MACROKIOSK
Powering Connectivity

etracker
Premium SMS
API Specifications

Thailand | Sept 2019 | Version 3.36

Summary of Changes

Version	Date	Areas of Amendments	Summary of Changes
3.20	27/05/15	Section 4.1	• 'Channel' parameter added.
		Section 4.2	• 'User' & 'Pass' parameter removed.
			• Response Code 401 removed.
3.21	26/06/15	All Sections	• Truemove removed throughout the document.
3.22	23/09/15	Section 6.0	• Response Code 408 added.
3.23	08/10/15	Section 4.2 & Section 2.0	• AIS Telco ID changed • Date format changed.
3.24	25/11/15	Section 7.0	• System Limitation & Known Issue updated
3.25	14/01/15	Section 1.3.1	• New info added for 'Cat' parameter
3.26	13/04/16	Section 4.1.3	• New section added for 'Request MSISDN and Telco ID via WAP/Web.'
3.27	04/05/16	Section 4.1.3	• New note added.
3.28	24/05/16	Section 4.1.3	• MSISDN Forwarding Flow updated.
		Section 6.0	• Response Code '406-Blacklisted MSISDN' added.
3.29	31/05/16	Section 6.0	• Response Code '409- Invalid linkid or exceeded push frequency' added.
		Section 4.3.1	• Linkid parameter description changed for Truemove Hutchison.
3.30	07/11/16	Section 4.1 & Section 4.2	• Add RefId parameter for DTAC Telco • Response Code 404 added
		Section 7.2	• New note added on "RefId" for DTAC at Known Issue for "MSISDN forwarding"
3.31	26/1/18	Section 5.0	• Added new "Keyword" parameter • Added Keyword parameter to example
3.32	03/07/2018	Section 4.3	• Added Response code 405 at "Response Code for MO via WAP/Web" table

Version	Date	Areas of Amendments	Summary of Changes
3.33	21/09/2018	Section 4.1 (New)	• Added Generate Authentication Token
		Section 4.3	• Added AuthToken in list of parameters • Added Response Code 408 & 408 for MO via WAP/Web
3.34	25/09/2018	Section 4.4.1	• Add Remark to (ii) "For Welcome MT response" • Added Example of Welcome MT • Added Note: "LinkID parameter = MOID parameter"
3.35	09/05/2019	Section 4.2	• Added "4(Truemove H)" to RefId parameter
		Section 4.3	• Added "4(Truemove H)" to RefId parameter
3.36	11/09/2019	Section 4.4.1	• Removed *Cat – 8 Unregister subscriber* • Added *Cat – 9 Free trial MT for time-based service*
		Section 6.0	• Added Response Code *414 – Blocked free trial MT* • Added Response Code *415 – Invalid price point for free trial MT*

Table of Contents

1.0   Introduction

This etracker premium messaging API document is specifically designed for developers and implementers with basic programming knowledge to make HTTP connections between etracker premium messaging gateway and an application. The HTTP protocol is an international standard used by the World Wide Web Consortium.

This document will highlight the process of sending messages by simply submitting either a POST or a GET request to etracker premium messaging gateway.

However, the POST method is recommended as opposed to the GET method due to the limitation of size and exposure of the HTTP request on the HTTP URL bar when a request submission is made. etracker premium messaging gateway is connected directly to AIS, DTAC and TRUEMOVE HUTCHISON to enable direct billing of mobile subscribers regardless of prepaid or postpaid.

1.1   Overview

etracker Premium Messaging API enables clients to monetize their mobile contents. It is a gateway that allows Premium SMS to be sent to a large number of mobile subscribers at any one time. Clients connect to MACROKIOSK's etracker Premium Messaging API gateway to send mobile contents based on Information-On-Demand / Subscription service packages.

2.0   Guide to Use this API document

In short these are few details that you need to pay attention to:

(i)   Understand the following terms/concepts because it will help you move quickly though the document.

Terms	Definition
-1 response	This refers to Asynchronous response whereby you as the client acknowledge that you have received the MO and agree to provide the MT at a later time.
4 parameter response	This refers to Synchronous response, whereby you as the client provide the MT immediately upon receiving a MO.
API	Application Programming Interface The interface that a computer system, library or application provides in order to allow requests for services to be made out of it by other computer programs, and/or to allow data to be exchanged between them.
Asynchronous	Refers to delayed MT return from the clients to the mobile subscriber. Also known as '-1' parameter.
Client	Client (CP)
Endpoint	An endpoint is a web service, defined by a WSDL file. It defines the address or connection point to a web service. It is typically represented by a simple HTTP URL string.
Encode	This means that the MT content and/or URL is coded into computer language to deliver the message to the client's application and vice versa. Example: {{ENCODE_TABLE}} You can encode the contents and URL by using the MK converter stated here:

Encode table:

Before Encoding	After Encoding
Hello World	Hello%20World
http://www.yourdomain.com/receive.asp?from=631234567890&text=hello world&time=yyyy-mm-ddhh:mm:ss&moid=1234567&shortcode=2929&telcoid=1	http%3a%2f%2fwww.yourdon.com%2freceive.asp%3ffro3d631234567890%26text%3ello+world%26time%3dyyyy-mm-ddhh%3amm%3ass%26moid3d1234567%26shortcode%3929%26telcoid%3d1

	http://utilities.etracker.cc/converter/converter.aspx
Known Issues	Issues that are beyond MACROKIOSKs control but highlighted to clients for their knowledge.
Synchronous	Refers to immediate MT return from the clients to the mobile subscriber. Also known as '4-parameter'.
System Limitation	Refers to MACROKIOSK's system limitation which may be further enhanced in the future depending on client's requirement.
WAP	Wireless Application Protocol A technology that allows cell phones to display specially formatted web sites on a small screen. Most of the WAP usage involves accessing the mobile web from a mobile phone.
WEBF	Web Failed Failed to pass the MO (Mobile Originating) parameters to the client's URL.

(i) Pay attention to the   'Remember' image posted throughout the document. This is highlighted for you to take note when doing system integration.

(ii) The 'Tool' image   in most section gives you the endpoints and methods required to send the parameters across to MACROKIOSK and versa.

You can also refer to Section 1.2 for the Summary of API endpoints for a quick reference.

(iii) Selected texts throughout this document are hyperlinked.
e.g. Refer to Known Issue
You can click on the hyperlinks to get more information on the selected text.

(iv) Notes are highlighted in pink for easy notice.

(v) Please note that the commercial information of the product such as the product feature, process flow etc. can be found in the *References for xxx etracker Premium SMS API Specifications.*

3.0   **Important Notes Clients**

- Delivery Notifications (DN) will be updated periodically for all clients subject to the frequency set by the respective mobile operators.

