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Service Provider Industry Notification *For The BT Network*

Title :- Fixed Line SMS

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BT Wholesale Services and Solutions at <https://www.btwholesale.com>

Prices (if quoted) are indicative, for current pricing information please refer to the BT price list available at :- <https://www.btwholesale.com/pages/static/help-and-support/pricing/carrier-price-lists.htm> Enquiries relating to this document should be directed to: sinet.helpdesk@bt.com

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1 Introduction

BT FLSMS is an SMS service enabling Fixed Line customers to send and receive text messages. The purpose of this Service Provider Industry Notification is to inform the Service Provider community, outline the key elements of the Fixed Line SMS service and give details of where to obtain further information. For technical issues, please refer to SIN 413 issue 3.2, May 16.

2 Service Outline

The service allows SMS messages to be sent from BT fixed lines to other UK customer's fixed lines and to the majority of UK mobile networks. The service will also provide for receiving SMS messages from fixed lines and mobile devices and delivering them to BT fixed lines.

The text messages will be delivered either as a text message to someone who has a suitably enabled SMS fixed line/mobile handset, or delivered to the fixed network as a text to speech message to customers who have no compatible handset. This text to speech message can either be deposited directly into a voice mailbox or delivered as a call.

Text to Speech Delivery (receipt of message):

If a call is made to deliver an SMS and is answered, but no response to indicate the presence of an SMS enabled handset is received, e.g. the call has been answered by an answering machine, then the text to speech service will wait for a period of no response to the offered options, and then automatically plays the SMS message as speech.

If Call Forwarding / Diversion is applied to the line, the text to speech call will be dealt with as any other call on the fixed network and will be forwarded. When diverted to a mobile, the text will be delivered as speech.

3 Key Points to Note

- End users will need to have SMS enabled handsets in order to send and receive SMS messages, and will need to programme the SMS Service centre send / receive telephone number into it, if not already configured by the handset supplier. End users who do not have SMS enabled CPE will receive SMS messages which have been converted into speech.
- An auto activation/registration will be used, this will automatically register the end user line on the BT platform on first use of the service. The registration process will acknowledge that the line is to be used for future sending and receipt of SMS messages, and return a welcome message.
- The Caller Line Identity (CLI) of the originating line is to be presented on all SMS sent from and received by fixed line SMS customers, the CLI cannot be withheld. This is standard industry practice for SMS, to discourage malicious SMS messages being sent to and from BT fixed lines. The service will also be able to support the receipt and onward transit of the sender's CLI.
- This service will be made available to customers of Service Providers who use BT lines. The SMS calls will be routed on the BT network and call records (CDR) will be made available to the service provider so that their end users can be billed. BT will bill these service providers in accordance with published prices. See section 4 for details of the call record format changes for the SMS service.
- Messages sent by customers are excluded from Carrier Pre-select. Where indirect access codes are inserted into the dialled numbers stream, these messages will route onto another operator's

network and will fail to reach BT's platform, unless there is an agreement between BT and that operator for SMS.

- End users may opt out of receiving text to speech by dialling a freephone number **0800 587 5252** and following the Interactive Voice Recognition (IVR). End users will not receive text to speech messages between the system's curfew hours, during the early hours.

4 Billing Information & Call Record Format Changes

4.1 Wholesale Calls Call Record Format Changes

The Daily Billing File is a record of all the priced Call Data Records that have been processed from the previous day. BT places this file on the FTP Gateway between 16:00 and 20:00 hours each day. The file is comprised of three sections, a header section which contains the Date of the records stored in the file, a record section that contains the call data events and a summary section that contains a single line summary for each combination of account and event type found in the file. The header will be unchanged as the result of the introduction of the SMS service, but there will be an additional type of record section "326" and a change to the summary section. The format is shown below:-

