

**WIRELESS TELECOMMUNICATIONS BUREAU****STAFF REPORT****Prevention of  
Unintentional Wireless 911 Calls****CC Docket No. 94-102****Released:** December 11, 2002

Unintentional wireless 911 calls today can be a significant problem for the nation's Public Safety Answering Points (PSAPs). These unintentional 911 calls can occur when a consumer accidentally presses a key on his or her handset automatically programmed to dial 911 via speed dial. The consumer unknowingly ties up a 911 call taker at the other end of the line who has to confirm, based on little information, that the call is, in fact, accidental, and not from a person in distress. That call taker now also is unable to field other, real, 911 emergency calls. According to the National Emergency Number Association (NENA), individual 911 PSAPs have estimated that between 25 and 70% of their wireless calls are unintentional calls. Thousands of PSAP call taker hours are thus wasted every year on unintentional wireless 911 calls.

In response to a request from various public safety organizations, the staff of the Wireless Telecommunications Bureau has investigated this problem, and in this document reports on the steps that are being taken to address it. The Commission, public safety organizations, wireless carriers, handset manufacturers, and consumers share a common goal in curtailing the incidence of unintentional wireless 911 calls. We are encouraged that key carriers and handset manufacturers are taking steps to combat the problem. We also recognize that the problem cannot be solved overnight, and intend actively to monitor and follow-up in the future if the incidence of unintentional 911 calls is not reduced. We also applaud the efforts of public safety organizations, including NENA, the Association of Public-Safety Communications Officials-International, Inc. (APCO), and the National Association of State Nine One One Administrators (NASNA), in focusing government, industry and consumer attention on this important issue.

**I. EXECUTIVE SUMMARY**

More specifically, building on efforts undertaken by NENA, the staff of the Wireless Telecommunications Bureau (Bureau) has worked with public safety agencies, wireless handset manufacturers, and wireless carriers to help ensure that steps are being taken to address the problems caused by unintentional 911 calls. As a result of these efforts, the Bureau has found the following:

- Unintentional 911 calls pose a significant problem for PSAPs because they must expend scarce resources to determine that these false calls are not actually emergency situations.
- Industry participants are taking steps to eliminate the unintentional call problem:
  - All wireless carriers surveyed have requested that manufacturers deactivate the auto-dial 911 feature prior to shipment of new handsets to the carriers. In addition, The Cellular Telecommunications and Internet Association (CTIA) has recently incorporated a requirement in its certification program that CTIA-certified handsets may not be pre-programmed with an auto-dial 911 feature.

- The major manufacturers of wireless handsets have reported that currently none of their phones come pre-programmed with an auto-dial 911 feature.
- Many carriers have attempted to reduce the occurrence of unintentional 911 calls by providing their customers with educational information through inserts in their monthly bills, through direct mailings/newsletters, and through postings on carrier websites.
- Consumers who possess handsets with the auto-dial 911 feature can assist efforts to eliminate the unintentional call problem by disabling the auto-dial 911 feature or by locking their key pad.
- Commission staff will assist efforts to eliminate unintentional 911 calls by continuing to monitor, in partnership with public safety organizations, carrier developments in this area, including steps taken by carriers and handset manufacturers, and by providing information to the public through a Consumer Alert available on the FCC website ([www.fcc.gov/cgb/information\\_directory.html](http://www.fcc.gov/cgb/information_directory.html)) on how they can prevent unintentional 911 calls.

## **II. BACKGROUND**

During the last several years, wireless handset manufacturers have produced various models of wireless mobile telephones with an “auto-dial 911” feature, providing the user with one touch dialing to 911. The user simply presses one button on the handset (usually the “1” or the “9” key) for approximately two seconds and the handset dials 911. The handsets containing this feature have often been delivered to the end user with the auto-dial 911 feature activated, and the user may not be aware that the feature is available and active when the handset is placed into service.

