”,
   ”userData”: ”Hello world, first message”,
   ”refId”: ”wir7kkw”
  },
  {
   ”source”: ”2333”,
   ”sourceTON”: ”SHORTNUMBER”,
   ”destination”: ”+4741560067”,
   ”userData”: ”Hello world, second message”,
   ”refId”: ”qts883r”
  }
 ]
}
```


SCHEDULED DELIVERY OF MT MESSAGES

Messages may be scheduled for a later delivery but at most 3 months in the future.

Add the custom parameter “scheduledTime” with the value as the date that the message should be sent. The date should be formatted according to RFC3339. »



Example

```
{
 ”source”: ”LINK”,
 ”destination”: ”+4799999999”,
 ”userData”: ”Hello world”,
 ”platformId”: ”0”,
 ”platformPartnerId”: ”0”,
 ”useDeliveryReport”: false,
 ”customParameters”: { ”scheduledTime”:”2017-06-07T15:30:00Z” }
}
```

DELIVERY REPORTS

When an MT message is delivered to a handset, or fails for any reason, you will receive a callback with a delivery report. This is required for charged messages, optional (but recommended) for free messages. It can be sent in JSON, XML, or HTTP GET/POST key/value pairs. If you want to change your format or your URL, please contact Support.

Common requires that your receiver responds with a HTTP status of 200 OK to acknowledge receipt of the delivery report. For added reliance, Common can also require that your receiver responds with a certain string in the body as well; this is optional. If you want this, please contact Support and they will enable it on your Gate.

Delivery reports will be POSTed to your service from the following IPs, please make sure there is an opening in your firewall for the hosts listed earlier in this document.

Delivery reports contain the following fields:

FIELD	DATA TYPE	DESCRIPTION
RefId	String	If you used a refId when submitting the message, this will be mirrored here. If not, this will be null.
Id	String	This is Common’s internal message ID for this message. It mirrors the ID which was given to you when submitting the message.
Operator	String	The telecom operator the message was sent to (The end-users’s operator)
SentTimestamp	DateTime	The timestamp when Common sent the message to the telecom operator. UTC time formatted according to RFC3339.

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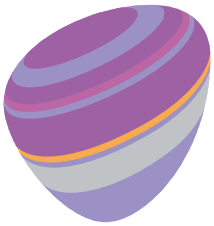

FIELD	DATA TYPE	DESCRIPTION
Timestamp	DateTime	The timestamp from the telecom operator for this status message. UTC time formatted according to RFC3339.
ResultCode	Integer	The status of the message. For what the different codes mean, see Status codes table below.
Operator-ResultCode	String	The unmapped status of the message from the operator. Each telecom operator has different statuses and this is only provided for debugging or reference, resultCode is the real status.
Segments	Integer	The number of segments (of 140 bytes) the message was split into for delivery.
GateCustom-Parameters	<List> KeyValue	If there are any custom parameters set on your gate, they will be provided here. Usually blank.
Custom-Parameters	<List> KeyValue	If there are any extra fields in the delivery report Common receives from the operator, they will be listed here. Usually blank or non-important.

Result Codes

The most common result code is 1001 Delivered. This code indicates a successful delivery of the message. Most statuses are final, indicating that the message either has been successfully delivered, or failed in a non-recoverable way.

RESULTCODE	DESCRIPTION	TRANSACTION STATE
0	Unknown error	Final: not delivered, not billed
1	Temporary routing error	Final: not delivered, not billed
2	Permanent routing error	Final: not delivered, not billed
3	Maximum throttling exceeded	Final: not delivered, not billed
4	Timeout	Final: unknown delivery, unknown billing
5	Operator unknown error	Final: unknown delivery, unknown billing