- The SMSC (Short Messaging Service Centre) will retry the sending of messages to the mobile subscriber within the stipulated retry policy set by the respective mobile operators.

- Mobile subscribers will not be charged if they do not receive the messages.

- Successful billing is based on the successful delivery status, and not the amount of messages that the client sends to etracker premium messaging gateway.

- A client is responsible for the following:

    - ✓ Content format compatibility with the mobile handset.

    - ✓ Ensure correct encoding format is used according to message content type (e.g. standard normal text, unicode, binary, etc.) before sending it over to etracker premium messaging gateway.

    - ✓ Mobile subscription database is to be updated at all times to avoid charging the mobile subscribers wrongly.

    - ✓ UAT (User Acceptance Test) must be conducted before launching any mobile services.

    - ✓ No MT (Mobile Terminating) messages should be sent to deactivated or recycled mobile numbers.

4.0   Specification

4.1   Generate Authentication Token

To do this….	Use this endpoint	Method	Successful response from etracker
Send Token Request to MK	http://mis.etracker.cc/THPSMSToken/GetToken	GET/ POST	Authentication Token, Expiry Time in seconds e.g. 10100000000,300

Access Token is required for Client to call and use MACROKIOSK API.
It is a combination of "UserName + Keyword + Shortcode + DateTime + Password (MD5 hashed)"

Example: MK + RING + 4541889 + 20180914155512 + 6F0F4D469EAEAD0AC18DA3A460F263B6

1. All characters must be uppercased.
2. Password must be MD5 Hashed before appending it to create the Access Token
3. Generate Access Token using MD5 Hashing Algorithm.
4. Hash the above result with MD5 generator.

Below is the list of parameters:

No	Parameter	Type	Description	Example
1	AccessToken	String	Access Token	aa15856d7b7fbb796debe4b6fb3aa715
2	Keyword	String	Subscription keyword used for MT (Mobile Terminating) PUSH	ring
3	ShortCode	Numeric	Shortcode	4541889
4	DateTime	String	Defines the date and time of the transaction. It should be the current date and time. The time is GMT+8 and it should be in this Format "yyyyMMddHHmmss"	20180914155512

http://mis.etracker.cc/THPSMSToken/GetToken?AccessToken=aa15856d7b7fbb796debe4b6fb3aa715&Keyword=ring&ShortCode=4541889&DateTime=20180914155512

Response Code

Response Code	Description
400	Invalid Parameter
401	Invalid Access Token
402	Invalid Keyword
403	Invalid ShortCode
404	Invalid DateTime
405	Unauthorize Access
500	Server Error

4.2   Receiving MO Messages via Shortcode

- For DTAC, AIS and Truemove Hutchison, the MO shortcode is the same as the MT shortcode.

Telco	End user MO	MO (MK to Client)	MT (Client to MK)
DTAC	4541xxx	4541xxx	4541xxx
TRUE	4541xxx	4541xxx	4541xxx
AIS	4541xxx	4541xxx	4541xxx

To do this….	Use this endpoint	Method	Expected response from client
Receive MO from MK	http://www.yourdomain.com/receive.asp?	GET/ POST	*-1* or *5 param*

The following are the parameters that will be included to the endpoint above:

No	Parameter	Type	Description	Example
1	From	Numeric	Mobile subscriber's mobile number, in international format (without the "+" sign).	66874111222
2	Text	Character	Content of the mobile subscriber's request, which includes the service keyword. It should be URL encoded.	RS%20ABC
3	Time	Date time	Timestamp of the request received.	yyyy-mm-ddhh:mm:ss
4	Shortcode	Numeric	Shortcode of which the request was received.	4541889
5	Moid or Msgid	Numeric	Unique message identifier, to tag each request received. **Note**: Either parameter name carries the same value	1234567
6	Telcoid	Numeric	To indicate mobile network 1 - DTAC 3 - AIS 4 - TRUEMOVE HUTCHISON	3
7	Channel	Numeric	To indicate MO Channel 0 - SMS 1 - IVR 2 - WAP	0
8	RefId	Alphanumeric	CP's Tracking id Optional – This parameter will only pass with Telcoid = 1(DTAC) & Channel = 2(WAP) & 4(Truemove H)	12345abcde

- Special characters, for example (*, -, +, space) cannot be used as part of a service keyword.

- The example below illustrates a URL to be provided for integration.

  http://www.yourdomain.com/receive.asp?from=66874111222&text=RS%20ABC&time=y
  yyy-mm-
  ddhh:mm:ss&moid=1234567&shortcode=4541889&telcoid=3&channel=0&refid=12345ab
  cde

  OR

  http://www.yourdomain.com/receive.asp?from=66874111222&text=RS%20ABC&time=y
  yyy-mm-
  ddhh:mm:ss&msgid=1234567&shortcode=4541889&telcoid=3&channel=0&refid=12345a
  bcde

4.3   Receiving MO Messages via WAP/Web

To do this….	Use this endpoint	Method	Successful response from etracker
Send WAP/Web MO to MK	http://mis.etracker.cc/THwap/WAPMORequest.aspx	GET	Response Code

Below is the list of parameters:

No	Parameter	Type	Description	Example
1	Telcoid	Numeric	To indicate mobile network: 1 - DTAC 3 - AIS 4 - Truemove Hutchison	1
2	Shortcode	Numeric	Shortcode	4541889
3	Keyword	Character	Subscription keyword used for MT (Mobile Terminating) PUSH	ring
4	RefId	Alphanumeric (Max 50)	CP's Tracking id Optional – This parameter is only to use with Telcoid = 1 (DTAC) & 4(Truemove H) Note: Tracking id will be sent back to CP in MO URL	12345abcde
5	AuthToken	Numeric	Authentication Token Note:Refer to Section 4.1	10100000000

http://mis.etracker.cc/THwap/WAPMORequest.aspx?Telcoid=1&Shortcode=1932339&Keyword=ring&refid=12345abcde&AuthToken=10100000000

Response Code for MO via WAP/Web

Response Code	Description
400	Invalid Parameter
402	Invalid Telco ID
403	Invalid Service
404	RefId limit exceed
405	Request Fail
408	Invalid Auth Token
409	Auth Token Expired

4.4   MT (Mobile Terminating)

4.4.1   MT (Mobile Terminating) Format for Text

To do this….	Use this endpoint	Method	Successful response from etracker
Send MT to etracker	http://mis.etracker.cc/THPush/THpush.aspx	POST	{*mobileno*}, {*msgid*}, {*status*}

The parameters below must be affixed to the endpoint above.