While initially considered a useful safety feature for wireless handsets, over the last few years, many Public Safety Answering Points (PSAPs) have reported answering high percentages of wireless 911 calls where no caller is on the other end of the line. These “unintentional 911 calls” can occur when the preprogrammed auto-dial 911 key is accidentally pressed while the phone is in the user’s pocket, purse, or briefcase, or is carried on the user’s belt. Wireless phones with a “clam shell” design, in which the keyboard is kept covered when not in use, are not as susceptible to this problem. Of course, these calls can occur in other ways—for example, children playing with wireless phones may dial 9-1-1—but the scope of this report is limited to the auto-dial 911 function.

When an unintentional 911 call is placed, PSAP operators’ general practice is to remain on the line in an attempt to determine if the call is intentional or unintentional. If the PSAP has E911 Phase I capability, which provides the PSAP with the caller’s telephone number, the operator can disconnect and call the user back to verify that the original call was unintentional. If the PSAP is unable to call the user back and has E911 Phase II capability, which provides the PSAP with the location of the caller, operators may be compelled to dispatch emergency services to the caller’s location if the PSAP cannot determine that the 911 call has been made unintentionally. All these practices result in the diversion of PSAP personnel and resources from the intake of other 911 calls reporting real emergencies.

On January 9, 2002, NENA, APCO, and NASNA sent a letter to the Federal Communications Commission (FCC), requesting an examination of the “very serious problems posed by unintentional wireless telephone calls to 9-1-1, which are clogging many Public Safety Answering Points (‘PSAPs’)

and diverting scarce resources necessary to respond to real emergencies.”<sup>1</sup> The public safety groups requested further investigation of the extent of this problem.<sup>2</sup>

One month earlier, on December 12, 2001, NENA sent a letter to twenty-one wireless carriers, requesting information on what each carrier had done or was willing to do, to reduce or eliminate unintentional 911 calls. The NENA letter outlined the unintentional 911 calls problem being experienced by numerous PSAPs, stating that between 25% and 70% of all wireless calls to 911 are unintentional. In its letter, NENA proposed several “solutions that give carriers an opportunity to work cooperatively with public safety to try to solve the most visible and vexing problem facing 9-1-1 centers today.”<sup>3</sup> NENA stated that the unintentional 911 calls problem could be best addressed through “a joint cooperative effort by carriers, manufacturers and the public safety community,” and asked “for a commitment to voluntary action by carriers and manufacturers to remedy this problem.”<sup>4</sup>

### **III. POSSIBLE SOLUTIONS**

In its December 12, 2001, letter, NENA proposes several possible solutions that, if adopted by wireless handset manufacturers and carriers, could significantly reduce the number of unintentional wireless 911 calls made to PSAPs. NENA first requests that carriers direct their handset manufacturers to cease production of handsets with an auto-dial 911 feature, or to ship the handsets to the carriers with the feature deactivated.<sup>5</sup> Second, NENA requests that carrier personnel ensure that an auto-dial 911 feature, if available, is deactivated prior to delivery of the handset to the customer.<sup>6</sup> Third, NENA proposes that carriers provide their customers with information regarding the unintentional 911 calls problem, both for customers getting new handsets and for customers using legacy handsets that may still have an active auto-dial 911 feature.<sup>7</sup> Providing existing customers with educational information can be accomplished through inserts in their monthly bills, through direct mailings/newsletters, and through postings on carrier websites.<sup>8</sup> Finally, NENA proposes that carriers list all 911 calls placed by customers on their monthly bills, allowing customers to recognize any unintentional 911 calls, and to take steps to prevent dialing 911 unintentionally in the future.<sup>9</sup>

On August 6, 2002, the Bureau requested information from several carriers<sup>10</sup> regarding steps they were taking to address the unintentional 911 calls problem, specifically:

---

<sup>1</sup> See Letter to Michael K. Powell, Chairman, Federal Communications Commission, dated January 9, 2002, sent by APCO, NENA, and NASNA at 1. The letter is available in PDF format via the following website link: <http://www.nena9-1-1.org/Wireless911/index.htm>.

<sup>2</sup> *Id.* at 2.

<sup>3</sup> See Letter to Wireless Carriers, dated December 12, 2001, filed by the National Emergency Number Association (NENA) at 1. The letter is available in PDF format via the following website link: <http://www.nena9-1-1.org/Wireless911/index.htm>.

