

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, DC 20554**

In the Matter of:	)	
	)	
Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993)	)	WT Docket No. 09-66
	)	
Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless including Commercial Mobile Services	)	
	)	
Petition of Public Knowledge <i>et al.</i> for Declaratory Ruling Stating that Text Messaging and Short Codes are Title II Services or are Title I Services Subject to Section 202 Nondiscrimination Rules	)	WT Docket No. 08-7

**COMMENTS OF  
PUBLIC KNOWLEDGE**

**SUMMARY**

Text messaging services are a distinct market segment within the wireless ecosystem. Text messages use different technology and protocols from both voice and data, and therefore cannot be effectively understood as merely a sub-element of either market. The text messaging market currently suffers from a number of problems, including anti-competitive pricing and the stifling of free speech. In order to resolve the ongoing failures in the text messaging market, the Commission must classify text messages as a distinct market segment separately regulated under Title II.

## ARGUMENT

### I. TEXT MESSAGING<sup>1</sup> IS AN INDEPENDENT MARKET AND SHOULD BE VIEWED AND REGULATED AS SUCH

#### A. The Commission Will Not Be Able to Properly Analyze the Wireless Ecosystem Without Recognizing Text Messaging as a Separate Market Segment

In the above-referenced Notice of Inquiry (NOI), the Commission expressed a desire to improve its analysis of competition in the wireless market.<sup>2</sup> As noted in the NOI, previous attempts to analyze the wireless market have failed to take into account the entirety of the “mobile wireless ecosystem.”<sup>3</sup> As a result, previous reports failed to accurately capture the dynamics of the full wireless market. Any future attempt to understand and analyze the mobile wireless ecosystem will be deficient unless the Commission recognizes that a number of distinct market segments, including text messaging, compose the wireless market.<sup>4</sup>

Text messages are a technologically distinct service, priced as a separate service for consumers. Problems in the text messaging market segment impact the wireless ecosystem in a manner distinct from problems in other market segments. In the past, the failure of the Commission to consider text messaging as a separate service harmed consumers who were overcharged by carriers for text messaging service, unable to choose innovative third party services that integrate text messaging, and had messages

---

<sup>1</sup> For the purposes of this comment, “text message” and “text messaging” refers to messages sent through the Short Messaging Service (SMS) by way of traditional telephone numbers as well as short codes.

<sup>2</sup> *Inquiry into Competition into Wireless Competition*, WT Docket No. 09-66, Notice of Inquiry, ¶ 14 (Released August 27, 2009).

<sup>3</sup> *Id.*

<sup>4</sup> *Id.* at ¶ 15.

blocked by carriers.<sup>5</sup> As Public Knowledge detailed in its outstanding text messaging petition, many of these problems in the general text messaging market also manifest themselves in the sub-market for text messaging short codes.<sup>6</sup> Unless the Commission recognizes text messaging (including short codes) as a separate market, it will ultimately fail to identify and address these and other underlying deficiencies.

### **B. Text Messages Use Technology and Protocols That Are Different From Both Voice and Data Services**

Text messages are short messages generally sent from one wireless handset to another, or between wireless handsets and short code services. During transmission, a message travels from the sender's wireless device to a cellular tower, at which point it is transferred to the carrier's telephone network.<sup>7</sup> This process is reversed to bring the message to the receiver's wireless device.<sup>8</sup>

The messages themselves are limited to 160 characters. This character limit is not arbitrary. Instead, the text message character limit allows text messages to be transmitted in a wireless control channel normally used for network operational purposes, essentially allowing service providers to broadcast the data without incurring additional costs.<sup>9</sup> The use of this control channel allows text messages to be transmitted in spectrum that is

---

<sup>5</sup> For the purposes of this comment, the single term "block" describes any one or more of three actions – the blocking of an individual text message by a wireless carrier, the refusal of a wireless carrier to allow a provisioned short code to access its network, and the refusal of the short code provisioning body (the Common Short Code Administration) to provision a code. For more information of these actions, *see* Public Knowledge, Free Press, Consumer Federation of America, Consumers Union, EDUCAUSE, Media Access Project, New America Foundation, U.S. PIRG, Petition for Declaratory Ruling, WT Docket No. 08-7, Dec. 11, 2007, *at* <http://www.publicknowledge.org/pdf/text-message-petition-20071211.pdf> [*hereinafter* *Petition*].