No	Parameter	Type	Description	Example
1	User	Character	Username to be provided once account is activated	macrokiosk
2	Pass	Character	The password for authentication	macro123
3	Type	Numeric	To indicate message type: 0 - Text 1 - Binary or WAP Push (DTAC, Truemove Hutchison & AIS L +) 5 - UCS (Unicode) – For more details, please refer to the Unicode Consortium at www.unicode.org	0
4	To	Numeric	The recipient's mobile number in international format (without the "+" sign). **Note:** Failure to include the country code may result in non-delivery of SMS to the intended recipient.	66874111222
5	From	Numeric	Shortcode	4541889
6	Text	Character	The content of normal text (ASCII) must be URL encoded. Binary messages must be in HEX format. For type=5, the Unicode content message must be UCS encoded.	You will receive JOKE per sms. Unsub send STOP JOKE to 4541889
7	Price	Numeric	The price and type of service is tied to the shortcode.	6

8	Telcoid	Numeric	To indicate mobile network: 1 - DTAC 3 - AIS 4 - Truemove Hutchison	1
9	Cat	Numeric	To indicate the message category.	1

Cat	Description
0	Info on Demand (IOD) service, i.e. not subscription service.
1	Welcome message when user subscribes. (Must contain Service Name, Price & instruction to confirm.)
2	First Premium content must be sent to the subscriber immediately after subscription. The following are the exceptions: | DTAC	Does not support first premium content.
AIS	Supports first premium content push for CAT = 6
TRUEMOVE H	Supports first premium content push for CAT = 2	
3	Error Message.
4	Weekly reminder message to keep active subscriber status alive.
5	Renewal of subscription (only applicable for monthly/weekly subscriptions).
6	Content Broadcast DTAC subscription supports broadcasting 1 message to many subscribers, therefore client should send one MT only and DTAC will help to broadcast to all of the subscribers.
7	Cancellation confirmation
9	Free trial MT for time-based service Only applicable for AIS shortcode with free trial option. Free trial MT must send with 0 price point. Client to validate subscriber who entitle free trial for first time subscription only.

| 10 | Keyword | Character | Subscription keyword used for MT (Mobile Terminating) PUSH | ring |

| 11 | Senderid | Character | To represent sender's name together with the messages. If Senderid is not available, a shortcode will be present.

AIS approval is required for Sender ID.

Please liaise with our respective Global Business personnel for AIS Sender ID application prior to the service launch.

Note: This is an optional parameter. | Abc |
| 12 | Linkid | Numeric | DTAC

i) Must be included for IOD with "-1" (asynchronous) response.

ii) Must be included for IOD and Subscription's Error MT (cat=3).

AIS

i) Must be included for IOD and subscription (except for -1 content MT & category=6 MT).

TruemoveH

i) Must be included for IOD with "-1" (asynchronous) response. | 1234567 |

Reference

Msgid: Msgid is generated by etracker premium messaging gateway for the checking of the

                     Delivery Notification status.

MobileNo: Refers to the recipient's mobile number.

Status: Refers to the Response Code from etracker.

Example:

{mobileno}, {msgid}, {status}
66874111222,1234567,200

For *IOD (Information on Demand) services,* clients must acknowledge the MO (Mobile Originating) by indicating either of the following:

(a) 5-parameters, which are delimited by commas: Type, To, MT text (URL encoded), Price, Category*, or -1.

> **Note:** *Please refer to 10.0 Appendix B: Category Description.

For Subscription services,

(a)   etracker will pass the MO URL to client:
   http://www.yourdomain.com/receive.asp?from=66874111222&**text=<keyword>**&time=yyyy-MM-dd hh:mm:ss&moid=1234567&shortcode=4541889&telcoid=3

Service	Telco (and platform)	Text Format (URL encoded)
Subscription Service Opt-in	AIS L + / DTAC / Truemove Hutchison	<keyword>
Subscription Service Opt-out	AIS L + / DTAC / Truemove Hutchison	STOP%20<keyword>

(b)   Client to acknowledge the MO (Mobile Originating) by indicating '-1'

> **Note:**
> - The 5-parameters response is a synchronous response where the MT message is sent immediately to etracker premium messaging gateway.
>   *Example:*
>   0,66874111222,mktest%20hello,30,0
>
> - The -1 response is an asynchronous response where it indicates that the client's application has received the MO (Mobile Originating) and will send the MT (Mobile Terminating) at a later stage.
>
> - The MO (Mobile Originating) response (5-parameters OR -1) must be in plain text, without any HTML tagging.

- If the client's application does not respond to the MO as above, etracker premium messaging gateway will assume that the message failed to be delivered to your application, resulting in a WEBF (Web Failed) status.

- A report of WEBF Mos can be obtained from **Client Reports > Request Log > View All** (http://clientreports.etracker.cc)

4.4.1 Sending Contents to Various Telco Platforms

AIS L+ Platform

i. **For Subscription MT Content**
    Example: http://mis.etracker.cc/thpush/thpush.aspx?user=macrokiosk&pass=macro 123&type=0&to=66874111222&from=4541889&text=Content&telcoid=3&price= 6&cat=6&keyword=ring&senderid=abc

ii. **For IOD MT with -1 response and For Welcome MT response:**
    The 'Linkid' parameter must be included and MT must be sent back *within 15 minutes* (due to the validity period of Linkid), after the MO is passed to client. Otherwise, the MT will hit error when passed to AIS.

    Example IOD MT:
    ```
    http://mis.etracker.cc/thpush/thpush.aspx?user=macrokiosk&pass=macro
    123&type=0&to=66874111222&from=4541404&text=Content&price=10&telcoid
    =3&cat=0&keyword=wall&senderid=abc&linkid=1234567
    ```

    Example Welcome MT:
    ```
    http://mis.etracker.cc/thpush/thpush.aspx?user=macrokiosk&pass=macro
    123&type=0&to=66874111222&from=4541404&text=welcome
    MT&price=0&telcoid=3&cat=1&keyword=wall&senderid=4541123&linkid=1229
    20190480972745
    ```

    Note: LinkID parameter = MOID parameter

iii. **For IOD MT with 5 parameters response:**
    Example: 0,66874111222,mktest%20hello,30,0

Truemove Hutchison

i. For Subscription MT Content:

Example:

http://mis.etracker.cc/thpush/thpush.aspx?user=macrokiosk&pass=macro
123&type=0&to=66874111222&from=4541889&text=Content&telcoid=4&price=
6&cat=6&keyword=ring&senderid=abc

ii. For IOD MT with -1 response:

Example:

http://mis.etracker.cc/thpush/thpush.aspx?user=macrokiosk&pass=macro
123&type=0&to=66874111222&from=4541404&text=Content&price=10&telcoid
=4&cat=0&keyword=wall&senderid=abc

iii. For IOD MT with 5 parameters response:

Example:

0,66874111222,mktest%20hello,30,0

DTAC:

i. For Subscription MT Content:

