## **Mesajlarim API Document**

### **Table Of Contents**

- 1 Table Of Contents
- 2 Introduction
- 3 Basics
- 4 Token Creation
- 5 Methods
  - 5.1 <u>SendSms</u>
  - 5.2 <u>Balance</u>
- 6 Error Messages
- 7 <u>Version</u>

## Introduction

This document covers the details of MESAJLARIM's API methods. It describes which parameters it takes what kind of parameters it returns and what kind of exceptions there are.

#### **Basics**

MESAJLARIM provides a REST like API which always returns a json response. For each request, appld, token, rand and msisdn values should be provided in order to be authenticate to the system. Token also signs the current request with the secret provided to the application developer by the administrator to prevent any malicious use of the API. To make requests to the application, you need to define your IP address (or addresses) to the system. Otherwise your requests will be dropped and you will receive an error.

Below, you can find a table describing the basic keywords of the API and this document:

Keyword	Description
Token	A hash value created by using the parameters sent to the API and a shared secret
Application	The web site that makes the request to the API
Application ID	A number defining each different application
Secret	A secret value defined by administrators and given to the application owner. This value should not be shared
НМАС	An authentication method that both signs the request and makes use of shared secrets
SHA1	The encryption algorithm we use for the HMAC

### **Token Creation**

A token is created based on the HMAC standards by using SHA1 algorithm. To create a token you should always use the appld, msisdn and a random value that changes for each request. In addition to these variables, you should also add the

current request data to the hash to prevent any malicious requests. While appld and msisdn are always prepended, random value is appended to the token before hashing. When hashing the value, you should use the secret provided to you by an administrator. If an invalid key is used, token will also be invalid.

A sample code for creating a token for a SendSMS method is like this:

\$appId = 1; //This id is provided to the application by an administrator
\$secret = "mySecret"; //This value is provided to the application by an administrator
\$msisdn = "5321000000";
\$message = "My Message";
\$recipient = "5322000000";
\$rand = time();
hash\_hmac("sha1", \$appId . \$msisdn . \$message . \$recipient . \$rand, \$secret);

## **Methods**

Function Name	SendSms				
Endpoint	/omrestapi/api.php?action=sendsms				
Description	Sends a text message to the recipients by the sender. Parameters should be sent as POST parameters				
Method	POST	POST			
Request Parameters					
Name	Required	Description			
appld	Υ	Application ID which makes the request. Provided by MESAJLARIM administrators to each application			
rand	Y	A random value to differentiate the token each time. It should be different for each request			
token	Υ	A hash value created by the parameters of this method call and the secret key provided to the application owner.  Token should hash these values in the appropriate order without any characters between them: appld, msisdn, message, recipient and rand			
msisdn	Y	An MSISDN number which is sending the message			
message	Υ	Content of the message which will be texted to the recipients			
recipient	Υ	An MSISDN number which will receive the message. Mutliple MSISDN numbers can be provided by using recipient[] as key instead of recipient.  There is a limit to the number of recipients that can be sent per request.  When there are multiple recipients each recipient should be used in the same order they are sent, without any white spaces between them when creating the token.			

Response F	ields					
Name	Туре	Description				
sender	string	MSISDN number who sent the message. This is the same as the msisdn value sent to the request.				
message	string	The message that is sent.				
balance	int	Returns the current free SMS balance. If user cannot send anymore free SMSes, it returns -1				
recipients	array	An array containing each recipient's delivery and charging statuses.  Status can either be delivered or error.  Charge can be none, free, charged or partly-charged. The meaning of these values are:  • none: An error occured during charging and no charging is yet done.  • free: This message is sent free by using free SMS quota.  • charged: This message is fully charged.  • partly-charged: This message is partly charged (probably the message length was more then the single message length, so it's delivered as two SMSes).				
D	A	ful was a was will be a				

#### Response Example

#### A successful response will be:

```
{
    sender:"5320000000",
    message: "My Message",
    recipients: [
        {msisdn: "5321000000", status: "delivered", charge: "free"},
        {msisdn: "5322000000", status: "delivered", charge: "none"},
        {msisdn: "5322000000", status: "error", charge: "free"},
        {msisdn: "5322000000", status: "error", charge: "charged"},
        {msisdn: "5323000000", status: "delivered", charge: "charged"},
        {msisdn: "5323000000", status: "delivered", charge: "partly-charged"}
        ],
        balance: 3
}
```

If an error occurs such a response will return:

{error: "Invalid App Id"}

Function Name	Balance
Endpoint	/omrestapi/api.php?action=balance
Description	Returns the current free SMS limit balance and daily free SMS limit. Parameters should be sent with GET

Method	GET	GET			
Request Para	meters				
Name	Required Description				
appld	Y Application ID which makes the request. Provided by MESAJLARIM administrators application				
rand	Y	A random value to differentiate the token each time. It should be different for each reque			
token	Y	A hash value created by the parameters of this method call and the secret key provided to the application owner.  Token should hash these values in the appropriate order without any characters between them: appld, msisdn and rand			
msisdn	Y	MSISDN number which the balance is requested			
Response Fie	lds				
Name	Туре	Description			
msisdn	string	MSISDN that owns the balance information			
balance	int	Current balance for free SMS. If he cannot send any more SMSes, it returns -1			
freeTotal	int	Daily free SMS limit			
Response Example	{     msisdn:"5321000000",     balance: 12,     freeTotal: 15     }  If an error occurs such a response will return:				
	{error: "Invalid App Id"}				

# **Error Messages**

A list of error messages which you can receive and why they occur are listed below:

Error Message	Description	
MSISDN is missing	MSISDN which we will be making the operations is not provided	

Token cannot be empty	Token is not provided or empty
Invalid IP Address	The server's IP address which you make the request is not defined in the allowed IP addresses list
Invalid Token Given	The provided token does not match with the calculated token
Random value cannot be empty	Rand value should be provided.
Sender MSISDN and message cannot be empty	Either message or the MSISDN is not provided or missing.
Recipients cannot be empty	Recipient cannot be empty if you want to send an SMS. If you send multiple values, all of them should be valid.
Too many recipients	The count of recipients you sent exceeds the maximum number of allowed recipients for a single request
Invalid App Id	Given App Id is not found.

## Version

Date	Sections	Description	Version
06.03.2012	All	Initial version of the document	1.0