<sup>6</sup> *See Petition*.

<sup>7</sup> As noted in the *Petition*, the person-to-person nature of text messages along with the separate provisioning of service, places text messages well under the umbrella of Title II services.

<sup>8</sup> *See* Randall Stross, *What Carriers Aren't Eager to Tell You About Texting*, N.Y. Times (December 28, 2008), *at* <http://www.nytimes.com/2008/12/28/business/28digi.html>.

<sup>9</sup> *Id.*

already used for network operation, and not require that carriers dedicate additional spectrum to text messaging. As a result, text messages use spectrum to communicate in a uniquely efficient manner.

While the path of a text message is similar to that of a voice phone call, the use of the control channel differentiates the two. Voice phone calls require additional spectrum beyond what is needed simply to operate a network, because each conversation requires a clear channel for communication.<sup>10</sup> As a result, at a given time a provider's network can only support a limited number of users, and each additional user imposes additional costs on a provider. Spectrum capacity limits the number of calls that a given provider can support at a given time in a way that it does not similarly limit the number of text messages.

Data, unlike either voice or text messaging service, does not use the traditional wired telephone network to transfer information. Instead, data services use packet switching to route data to the correct destination.<sup>11</sup> However, like voice and unlike text messaging, data services cannot make use of control channels to transfer data. Each additional data user requires additional spectrum access and backhaul data capacity, and heavy data usage increases demand on wireless networks.<sup>12</sup>

Each of these services, voice, text, and data, use different protocols to transmit different types of information. Consumers purchase the services separately, often use them separately, and are billed for them separately. The Commission should look to the

---

<sup>10</sup> See Thomas Farely & Ken Schmidt, *Cellular Telephone Basics*, at [http://www.privateline.com/mt\\_cellbasics/](http://www.privateline.com/mt_cellbasics/).

<sup>11</sup> See Yueh-Way Sun & Moni Malek, *Wireless Infrastructure: Routing IP packet data over GRPS wireless nets*, CommsDesign.com, Nov. 27, 2001, at [http://www.commsdesign.com/design\\_corner/showArticle.jhtml?articleID=16503788](http://www.commsdesign.com/design_corner/showArticle.jhtml?articleID=16503788).

<sup>12</sup> See, e.g. CTIA The Wireless Association, Written Ex Parte Communication, GN Docket No. 09-51, September 29, 2009; Jenna Wortham, *Customers Angered as iPhones Overload AT&T*, N.Y. Times, Sept. 2, 2009, at [http://www.nytimes.com/2009/09/03/technology/companies/03att.html?\\_r=1&hp](http://www.nytimes.com/2009/09/03/technology/companies/03att.html?_r=1&hp).

nature of the different services provided and recognize that these characteristics delineate separate market segments.<sup>13</sup>

In the past, the Commission recognized separate markets for services that were much less distinct than those considered here. In approving the AOL/Time Warner merger, the Commission singled out Instant Messaging (IM) for special consideration.<sup>14</sup> Unlike voice, text, and data offered by wireless carriers, IM shared a platform (IP-based communication) with any number of other services offered by AOL, such as email and web surfing. However, the fact that consumers used it as a separate application justified viewing it as a separate service.<sup>15</sup>

### **C. Carriers Offer Text Messages as Additional, Separate Services**

Although it is important to recognize the technical differences between voice, data, and text messaging services in order to illustrate how text messages make up an independent market segment, it is also important to consider how the marketplace treats text messages. All major wireless carriers treat text messaging as an offering distinct from both data and voice services.<sup>16</sup> This illustrates both that text messages are a separate market and that text messages should be recognized as separate Title II services.<sup>17</sup>

---

<sup>13</sup> See, e.g. *National Cable & Telecommunications Assn. v. Brand X Internet Services*, 545 U.S. 967 (2005) (recognizing that categorizing services by their nature is an acceptable practice).