Example:

http://mis.etracker.cc/thpush/thpush.aspx?user=macrokiosk&pass=macr
o123&type=0&to=66874111222&from=4541889&text=IODText&price=6&telcoi
d=1&cat=0&keyword=ring&senderid=abc

ii. For IOD MT with -1 response:

Example*:*

http://mis.etracker.cc/thpush/thpush.aspx?user=macrokiosk&pass=macr
o123&type=0&to=66874111222&from=4541889&text=IODText&price=6&telcoi
d=1&cat=0&keyword=ring&senderid=abc&linkid=1234567

iii. For IOD MT with 5 parameters response:

Example*:* 0,66874111222,mktest%20hello,30,0

Other Information for DTAC

i. **For Welcome Message, category 1:**

Example:

http://mis.etracker.cc/thpush/thpush.aspx?user=macrokiosk&pass=
macro123&type=0&to=66874111222&from=4541889&text=WelcomeMessage
&price=0&telcoid=1&cat=1&keyword=ring&senderid=abc

ii. **DTAC does not allow 1st Premium Message.**

iii. **Error Text for DTAC – Client Control Command, category 3:**

Example*:*

http://mis.etracker.cc/thpush/thpush.aspx?user=macrokiosk&pass=
macro123&type=0&to=66874111222&from=4541889&text=ErrorText&pric
e=0&telcoid=1&cat=3&keyword=ring&senderid=abc&linkid=1234567

Note: Error text for DTAC Control Command will be handled by DTAC

iv. **For Reminder Message, it will be handled by DTAC.**

v. **For Recurring Charge and Notification Message, it will be handled by DTAC.**

vi. **For Content Text, category 6:**

Example*:*

http://mis.etracker.cc/thpush/thpush.aspx?user=macrokiosk&pass=
macro123&type=0&to=66874111222&from=4541889&text=Content&price=
6&telcoid=1&cat=6&keyword=ring&senderid=abc

vii. **For Cancellation Confirmation Text, cat = 7:**

Example*:*

http://mis.etracker.cc/thpush/thpush.aspx?user=macrokiosk&pass=
macro123&type=0&to=66874111222&from=4541889&text=CancellationCo
nfirmation&price=0&telcoid=1&cat=7&keyword=ring&senderid=abc

MACROKIOSK
Powering Connectivity

4.4.2 MT (Mobile Terminating) Format for Non-Text

	Bit	Length (Characters)
Standard Text Message	7	160
Binary message	8	280
Unicode Message	16	280
		Note: Unicode characters need to be encoded as Hex, therefore message length is 280 hex characters instead of 70 Unicode characters.

Ringtone

Ringtone must be TP-UDH formatted.

Example of message format:

06050415811581024A3A58C0C0C0C0C0C4041EA716934D515610428AD08514568428A274214
513A10A288D08514468428934C210515610428AD08514568428A274214511A10A289D0851446
8428934C210515610224AD0851256042892B42144936108249D085124E84289274214493A10A2
49D08512450000

> **Note:**
>
> If a ringtone does not fit into 1 text message, the ringtone hexcode will need to be split into multiparts. Each part must be within 140 octets (characters). Each part must be separated by colon":" as the delimiter.

Example:

0B0504158115810003000201024A3A69CDDD9595D18DA1A5B1900401C8D8E4936289B126986
18A30C49A628BB126984D8A26C49A618628C312698A2EC49A6156289B12698618A30C49A628
BB12698558A26C49A618628C312698A2EC49A6186289B12698618A30C49A628BB12698618A2
6C49A618628C312698A2EC49A6136289B12698618A30C49A628BB12:0B050415811581000300
02026984D8A26C49A618628C312698A2EC49A6136289B12698618A30C49A628BB126984D8A2
6C49A618628C312698A2EC49A6156289B12698618A30C49A628BB12698558A26C49A618628C
312698A2EC49A6186289B12698618A30C49A628BB12698618A26C49A618628C312698A2EC49
A6136289B12698618A30C49A628BB1269

Picture Message without text

Picture message must be UDH formatted (hexcode)

Example of message format:

0B0504158A158A0003000301**30020100**00481C01000AABAAAAAAAAAE28000D5F55555555560 0000AAAAAAAAAAAAE00001D557D5555555600003AAB83AAAEAAAA0000555700D557D55600 01AABE002AAAFEAE001F57F3001D5555DC54FAF980800EAAAAAE80F40E0040415555560000 0E002080EAAAAB00000C0021803D555580000E00210007AAAAC0000604**:**0B0504158A158A00 03000302210003FD556000020E2100020FEAB8000300411801007F5D000300810801004FFA000 10181000100C07F00008300800000E00000007E10C00307E00000003838600E06600000056418 1030183551002AE2000FE0F022AA155541C00057C03004AAA088F83FF800300A54018D1FF40 10010070 0018180003E00100F0001010000**:**0B0504158A158A0003000303**6**000100F

Picture Message with text

Example of message format:

0B0504158A158A0003000301**30020100**00481C01000AABAAAAAAAAAE28000D5F55555555560 0000AAAAAAAAAAAAE00001D557D5555555600003AAB83AAAEAAAA0000555700D557D55600 01AABE002AAAFEAE001F57F3001D5555DC54FAF980800EAAAAAE80F40E0040415555560000 0E002080EAAAAB00000C0021803D555580000E00210007AAAAC0000604**:**0B0504158A158A00 03000302210003FD556000020E2100020FEAB8000300411801007F5D000300810801004FFA000 10181000100C07F00008300800000E00000007E10C00307E00000003838600E06600000056418 1030183551002AE2000FE0F022AA155541C00057C03004AAA088F83FF800300A54018D1FF40 10010070 0018180003E00100F0001010000**:**0B0504158A158A0003000303**6**000100F**0000046566** 6768

Note:

1. Codes highlighted in **Red**

- 30:- format version (must always be 30).

- 02:- indicates OTA (Over The Air) bitmap.

- 0100:- indicates content length in hexcode (must always be 0100 hexcode which is equivalent to 256 bytes)

2. Codes highlighted in **Purple** (at end of UDH)

- 00:- indicates text message type (length <= 110 bytes).

- 0004:- indicates content length in hexcode (length = 4)

3. Legend for sending 8-bit messages

- **Blue** – UDH

- **Green** – Mobile Operator Code (MOC)

- **Red** – Picture Message type to set

- **Purple** – Text in Picture Message

4.4.3 MT (Mobile Terminating) Format for Rich Content via WAP Push

Before any integration and testing can be done, the contents must be located in a server that is accessible via the World Wide Web.