Field Name	Description
	This field contains the literal "Event:<space>" and will not be terminated by a comma.
Calling line identity	The telephone number that originated the call. This is the main billable telephone number.
	Contains the value "326".
Date and time message was received	Date/Time that the SMS message was received by the recipient in the format "CCYYMMDDhhmmsstt".
	Null
Record Sequence Number	Reserved for BT use.
Spid	The Service Provider Id (9 digits).
NNI/BD/FGN	This field is in three parts concatenated into one (13 digit) field: a) The NNI (7 digits) will be the identity of the original switch i.e. the source of the records b) The Billing Destination (BD) value is the 2 digit BT Billing system identifier c) The File Generation Number of the original file sequence number from the network
Reverse Charge	Currently populated with 0. In future this will contain a Reverse Charge Indicator. Expected values are: 0 – Normal 1 – Reverse
Other number	The telephone number that the SMS was sent to.
Originating Network	Currently populated with 00000. In future releases will contain the networks MCC and MNC codes, if available.
Date and time message was received	Date/Time that the SMS message was sent in the format "CCYYMMDDhhmmsstt".

Field Name	Description
Source Type/Direction	Description of the type of device used at the source and destination. 01 - Fixed to mobile 02 - Mobile to Fixed 03 - e-Mail to Fixed 04 - Fixed to Fixed 05 - Fixed to email 06 - Fixed to messaging mailbox 07 - Delivery Report 08 - Supplementary service activation/deactivation eg privacy 09 - Supplementary service activation/deactivation eg delivery restriction times
Destination Code	The way in which the SMS message was delivered to the customer. 00 – Not delivered (or unknown) 10 – Text to Text 11 – TTS (Text To Speech) Outcall 12 - TTS Voicemail
Message Size	Count of the number of characters worth of user data contained in the message.
Message Type	Currently set to 00. In future release will contain a 2 digit description of the text of SMS message sent. Expected values are: 01 – Text 02 – Ring Tones 03 – Audio 04 – Video
Tariff	The tariff associated with the event. 10 – Standard 11 – Premium 12 – Free
Payment direction	An indication of the direction of payment. This value will be determined as described below: “R” – Expected payment from SP. “P” – Payment to SP.
Duration	The duration value in hh:mm:ss.tt format i.e. to hundredths of seconds
Rerate Indicator	If the record has been rerated then the value = “Rerate”.
Destination Network	Currently populated with 00000. In future releases will contain the networks MCC and MNC codes when available.
Account Number	A unique field for the Wholesale Calls product.
Record Status	An indication of what kind of event this is. Does the event reside in the current billing period or a previously billed period? Is this the first time the event has been rated or has it been rated before? This value will be determined as described below: “S” – First time rated and for this billing period. “SR” – Re-rated but for this billing period. “L” – First time rated but for a previous billing period. “LR” – Re-rated and for a previous billing period.
Wholesale Price	The wholesale undiscounted price of the call in tenths of a penny.
Record Source	Record Source is to indicate where the record originated and the NNI of the source system

Field Name	Description
Chargeband	The Chargeband field. The Chargeband value represents the source operator (first two digits) and the destination operator (last two digits). The source operator in all usage feed to SPs will be WC. A destination operator of Ignite will be associated with a premium rate SMS. 10 – Retail 11 – COLO 12 – MOLO 13 – Ignite 14 – WC 15 – WA
Service Category Name	This text field relates to Record Type "21.0" – SMS Call "21.1" – Reverse Charge SMS call
Error Code	Include an error code if BT processing has detected an error in the Network record.