<sup>14</sup> See *Application for Consent to the Transfer of Control of Licenses and Section 214 Authorizations by Time Warner Inc. and America Online, Inc., Transferors, to AOL Time Warner Inc., Transferee*, CS Docket No. 00-30, Memorandum Opinion and Order, ¶¶ 128-200 (Released Jan. 22, 2001).

<sup>15</sup> *Id.*

<sup>16</sup> See generally “Features,” AT&T Wireless, at <http://www.wireless.att.com/cell-phone-service/services/services-list.jsp?LOGSID=7150000142&splittable=true>; “Select Features,” Verizon Wireless, at <http://www.verizonwireless.com/b2c/store/controller?item=planFirst&action=viewFeaturesAccessoriesfromPhone>.

<sup>17</sup> See *Petition*.

When purchasing a wireless subscription, carriers generally offer consumers three categories of service: voice, data, and text.<sup>18</sup> A consumer chooses how much (be it minutes, messages, or bits) of each service he or she wishes to purchase, and the carrier prices the plan accordingly. A consumer's choice on any of the three variables impacts the monthly subscription charge. Just as with voice and data, carriers often present consumers with a number of different text message service tiers, and give consumers the ability to choose between paying a per-message fee and purchasing varying sized "buckets" of messages.<sup>19</sup>

## **II. MARKET SHORTCOMINGS IN THE TEXT MESSAGING MARKET WILL CONTINUE TO HARM THE BROADER WIRELESS ECOSYSTEM UNTIL THE REGULATORY STATUS OF TEXT MESSAGING IS RESOLVED**

A letter from Senator Herb Kohl, Chair of the Senate Antitrust Subcommittee to major wireless carriers recognized that text message pricing is "hardly consistent with the vigorous price competition we hope to see in a competitive marketplace."<sup>20</sup> This pricing largely results from the fact that text messages are generally "shrouded attributes" in the wireless market.<sup>21</sup> While some consumers may take the price of text message plans into account when evaluating competing wireless plans, more often text message pricing is overshadowed in the mind of consumers, or shrouded, by more expensive components of

---

<sup>18</sup> See generally "Features," AT&T Wireless, at <http://www.wireless.att.com/cell-phone-service/services/services-list.jsp?LOSGId=7150000142&splittable=true>; "Select Features," Verizon Wireless, at <http://www.verizonwireless.com/b2c/store/controller?item=planFirst&action=viewFeaturesAccessoriesfromPhone>.

<sup>19</sup> *Id.*

<sup>20</sup> Letter from Senator Herb Kohl, Chairman, Antitrust Subcommittee, Senate Judiciary Committee to AT&T, Verizon Wireless, Sprint, and T-Mobile (Sept. 9, 2008).

<sup>21</sup> See Xavier Gabaix and David Laibson, *Shrouded Attributes, Consumer Myopia, and Information Suppression in Competitive Markets*, The Quarterly Journal of Economics, MIT Press, vol. 121(2), pages 505-540, (May 2006) at <http://www.econ.yale.edu/~shiller/behmacro/2003-11/gabaix-laibson.pdf>.

the plan such as voice or data. As a result competitors in the wireless market, which has traditionally been considered competitive,<sup>22</sup> act in an uncompetitive manner with regard to text messages without being concerned about marketplace repercussions.

#### **A. Prices For Text Messages Offered By Major Carriers Rise In Concert**

Pricing for text messages vividly illustrates the failure of the unregulated text messaging market. Although carriers point to the falling per/message cost of text messages when questioned on this topic, they do so in the context of bulk and/or unlimited messaging plans. Carriers fail to address the rising costs of sending text messages to users who pay on a per message basis.<sup>23</sup> What is noteworthy about this trend is not only that the costs rise together, but that they rise at all. As described above, text messages are essentially free riders on existing network infrastructure. It is highly unlikely that the nominal cost to a carrier to transmit a text message has increased over time. In fact, in a functioning market one would expect to see the prices of text message fall to their marginal costs – a number approaching zero.<sup>24</sup> Instead, the price per MB of this uniquely efficient communications technology is at least four times greater than the cost to transmit data to the Hubble Space Telescope orbiting 353 miles above the surface of the Earth.<sup>25</sup>

---

<sup>22</sup> The wireless market at the national level has traditionally be considered competitive because there are four national carriers. However, at the local level this classification is much more nuanced and suspect.