The relevant MIME file type must be set and can be added at the IIS (for Windows based web server only). Below is an illustration on the location of the MIME file type.
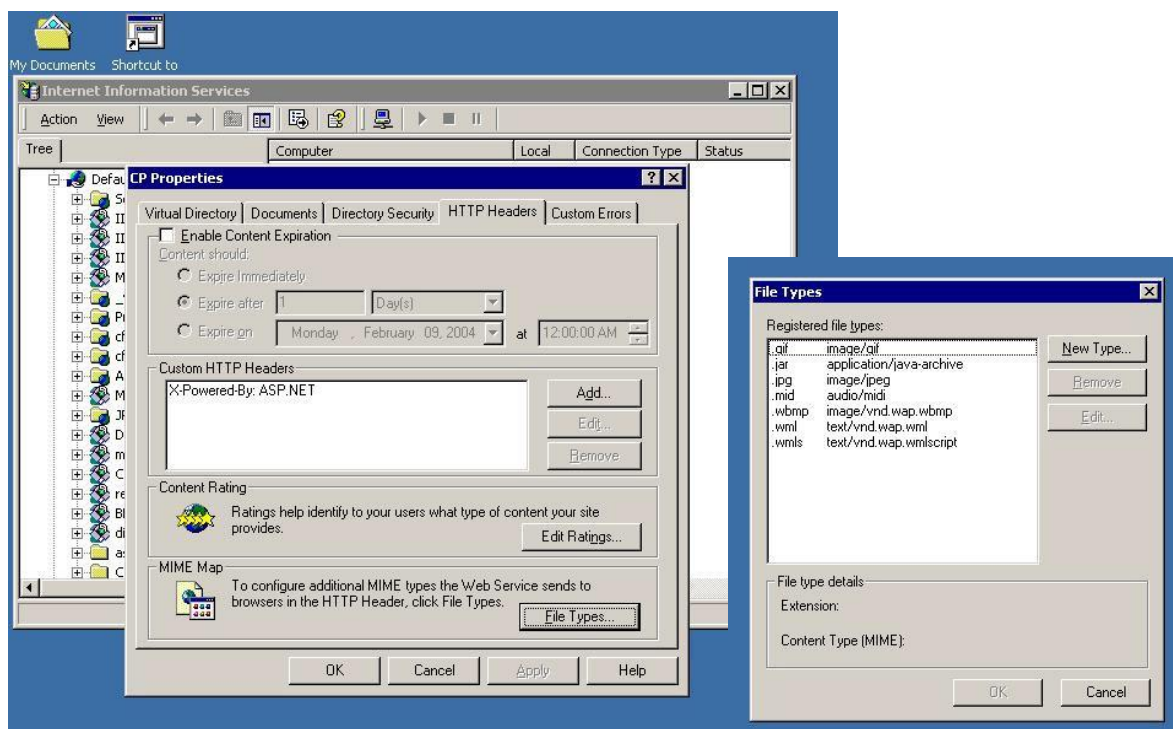
Mobile operator's requirements in transmitting WAP Push.

Following is a checklist of all the required parameters via HTTP POST. HTTP GET is not recommended in this case due to string limitations:

- User (userid)
- Pass (password)
- From (shortcode)
- To (recipient's mobile number)
- Type (1 for AIS L+, DTAC and Truemove Hutchison)
- Text
- Cat (category)
- Telcoid
- Keyword
- Price
- Senderid (Optional for AIS L+ only).
- LinkID (This is only optional for Truemove Hutchison platform).

Sample to send WAP (Wireless Application Protocol) Content via MT (Mobile Terminating) PUSH for AIS L + / DTAC / Truemove Hutchison

http://mis.etracker.cc/THPush/THPush.aspx?user=macrokiosk&pass=macro123&type=1&from=4541605&to=6658126201&text=0B05040B8423F00003840101C5061D03AE818 4456E636F64696E672D56657273696F6E00312E3300AF82B4850205040045C60C037777772 e796f7572646f6d61696e2e636f6d2f6d6964692f746174752e6d69640011033100010353 6 f6e675469746c65000101&telcoid=2&keyword=ring&cat=6&senderid=abc&price=10

> **Note:**
> - Data conversion to hexcode can be done at the following web address:
>   http://utilities.etracker.cc/converter (select Rich Content Encoder).
> - For DTAC WAP MT, select 'DTAC SI Link Encode' to do conversion.
> - The maximum length for 'text' and 'contenturl' combined is 84 characters.

Sample to send WAP (Wireless Application Protocol) Content via IOD (Information On Demand)
Please indicate the following 5 parameters in MO (Mobile Originating) acknowledgement: type, to,

urlencoded (title and contenturl), price, cat

Example:

1,6658126201,0B05040B8423F00003840101C5061D03AE8184456E636F64696E672D5665727369

6F6E00312E3300AF82B4850205040045C60C033230322E392E3130342E3131302F63702F6D696

4692F63616E6F6E696E442E6D6964400110331000010352696E67746F6E65000101,30,0

Testing Requirements for WAP (Wireless Application Protocol) PUSH

Please ensure the following before testing is carried out:

- Mobile handset is GPRS, WAP or 3G enabled. Check with the respective mobile or service operator on the necessary configurations.
- For testing purposes, the mobile handset must be able to support the mobile content.
  - Configure the following MIME file type on the web server:
    - ✓ **gif** "image or gif"
    - ✓ **jpg** "image or jpeg"
    - ✓ **mid** "audio or midi"

4.5   MSISDN Forwarding for WAP Opt In.

| End User clicks on Client's Pre-Landing Page / Banner or Affiliate URL. | → | Client redirects End User to the MSISDN forwarding URL | → | 'MSISDN forwarding' will process, and redirect the user, to the CallBackURL, containing the query string of the result. |
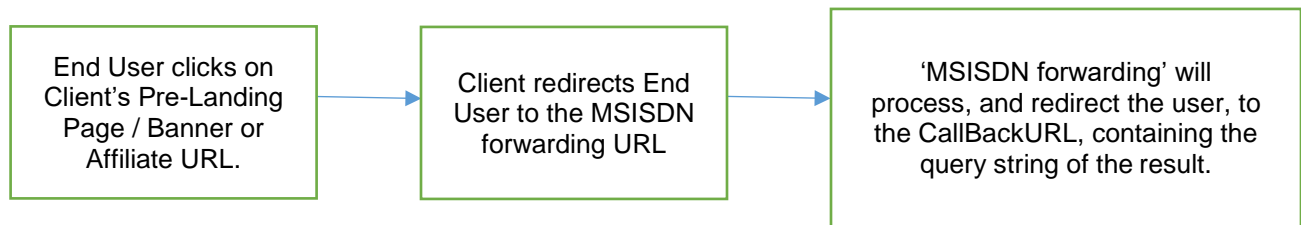
Note:

MSISDN Forwarding feature is meant to identify the End User's details only. Those CPs who are unable to use the MSISDN forwarding feature, are still required to follow the Landing Page & AOC regulations as set by Telco.