The Summary section will be modified as follows:-

Field Name	Description
Tag	This field contains the literal "Summary:<space>" and will not be terminated by a comma.
Statistics Date	The Creation Date on which the extracted records were rated and loaded into Geneva.
Service Provider Identity	The Service Provider Identity.
Tariff Recovery filename	The name of the Tariff Recovery file associated with this summary.
Number of re-rated records	The number of billed re-rated records sent to the Service Provider for this particular combination of Creation Date, Service Provider, Content Type, Account and Event Type.
Duration of re-rated records	The total of the duration associated with the billed re-rated events sent to the Service Provider for this combination of Creation Date, Content Type, Account and Event Type.
Original cost of records	The total of the original cost values associated with the billed re-rated events sent to the Service Provider for this combination of Creation Date, Content Type, Account and Event Type.
New cost of records	The total of the new cost values associated with the billed re-rated events sent to the Service Provider for this combination of Creation Date, Content Type, Account and Event Type.
PSTN Adjustment	The adjustment required to achieve the difference between the New and the Original prices relating to PSTN revenue.
ISDN Adjustment	The adjustment required to achieve the difference between the New and the Original prices relating to ISDN revenue.
Account Number	The account number associated with this summary. This is the originating account not the non-billed account.
Event Type	The event type id associated with this summary.
SMS Adjustment	The adjustment required to achieve the difference between the New and the Original prices relating to SMS revenue.

The Fraud files will be placed on the FTP Gateway six times per day will also have a new type of record which has the same format as the Daily Billing File record shown above except that the following fields are set to null:-

- Payment Direction
- Rerate indicator
- Account Number
- Record Status

Wholesale Price

4.2 Wholesale Access and Calls & Access Call Record Format Changes

The Onebill Invoice has a record of all the priced Call Data Records that have been processed for the last month. The format of this invoice will be unchanged as a result of the introduction of SMS message service. Calls carrying SMS messages made by Service Provider end users will generate entries in the standard PSTN Billing Invoice, as described in the relevant Product Manual, but priced according to the SMS entries in the BT Price list. SMS entries can be differentiated from normal calls in the Onebill output by a zero duration.

The records contained in the Fraud files, which are sent to Wholesale Access and Calls and Access Service Providers, will change as shown in the format below:-

Field	Picture	Size	Specific Value
Call Record Type	X	4	BCAL
Comma Separator	X	1	, (Comma)
Data Type		9 2	
Comma Separator	X	1	, (Comma)
Call Answer Date		9 8	YYYYMMDD
Comma Separator	X	1	, (Comma)
Call Answer Time		9 6	HHMMSS
Comma Separator	X	1	, (Comma)
Calling Line Identity		9 12	Left aligned - space filled. Includes leading zero.
Comma Separator	X	1	, (Comma)
PBX Suffix		9 4	0-9999. For a single line the value will be zero.
Comma Separator	X	1	, (Comma)
Call Linking Indicator		9 1	
Comma Separator	X	1	, (Comma)
Duration of whole or part of call		9 8	HHMMSShh (hh = hundredths of a second)
Comma Separator	X	1	, (Comma)
Number of digits in destination number		9 2	
Comma Separator	X	1	, (Comma)
Destination number		9 32	1-32 digits (however normal range is 3 - 18 digits)
Comma Separator	X	1	, (Comma)
SMS Call Indicator	X	1	Can Contain 'N' or 'R' or Spaces N - Normal SMS Call R - Reverse SMS Call Spaces - All other cases
Filler	X	110	Space Filled

5 Pricing Information

Pricing information can be found via the link below.
<https://www.btwholesale.com/pages/static/help-and-support/pricing/carrier-price-lists.htm>
Section B1. Telephony_Non-Regulated and non-standard.Part 1.24 Fixed line Short message

6 Management of the SMS opt out feature

Opt out from SMS is managed by the end user via an IVR gateway. The IVR will allow SMS OPT OUT to be provided and removed from end users installations. Their number will be held in a list on the BT SMS platform to ensure TTS converted SMS are not sent to them.

As SMS OPT OUT is a line feature, it is not relevant to Wholesale Calls Service.

It will be possible to enable this feature on the PSTN1, PSTN2 and the main ISDN number of Business or Home Highway lines

It will only be possible to put this feature on the main number of a PBX hunt group irrespective of whether it is DDI or Not DDI.

End Users who require the OPT OUT on other numbers e.g. Call Sign numbers, DDI extension numbers will need to contact their Service Provider who is requested to raise a fault report with their BT Service Management Centre.

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