6	Operator error	Final: not delivered, not billed
104	Configuration error	Final: not delivered, not billed
105	Internal error	Final: not delivered, not billed
1000	Sent (to operator)	**Temp:** not delivered, not billed
1001	Billed and delivered	Final: delivered, billed (if applicable)
1002	Expired	Final: not delivered, not billed
1004	Mobile full	Final: not delivered, not billed
1006	Not delivered	Final: not delivered, not billed

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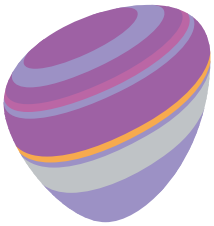

RESULTCODE	DESCRIPTION	TRANSACTION STATE
1007	Delivered, Billed delayed	**Temp:** delivered, not billed
1008	Billed OK (charged OK before sending message)	**Temp:** not delivered, billed
1009	Billed OK and NOT Delivered	Final: not delivered, billed
1010	Expired, absence of operator delivery report	Final: unkown delivery, unknown billing
1011	Billed OK and sent (to operator)	**Temp:** not delivered, billed
1012	Delayed (temporary billing error, system will try to resend)	**Temp:** not delivered, not billed (re-sending)
2104	Unknown subscriber	Final: not delivered, not billed
2105	Destination blocked (subscriber permanently barred)	Final: not delivered, not billed
2106	Number error	Final: not delivered, not billed
2107	Destination temporarily blocked (subscriber temporarily barred)	Final: not delivered, not billed
2200	Charging error	Final: not delivered, not billed
2201	Subscriber has low balance	Final: not delivered, not billed
2202	Subscriber barred for overcharged (premium) messages	Final: not delivered, not billed
2203	Subscriber too young (for this particular content)	Final: not delivered, not billed
2204	Prepaid subscriber not allowed	Final: not delivered, not billed
2205	Service rejected by subscriber	Final: not delivered, not billed
2206	Subscriber not registe-red in payment system	Final: not delivered, not billed
2207	Subscriber has reached max balance	Final: not delivered, not billed
3000	GSM encoding is not supported	Final: not delivered, not billed
3001	UCS2 encoding is not supported	Final: not delivered, not billed

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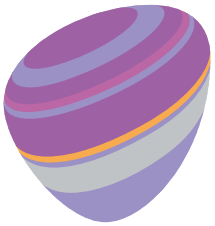
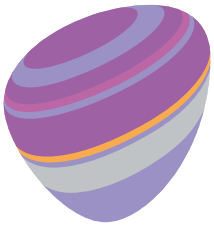


RESULTCODE	DESCRIPTION	TRANSACTION STATE
3002	Binary encoding is not supported	Final: not delivered, not billed
4000	Delivery report is not supported	Final: not delivered, not billed
4001	Invalid message content	Final: not delivered, not billed
4002	Invalid tariff	Final: not delivered, not billed
4003	Invalid user data	Final: not delivered, not billed
4004	Invalid user data header	Final: not delivered, not billed
4005	Invalid data coding	Final: not delivered, not billed
4006	Invalid VAT	Final: not delivered, not billed
4007	Unsupported content for destination	Final: not delivered, not billed

Delivery Report Example
The following example is an example of a successfully delivered message. refId and id have been set to invalid values in this example.


```
{
 ”refId”: ”0”,
 ”id”: ”0”,
 ”operator”: ”no.telenor”,
 ”sentTimestamp”: ”2015-11-19T09:37:35Z”,
 ”timestamp”: ”2015-11-19T09:37:00Z”,
 ”resultCode”: 1001,
 ”operatorResultCode”: ”2”,
 ”segments”: 1,
 ”gateCustomParameters”: {},
 ”customParameters”: {
  ”received”: ”2015-11-19 10:37:36”
 }
}
```



The following example is an example of a message which was attempted sent to a phone number which does not exist. refId and id have again been set to invalid values in this example.


```
{
  ”refId”: ”0”,
  ”id”: ”0”,
  ”operator”: null,
  ”sentTimestamp”: ”2015-11-19T10:17:37Z”,
  ”timestamp”: ”2015-11-19T10:17:37Z”,
  ”resultCode”: 2106,
  ”operatorResultCode”: null,
  ”segments”: 1,
  ”gateCustomParameters”: {},
  ”customParameters”: {
    ”received”: ”2015-11-19 11:17:37”
  }
}
```