MSISDN Forwarding Function

Before MSISDN Forwarding

After landing page user goes to the AOC page

On the AOC page user clicks to confirm subscription

After confirmation user gets the welcome message
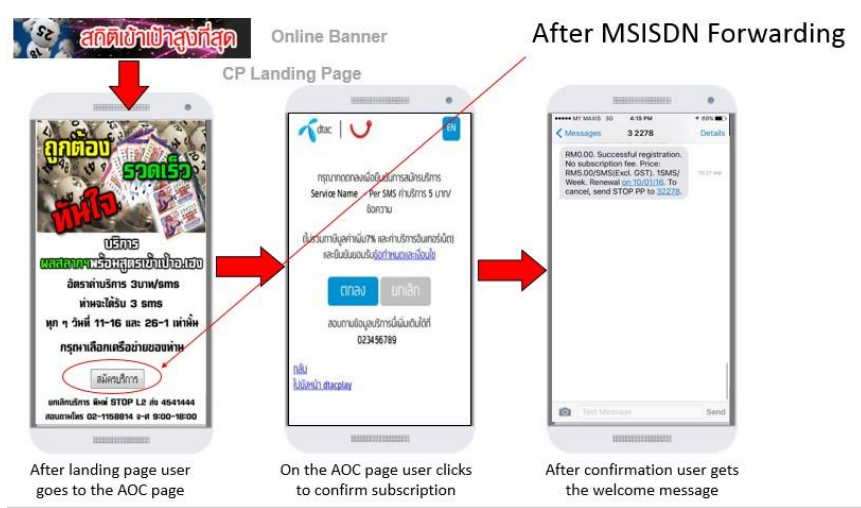
No MSISDN or Telco selection required.

To do this…	Use this endpoint	Method	Successful response from etracker
Send request to etracker	http://mis.etracker.cc/THWAP/MsisdnForwarding.aspx	GET	{Status},{TelcoID},{MSISDN}

The parameters below must be affixed to the endpoint above.

No	Parameter	Type	Description	Example
1	Keyword	Character	Subscription keyword	Ring
2	Shortcode	Numeric	Shortcode	4541889
3	CallBackURL	URL	Result will be sent to this URL **Note:** The URL must be URL encoded.	http%3a%2f%2fmk.com%2fTest.aspx

Example of 'Request':

http://mis.etracker.cc/THWAP/MsisdnForwarding.aspx?Keyword=ring&Shortcode=4541889&CallBackURL=http%3a%2f%2fmk.com%2fTest.aspx

Example of 'Return':

http://mk.com/Test.aspx?Status=Success&TelcoID=4&Msisdn=66874111222

Reference for 'Return'

Meaning	Description
Status	Refers to the Response Code from etracker.
TelcoID	Refers to the recipient's Telco
MSISDN	Refers to the recipient's mobile number.

Response Code for MSISDN Forwarding

Response Code	Description
Success	Successful
Fail	Failed to identify MSISDN/TelcoID
402	Invalid Shortcode/Keyword
403	Invalid Service
Unauthorized	Unauthorized Access

5.0 Delivery Notification (DN)

Option 1: Web Based Reporting – GUI Interface

The availability of a Delivery Notification (DN) is based on the Telco's policy which may change from time to time. Client may check all MO (Mobile Originating) / MT (Mobile Terminating) transaction and DN records, via Client Report portal (http://clientreports.etracker.cc).

Option 2: etracker Delivery Notification (DN) – API Interface *(Offline DN)*

Instead of using the online web reporting to view a DN, clients have the option to request for a DN through the etracker URL engine. This option is used to search for ONE particular transaction at any time.

To do this….	Use this endpoint	Method	Successful response from etracker
Request for offline DN from etracker	http://mis.etracker.cc/OfflineDNAPI/DNLog.aspx?	GET / POST	*For Synchronous:* *<MOID>,<MTID>, <MSISDN>,<STATUS>* *For Asynchronous:* *<MTID>,<MSISDN>, <STATUS>*

The URL will require seven parameters as shown below:

Parameter	Description
Mtid	Unique message identifier, to tag each message sent (MT).
Moid	Unique message identifier, to tag each message received (MO). NOTE: Only applicable when client acknowledges with 5 parameters (Synchronous Mode) while receiving MO.
Smsdate	The date/time (YYY-MM-DD) of the moid for synchronize mode OR The date/time (YYY-MM-DD) of the mtid for asynchronize mode
Msisdn	The mobile number of the recipient that is sent along with the MT (Mobile Terminating)
Shortcode	The 7 digit shortcode that the MT (Mobile Terminating) is sent
Telcoid	The mobile operator's identification that the MT (Mobile Terminating) is sent
Countryid	The country identification that the MT (Mobile Terminating) is sent. Thailand is set with the value '3'

Example:

http://mis.etracker.cc/OfflineDNAPI/DNLog.aspx?mtid=123296707&moid=1234567&msisdn=66874111222&shortcode=4541889&telcoid=1&countryid=3&smsdate=2010-06-15

Option 3: etracker Real Time DN Request – API Interface *(Realtime DN)*

1. For real time DN via API, it is only available upon request to the Global Business Consultants. Once you have requested for real time DN, your DN URL endpoint as shown below will receive the following parameters:

http://www.yourdomainDNurl/receive.asp

> **Note:** 'Yourdomain' refers to the Client's domain name.
> This enables etracker to send the DN to the Client after every transaction.

Parameter	Description
Mtid	Unique message identifier, to tag each message sent (MT).
Moid	Unique message identifier, to tag each message received (MO). NOTE: Only applicable when client acknowledges with 5 parameters (Synchronous Mode) while receiving MO.
Datetime	The date/time (YYY-MM-DD) of the moid for synchronize mode OR The date/time (YYY-MM-DD) of the mtid for asynchronize mode
Msisdn	The mobile number of the recipient that is sent along with the MT (Mobile Terminating)
Shortcode	The 7 digit shortcode that the MT (Mobile Terminating) is sent
Telcoid	The mobile operator's identification that the MT (Mobile Terminating) is sent
Countryid	The country identification that the MT (Mobile Terminating) is sent. Thailand is set with the value '3'
status	The real time DN status
Keyword	The Keyword that the MT (Mobile Terminating) is sent

For Synchronous Mode, the Real Time DN API is forwarded to clients with 8 parameters, include the MOID parameter.

Example:

http://www.yourdomainDNurl/receive.aspx?mtid=123296707&moid=1234567&msisdn=66
874111222&shortcode=4541889&telcoid=1&countryid=3&datetime=2010-06-15
10:10:10&status=OK&keyword=ring

For Asynchronous Mode, the Real Time DN API is forwarded to clients with 7 parameters, without the
MOID parameter.

