

# WHAT YOU SHOULD KNOW ABOUT FREE TEXT MESSAGING SERVICES

An educational description of text messaging services including the positives and negatives about true SMS messaging as compared to free services that use either email-to-text (SMTP) or are ad-supported.



# WHAT IS “FREE” TEXT MESSAGING?

The idea of sending text messages at no charge can be appealing to companies that want to avoid even the nominal costs – typically pennies per message – of sending messages via the FCC-approved Short Message Service (SMS) channels and using the carriers’ proscribed SMS protocols.

While it is possible to send messages to a cell phone that appear as a text message by using an “email-to-text” function there are some significant disadvantages – and more than a few legal issues – in doing so.

Companies that are sending text messages to wireless devices using the email-to-text function instead of the SMS protocols should consider all of the pros and cons of doing so. The intent of this paper is to clarify the benefits and ramifications of each method.

# HOW CAN TEXT MESSAGES BE SENT FOR FREE?

There are two ways that text messages can be sent at no charge to the sender (standard message and data rates will apply for the mobile user who receives the message regardless of whether it is free to the sender):

1. The messages are ad-supported. A certain number of characters from the available 160 total characters in the text message are dedicated to an advertisement. Typically the sender of the message has no control over the content or nature of the ad as it is inserted by the aggregator (a company similar to TextPower). This is typically used by companies that wish to send millions of marketing messages per month and whose cost concerns outweigh potential downsides of irrelevant, competitive or inappropriate content in the ads attached to the messages.
2. Instead of using FCC-sanctioned and carrier-approved SMS protocols, gateways and "short codes" senders may choose to use email-to-text capabilities. This email-to-text process, otherwise known as "SMTP messaging" (SMTP is an Internet Service Provider acronym for "Simple Mail Transfer Protocol") is the same process by which email is traditionally sent to or from a computer using an email application like Outlook or an online email service like Gmail or Yahoo. This capability is available on every cell phone and is designed specifically for occasional use by individuals, not companies, for the purposes of convenient messaging from a desktop email application to a mobile user who has access to text messaging but not email from their wireless device.

# IF I CAN SEND TEXT MESSAGES USING AN SMTP (EMAIL) GATEWAY FOR FREE WHY SHOULD I USE AND PAY FOR SMS INSTEAD?

While the idea of sending messages at no charge may be appealing on the surface it is rife with potential problems.

1 Using email-to-text for commercial purposes is in violation of carrier regulations. You can – and most likely WILL – be sued for it... and you will lose.

Email-to-text is designed as a convenience for the occasional message and, according to AT&T, Verizon Wireless, T-Mobile, Sprint and virtually every other carrier, may not be used for commercial applications. Carriers can and do sue content providers (the people who are sending the messages) for using an “email-to-text” process.

Every cellular carrier in the United States requires companies that send text messages through their networks to comply with the practices of the Mobile Marketing Association (MMA) which says, in part:

*Carriers, at their discretion, make available SMTP gateways so that subscribers may receive SMS messages originated via email. Example: A mobile subscriber can be reached by sending an email (SMTP) message to [10 digit number]@[carrierdomainname].com.*

*The carriers that support such gateways do so with the intent that they are not utilized for any commercial traffic. To that end, carriers actively monitor and filter against these connections to protect subscribers from unsolicited messages (spam) and utilize a variety of mechanisms to do so, including spam keyword filters, throttling against questionable domain or IP addresses suspected of abuse, and the like.*

The MMA guidelines are clear about not using SMTP to bypass the SMS process to send messages:

*Some application providers attempt to bind a SMTP/EMAIL and or SMS Modem to their application to bypass the messaging aggregator. This practice is not accepted by the mobile operators, commercial traffic is not allowed through either method.*

**Summary: Using email-to-text instead of standard SMS carries legal, financial and business risks.**

2 Email-to-text messaging is unreliable – it could be stopped by the carrier at any time and the delivery is usually very slow.