<sup>23</sup> See *Joint Comments of Consumer Federation of America, Consumers Union, Free Press, Media Access Project, New America Foundation, and Public Knowledge*, WT Docket No. 09-66, at 10-11.

<sup>24</sup> *Id.*

<sup>25</sup> See Mike Nizza, *Costs of Text Messaging vs. Space Transmission*, N.Y. Times The Lede Blog (May 12, 2008) at <http://thelede.blogs.nytimes.com/2008/05/12/costs-of-text-messaging-vs-space-transmissions/>.

**B. The Commission's Failure To Formally Announce That Text Messaging Is A Separate Title II Service and Treat it As a Separate Market Segment Harms The Free Circulation Of Speech And Ideas, As Well As The Development Of Competing Services**

As Public Knowledge detailed in prior filings before the Commission,<sup>26</sup> each wireless carrier exercises the power to independently decide whether to accept text messages sent to its customers.<sup>27</sup> This gives carriers the ability to prevent subscribers from receiving text messages that the carrier, in its own judgment, deems objectionable. In the past, carriers have blocked messages that subscribers requested to receive on the grounds that the carrier objected to the content of the message.<sup>28</sup>

The ability of carriers to block text messages raises at least two concerns. The first is competitive. In at least one instance, a company that used text messaging to initiate a low-price long distance voice calling service found its text messages blocked by carriers.<sup>29</sup> The carriers asserted that they had the right to use their control of the text messaging system to prevent competitors from reaching their customers.<sup>30</sup>

The second concern is more fundamental. In another instance, a carrier blocked political text messages sent to subscribers who had asked to receive them.<sup>31</sup> The carrier justified its actions on the grounds that it had the right to block any messages that it considered objectionable.<sup>32</sup> With millions of Americans relying on text messaging for information on a wide range of topics, allowing a private company to screen the

---

<sup>26</sup> *See Petition.*

<sup>27</sup> *See id.* at 3-6.

<sup>28</sup> *Id.*

<sup>29</sup> *Id.*

<sup>30</sup> *Id.*

<sup>31</sup> *Id.*

<sup>32</sup> *Id.*

messages for political speech that it finds objectionable has the potential to undermine political discourse and the free exchange of ideas.

The Commission can begin to address these concerns when it acts on Public Knowledge's outstanding petition to clarify that text messages are Title II services.<sup>33</sup> Once the status of text messaging is clear, carriers will be required to allow interconnection with their networks and be unable to block messages that they deem to be objectionable. Text messaging is a form of speech that is, from a regulatory perspective, functionally identical to voice. Therefore, the Commission should regulate both under the identical title. Unjust and unreasonable discrimination which is not permitted in voice should also be prohibited in text messaging.

## CONCLUSION

The Commission's attempt to consider the entirety of the wireless ecosystem is a significant step towards effective and reasonable regulation. It is critical that the Commission examine each market segment separately in order to consider the unique factors that help shape them. Once the Commission identifies text messaging as a separate market segment, it will be able to begin to address the failures of the text messaging market. Swift recognition of text messaging as an independent service regulated under Title II is the first step towards making sure that the text messaging market operates in a way that brings value to all consumers.

---

<sup>33</sup> Even if the Commission concludes that text messages are not a separate market to be regulated as an independent Title II service, it should regulate text messages under Title II as a service adjunct to the existing Title II service of voice. *See Verizon California, Inc. v. FCC*, No. 08-1234 (D.C. Cir. Feb. 10, 2009).

Respectfully Submitted,

Public Knowledge

BY: \_\_\_\_\_ /s/

Harold Feld  
Jeffrey Pearlman  
Public Knowledge  
1875 Connecticut Ave. NW  
Suite 650  
Washington, DC 20009  
(202) 518-0020  
hfeld@publicknowledge.org

Michael Weinberg  
Law Clerk  
Public Knowledge  
1875 Connecticut Ave. NW  
Suite 650  
Washington, DC 20009  
(202) 518-0020  
mweinberg@publicknowledge.org

September 30, 2009