Example:

http://www.yourdomainDNurl/receive.aspx?mtid=123296707&msisdn=66874111222&sho
rtcode=4541889&telcoid=1&countryid=3&datetime=2010-06-15
10:10:10&status=OK&keyword=ring

6.0 Response Code

A response code will be returned for all HTTP GET or POST submissions, from etracker Premium Messaging gateway to clients.

List as below:

Response Code	Description
101	Invalid DTAC Category (This shortcode is under DTAC Command Control)
200	Message sent to queue successfully
400	Missing parameter or invalid type field
401	Invalid user/pass
402	Invalid shortcode/keyword
403	Broadcast limit exceeded (for DTAC only).
404	AIS duplicate content broadcast
405	Invalid sender ID (applicable for AIS L+ IOD only)
406	Blacklisted MSISDN
407	Blocked keyword
408	Duplicate MT Blocked
409	Invalid linkid or exceeded push frequency
410	Invalid subscriber
411	Invalid category (applicable for AIS only)
412	Welcome MT blocked as it is currently handled by Telco and should not be sent by clients.
413	DTAC & AIS L+ are not allowed to send 1st premium MT.
414	Blocked free trial MT
415	Invalid price point for free trial MT
WEBF	Web failed to pass the MO (Mobile Originating) parameters to client's URL

7.0 System Limitation & Known Issues

7.1 System Limitation

i) MO Format

- Clients are responsible to filter all incoming MO (without space), to ensure if keyword and variable are in accordance to their campaign requirements.
- Clients can use only ONE MO format PER campaign, i.e. MO with space OR MO without space.
- For existing shortcodes which are running 'live' campaigns, the following must be done prior to changing the MO handling flow:
- ✓ Live campaigns' must be frozen prior to changing the MO handling mode from (with space) to (without space). This is to avoid service interruption towards the incoming MO.

7.2 Known Issues

- The MO option via WAP/Web is only applicable to Subscription service.
- For all AIS L+ short code, please note that whenever customized error message is triggered, AIS will replace the customized message with their standard error message. Telco will charge user first and refund them the next day.

- Please note the following actions when user de-registers the subscription by typing 'STOP MO' from *CP controlled shortcode*:

  STOP MO performed from SMS channel

  Client might receive the STOP MO *twice.*

  STOP MO performed from DTAC web tool

  Client will receive the STOP MO once.

  Note:
  'DTAC controlled shortcode' refers to the shortcodes that are running on DTAC's new system.
  'CP controlled shortcode' refers to the shortcodes that are running on DTAC's old system.
  'DTAC web tool' refers to the web portal owned by DTAC which allows unsubscribing by DTAC personnel.

MSISDN Forwarding

1. *'MSISDN Forwarding'* feature is only applicable for WAP Opt In users on mobile data. End Users that connect via WiFi, will be directed to key in in mobile number and select the Telco.

2. Unlike AIS & TruemoveH, which will provide the end user's mobile number to the clients, DTAC will only provide the Telco ID.

   Therefore if clients want the MSISDN number of the end users, they have to request it from the End Users via their registration page and/or clients can match end users MSISDN number to their affiliate by using the RefId parameter in the WAP MO Request URL (Refer to section 4.1 and 4.2).

**8.0   References for Thailand etracker Premium SMS API Specifications.**

8.1   Product Feature Highlights

Feature	Description
HTTP	▪ Supports HTTP request submission.

Content Format	▪ Supports normal text content in:
	   o Roman (ASCII)
	   o Unicode
	
	▪ Supports the display of:
	   o Binary (Ringtone and Picture)
	   o WAP Push (SI link)

Supports different MO options	▪ Supports MO via SMS and WAP/Web mobile. * WAP/Web opt in is only applicable for subscription service.
MSISDN Forwarding option for WAP Opt in.	▪ Simplified steps for End Users, as they don't need to key in their mobile number and Telco when subscribing for contents. *Applicable for All telco* _Benefits for Clients:_ ▪ Identification of Business Referral Sources - Clients can track the source, from which the end users decided to subscribe the contents from. ▪ Increased Revenue - Simplified user experience will promote user to subscribe from Clients more often. This will increase client's traffic and revenue at the same time as well.
Supports different MO Format	▪ Supports MO *with space* between keyword and variable ▪ Supports MO *without space between* keyword and variable
Post-paid and Pre-paid billing	▪ Supports billing to Postpaid and Prepaid mobile subscribers.
Delivery Notifications	▪ Receives real time acknowledgement for each message sent to Telcos. ▪ The DN statuses from DTAC for subscription service transactions are updated in MACROKIOSK database on a daily basis.
Supports Sender ID	▪ Supports sender ID on MT broadcast delivery. o AIS - requires 2 to 3 weeks of Sender ID approval.

Feature	Description
Supports IOD service	▪ Each MT delivered to mobile subscribers corresponds to each MO request received from mobile subscribers.

Supports Subscription service	▪ Supports the delivery of a series of charged contents to the mobile subscribers over a subscription period.
	
	▪ Charging methods:
	   o Charge-per-register
	   o Charge-per-MT

Access Level	▪ API access level only.
Telco Coverage	▪ AIS ▪ DTAC ▪ Truemove Hutchison
Shortcode	▪ 4541xxx (7 digits)
Billing method	▪ MO Billing ▪ MT Billing Note: Refer to *Chapter 4. MO / MT Billing* for further details on the billing methods.
Supports Web Based Reporting system	▪ Offers simple user administration through web base reporting access.

Note: Please refer to 10.0 Appendix A for the API Feature Summary.