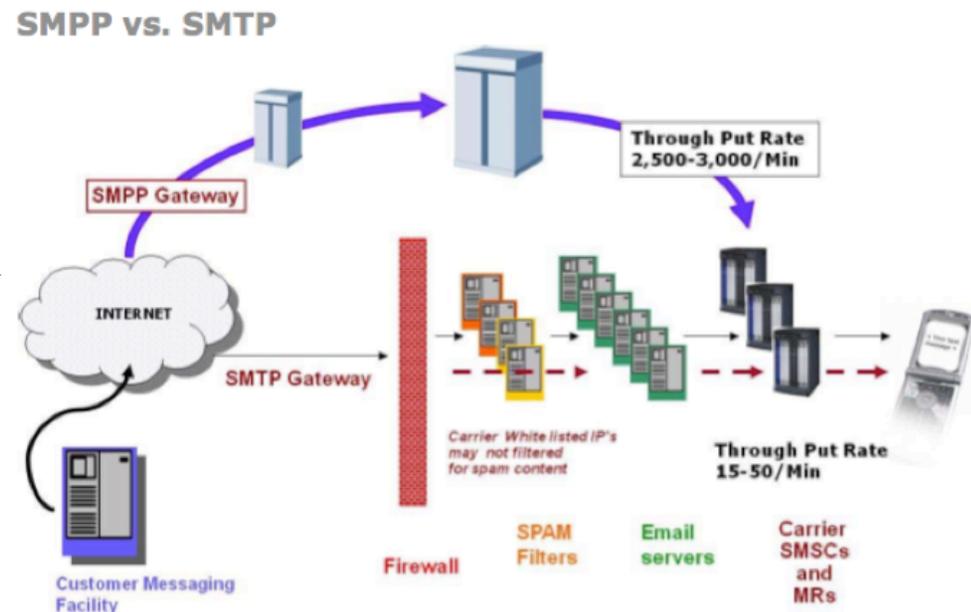
RELIABILITY: Carriers can, and will whenever they are aware of it, block email-to-text messages without notice because it is being sent in violation of their regulations for use of their network. In addition, email-to-text, just like any other email message, can be caught in a corporation's email system's spam filter because it is, in fact, email – it is just received by a phone but in every other way is traditional, common email. As a result, businesses who send messages using this method risk having their message flow shut down at any time without any prior notification. While this may be an acceptable risk for a bar or restaurant using messaging for promos or coupons it is likely to be unacceptable for an enterprise or business that requires reliability.

**DELIVERY SPEED:** When companies send a text message their intention is generally for it to be delivered quickly, reliably and with some confirmation that it actually arrived. (If the company's message wasn't urgent or important they could send it by email or even post it on a web site and wait for people to read it periodically.) Text messages, almost by definition, are designed to demand immediate attention by being delivered directly to the end user's mobile device. Sending messages via an email-to-text process defeats that purpose because of its inherent lack of speed.

Delivery of text messages sent via SMTP is slow. These messages are subject to significant delay because they are subject to carrier firewalls, email servers, Internet delays and spam filters. In addition, due to the nature of email-to-text messages no error message or delivery confirmation is available and thus the sender has no way of knowing whether a problem exists or delays are keeping their messages from being delivered.

The following graphic illustrates the difference between the two processes (the purple line at the top represents true SMS messages, the arrows along the horizontal plane represent the path of an email-to-text, or SMTP-generated message).

SMS messages typically arrive at the mobile device within seconds of being sent by the content provider. Email-to-text messages do not. This is a particularly acute problem when sending bulk messages (which are also particularly prone to being noticed by



carriers and thus blocked) because the throughput rate of email messages is significantly slower than SMS messages, roughly 15-50 messages per minute using email-to-text as compared to up to 3000/minute using SMS.

***Summary: Anyone concerned with reliability, avoiding spam filters, speed of delivery and a much greater chance of having their messages read quickly should not be using email-to-text/SMTP as their message delivery mechanism.***

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**Email-to-text messaging is one-way, thus severely limiting its capabilities.**

3 True SMS messaging allows for a variety of functions because it can handle replies that facilitate queries, voting, information retrieval, real-time updates, etc. Replies from mobile users to standard text messages can be set up to prompt actions, check inventories and do all other sorts of things because it functions in a highly standardized and structured environment. Replies from mobile users to email-to-text messages cannot do those same things because the reply function will send a message back to an email address and these replies are not nearly as structured as a short code on a text message system.

Two-way, response-capable messaging is becoming increasingly important because in addition to the traditional uses for messaging a wave of event-triggered messaging functions and machine-to-machine functions have been developed and implemented. These capabilities are only available through a true SMS network because they require the ability to handle replies that command machines to take actions, respond to various keywords for different functions and many other capabilities that email messaging cannot handle.

# 4

## Email-to-text messages are not identifiable.

When a content provider sends a message through an SMTP gateway (i.e., via email) and it arrives on a user's mobile device the mobile user doesn't know who the message is coming from, unlike a true SMS that they can identify. Essentially, true SMS provides a caller ID function which email-to-text cannot.

Like any other form of email, email-to-text messages are subject to spam filters and blockers. Even if someone opts-in for what they believe is a text message service, if the alert is sent via the unapproved SMTP gateway method it's entirely possible that the mobile user's corporate firewall, or the carrier's own spam filters, will block the message because the system recognizes it as email, not SMS (true SMS doesn't route through any corporate firewall at all, completely eliminating the potential problem).

# IMPORTANT Q&A

## What are the legal and financial consequences of not complying with carrier regulations and requirements?

Carriers have the right to, and will, shut down the flow messages of and sue both the providers and senders of text messages for various reasons including:

- \* Using email-to-text capabilities provided by the carrier for the convenience of users for peer-to-peer communication for commercial or “bulk” messaging purposes (i.e., using email-to-text for commercial purposes)
- \* Using the peer-to-peer capability inherent in all phones for the sending of commercial messages
- \* Sending messages to the carrier’s mobile users without permission of the mobile user<sup>1</sup>. This is regulated by the FCC through [the “CAN-SPAM” act](#) which specifies that each separate act (i.e., each individual email) that violates this regulation is subject to a fine of \$16,000 per act.

Examples of content providers being sued by the FCC and fined by the Federal Trade Commission (FTC) are easily available online; many examples show large fines and companies being shut down for violation of carrier regulations<sup>2</sup>.

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<sup>1</sup> According to the FCC and the Telephone Consumer Protection Action (TCPA) user permission, otherwise known as "opting in" is not required for messages of an informational or emergency nature. Only messages containing marketing information or soliciting the purchase of a service require the user's permission in advance. Please find a video interview with one of the industry's leading attorneys, explaining this in more detail here: <https://vimeo.com/91468373>

<sup>2</sup> In 2010 the largest company in the industry lost their access to the carriers on their main short code as a result of several of their clients being non-compliant; the service provider carries a joint responsibility with the actual sender of the messages or, in industry parlance, the “content provider.” The CEO’s letter of apology is a matter of public record.

## **Why are carriers so insistent about content providers not sending messages using the email-to-text method?**

Carriers are insistent about content providers, commercial enterprises and companies of all sorts using true SMS text messaging instead of email-to-text because:

- \* Legal issues can arise quickly and often when email-to-text is used and the carriers become part of it due to their role in delivering the message. So, although they have no control over the message content (unlike an SMS message, where they have standards that must be met) they can still be subjected to the legal liabilities inherent in unapproved messages. Minimizing the possibility of legal action by using standard SMS protocols is one of their main operating tenets.
- \* Customer complaints are typically directed at the carrier rather than the content provider because in many cases the content provider cannot be identified. In addition, it is common for the customer to turn to the carrier for any problems that they have with their mobile service even if the problem is precipitated by the equipment from a particular manufacturer.
- \* Overburdened networks – SMTP messages are frequently sent in large bulk amounts and often impact the FCC-approved, standard services that the carrier is legally obligated to provide.
- \* Cost – Email-to-text messages still use capacity and resources on the carriers' networks and yet the carriers do not get paid for the sending of those messages. In order to keep their own costs down, and to avoid passing additional costs on to customers, they do not want to allow these email-to-text services to piggyback on their infrastructure and strain their resources at no charge to the message sender.

## **Does TextPower adhere to text messaging regulations and compliance requirements as stated by the carriers?**

Yes - 100%. Our software has been designed to provide all of the functions required to maintain complete compliance including:

- \* Opt-in/Opt-out management
- \* Help messages
- \* Cancel and quit functions
- \* Manage carrier blacklists
- \* Error reporting (and automated retry, a TextPower exclusive)

### **Does TextPower provide functions that are more powerful than email-to-text offers that would make a difference to my business?**

Yes. Our system is sophisticated, stress-tested and designed to handle a variety of applications through our SOAP-powered API. In addition, TextPower's system comprises tens of thousands of lines of code that control systems designed to handle mission-critical applications:

- \* Multiple aggregator connections
- \* Automated multi-level alarms
- \* Hot standby redundant functionality for all mission-critical aspects of the infrastructure
- \* International connections to the most widely used carriers worldwide
- \* Instantly expandable bandwidth and processing power
- \* Geographic redundancy to ensure continuous operation in the event of catastrophic events

### **Will TextPower work with my company to send text messages at no charge using an SMTP/email-to-text system?**

No. We are committed to remaining fully compliant with carrier requirements at all times.

TextPower, Inc. provides alerting and authentication solutions to a variety of industries worldwide using text messaging (SMS). The company's software and text messaging services help companies enhance their revenues, decrease costs and improve customer service. TextPower's authentication product, TextKey™, provides seven-factors of authentication to protect websites, VPNs and mobile apps. This makes it more secure than regular two-factor authentication (2FA) and replaces the smartphone app, hardware token or security fob previously needed to verify the identity of online users for password-protected applications. TextPower's mission-critical infrastructure employs geo-redundancy for the industry's highest reliability, providing delivery to virtually every cell phone in the United States and connections to most recognized wireless operators around the world.

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