8.2 etracker Premium Messaging API Process Flow
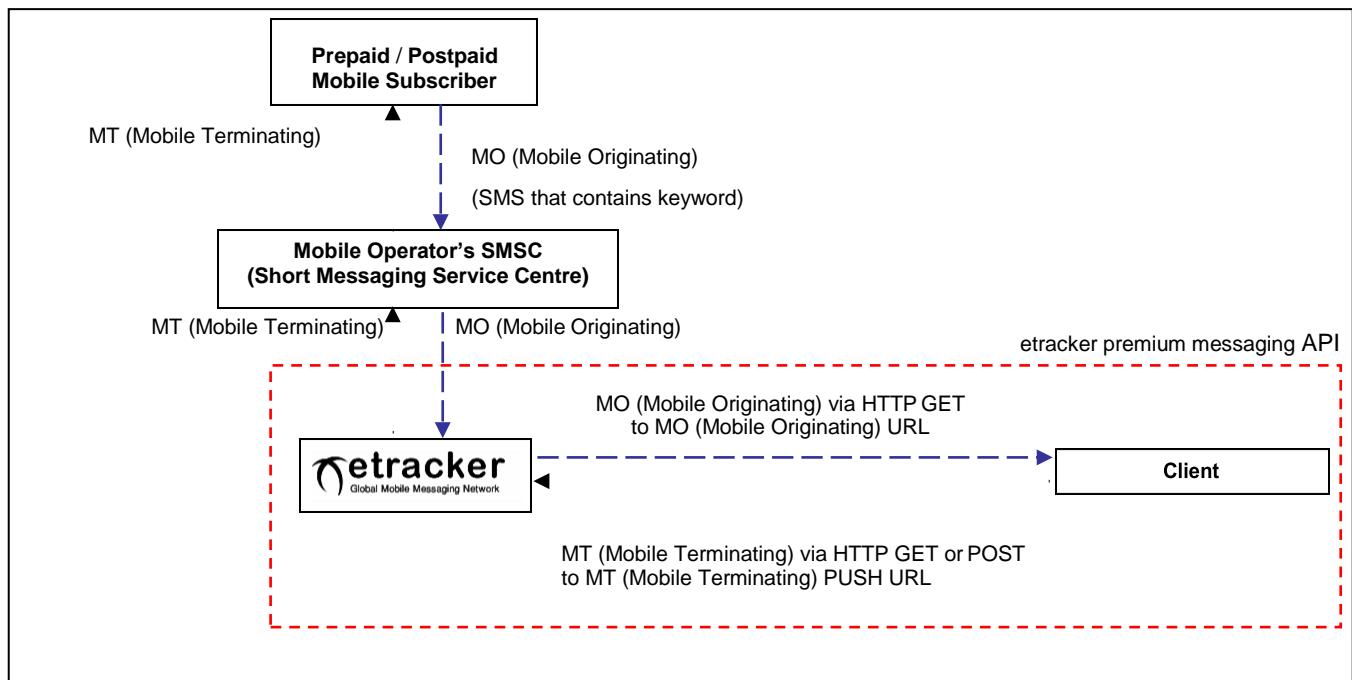
Legend:

- - - - - ► Received MO (Mobile Originating) via POST or GET to MO (Mobile Originating) URL

───────► Sending MT (Mobile Terminating) via POST or GET to MT (Mobile Terminating) URL

9.0 FAQ

1. **How do I integrate to etracker Premium Messaging API?**

   Use HTTP protocol (either POST or GET) to connect to the etracker Premium Messaging API. The etracker Premium Messaging API complies with the international standards used by the World Wide Web Consortium for communicating and exchanging of files. The specifications are developed and maintained by W3C.

2. **I sent a request, but did not get any message on the mobile handset. Why?**

   First of all, please logon to http://clientreports.etracker.cc webpage to view the message status. The message status can be viewed at the ''View Request Log" link. In the event the status is other than 'OK', please check that the application URL connecting to etracker Premium Messaging gateway is returning the correct values. It is likely that the returning values are not correctly formatted. Example: invalid price code, message not URL encoded, the page has HTML tags, redirected wrongly, the message content has exceeded the allowable message limits.

3. **Why are messages delayed or missing?**

   Such incidences only happen when there is a very huge volume of messages being sent out at any one particular time. This delay is usually caused by the message queue at the Telco's SMSC (Short Messaging Service Centre). As for the missing messages, it is more often than not caused by the following scenarios:

   - Mobile subscriber has insufficient credits (especially prepaid mobile subscribers)
   - The particular mobile number is invalid or ceased
   - The particular mobile number has been barred or terminated.

4. **What is the format to convert SI (Service Indicator) message?**

   If the mobile content exceeds 140 bytes, the UDH will be split into multi parts.

   Example:

   0B05040B8423F00003840101C5061D03AE8184456E636F64696E672D56657273696F6E00312E33 00AF82B4850205040045C60C033230322E392E3130342E3131302F63702F6D6964692F63616E6F 6E696E442E6D696400110331000103**52696E67746F6E6500**0101

   BLUE = UDH

   RED = SI (Service Indicator) (DO NOT CHANGE)

   GREEN = String terminator (DO NOT CHANGE)

   BLACK = hex code value

5. Does MACROKIOSK provide client support?

MACROKIOSK provides a 24x7 client support assistance. The number to call is +603 2163 2100.

Alternatively, client can email us at techsupport@macrokiosk.com .

MACROKIOSK
Powering Connectivity

10.0 Appendix

A. Thailand's PSMS API Feature Summary

Features Supported	DTAC Control Command	DTAC Client Control Command	Truemove Hutchison	AIS L +
Supports MO and MT Billing	Yes	Yes	Yes	Yes
Supports Postpaid and Prepaid Mobile Subscribers	Yes	Yes	Yes	Yes
Supports SenderID on MT	Yes	Yes	Yes	Yes
Supports IOD (Info-on-Demand) service	Yes	Yes	Yes	Yes
Supports subscription service: - charge-per-register - charge-per-MT	Yes Yes	Yes Yes	Yes Yes	Yes Yes
Supports MT Format: - Roman Characters (ASCII) - binary - Unicode	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes
Supports WAP PUSH (SI LINK)	Yes	Yes	Yes	Yes
Supports Delivery Notification	Yes	Yes	Yes	Yes
Supports 1st Premium MT immediately after confirmed subscription	No	No	Yes	No
Supports broadcasting 1 message to many subscribers	Yes	Yes	No	No
Supports broadcasting 1 message to 1 subscriber	No	No	Yes	Yes

B. Category Description

Cat	Description	DTAC Control Command	DTAC CLIENT Control Command	TRUEMOVE HUTCHISON	AIS L +
0	IOD Service only	Premium/Free IOD MT.	Premium/Free IOD MT.	Premium/Free IOD MT	Premium/Free IOD MT
1	Welcome Message	DTAC will send Welcome Message.	DTAC will send Welcome Message.	Client to send Welcome Message	Client to send Welcome Message
2	1st Premium Message	Not supported	Not supported	Send 1st premium content (1 MT to 1 subscriber only)	Not supported.
3	Error Message	DTAC to send Error Message.	DTAC to send Error Message	Client to send Error Message.	Client to send Error Message
4	Weekly reminder message to active subscribers	DTAC to send Reminder Message	DTAC to send Reminder Message.	Client to send the reminder.	Client to send 1 reminder MT, 3 days in advance.
5	Renewal of package (only applicable for monthly/weekly package	DTAC to renew package.	DTAC to renew package.	Client to send the renewal notice.	Client to send the renewal notice.
6	Content Broadcast	Broadcast 1 message to many subscribers	Broadcast 1 message to many subscribers	Broadcast 1 message to 1 subscriber	Broadcast 1 message to 1 subscriber
7	Cancellation Confirmation	DTAC to send Cancellation Confirmation Message	DTAC to send Cancellation Confirmation Message	TRUEMOVE HUTCHISON to send Cancellation Confirmation Message	AIS L + to send Cancellation Confirmation Message
8	Unregister Subscriber	Not supported	Not Supported	Not Supported	Not Supported

Notes