<sup>4</sup> *Id.* at 3.

<sup>5</sup> *Id.* at 2.

<sup>6</sup> *Id.* at 2.

<sup>7</sup> *Id.* at 2.

<sup>8</sup> *Id.* at 2.

<sup>9</sup> *Id.* at 3.

<sup>10</sup> See Letters from Thomas Sugrue, Chief, Wireless Telecommunications Bureau, to John T. Scott, III, Vice President and Deputy General Counsel, Regulatory Law, Verizon Wireless; Douglas I. Brandon, Vice President, (continued....)

- 1) whether the carrier had communicated to its handset manufacturers its desire that mobile phones not be preprogrammed to dial 911 by pushing a single button on the keypad;
- 2) whether personnel had been instructed to deactivate the auto-dial 911 feature if it comes preprogrammed on certain mobile phones;
- 3) the extent to which customers had been provided information regarding the unintentional 911 calls problem, both for existing handsets and new handsets; and
- 4) whether 911 calls were itemized on customers' bills to alert them that they may be placing 911 calls unintentionally.

In response to the NENA and Bureau requests, handset manufacturers and wireless carriers have acknowledged the existence of the unintentional 911 calls problem and have committed to taking active steps to curtail the number of such calls made by customers. Bureau staff has also discussed this issue with other interested parties, including handset manufacturers.<sup>11</sup>

#### **A. Wireless Handset Manufacturers**

Bureau staff contacted the three major manufacturers of handsets sold in the United States. The collective market share of Motorola, Nokia, and Sony/Ericsson is approximately two-thirds of all wireless handsets.<sup>12</sup>

Motorola and Nokia have advised the Bureau that they have taken steps to correct the unintentional 911 calls problem, including not offering an auto-dial 911 feature as an option on their handsets on a going-forward basis. While one current Nokia model has an auto-dial 911 feature available, the user must activate the function through several menu steps. Sony/Ericsson reported that a pre-programmed auto-dial 911 feature has not been part of its manufacturing process for any handset offered, and it has no plans to offer it in the future. Although the number of handsets in the market that possess this pre-programmed auto-dial 911 feature has not been reported, as newer handsets are manufactured without the feature, the percentage of auto-dial 911 enabled handsets will decrease.

Motorola, Nokia, and Sony/Ericsson also reported that their "candybar" style handsets (i.e., those with an open-faced design where the keypad is exposed), which appear to be more prone to unintentional 911 calls, have keypad locks that can be activated by the user. These keypad locks, some of which can be programmed to activate automatically, prevent any keys from being pressed until the user unlocks the keypad with a short combination of key presses. "Clam shell" style handsets are likely not a large contributor to the unintentional call problem due to the nature of their design.

---

(...continued from previous page)

External Affairs and Law, AT & T Wireless Services, Inc.; and Brian T. O'Connor, Vice President, Legislative and Regulatory Affairs, VoiceStream Wireless Corporation, dated August 6, 2002.

<sup>11</sup> Bureau staff has relied on the representations of carriers and handset manufacturers in preparing this report, and we expect that the information they have provided to be accurate. If further investigation proves otherwise, we will seek appropriate action against the party providing inaccurate information.

<sup>12</sup> See Roger O. Crockett, *Company News: Is Nokia Missing an Important Call?*, BusinessWeek Online, March 27, 2002.

## B. Cellular Telecommunications and Internet Association (CTIA)

CTIA states that it recognizes that the number of unintentional calls to 911 triggered by the “one-touch” dialing feature is an important public safety issue.<sup>13</sup> In efforts to reduce the incidence of unintentional wireless 911 calls, CTIA’s Board of Directors has very recently modified the CTIA Certification Program<sup>14</sup> to include the requirement, effective January 1, 2003, that CTIA-certified handsets will not be pre-programmed at the factory to dial 911. The new requirement will not prohibit consumers from programming “911” as a one-touch number.

## C. Wireless Carriers

All nationwide wireless carriers have either responded to NENA’s December 12, 2001, letter or to the Bureau’s August 6, 2002, request for information. These wireless carriers have now advised the Bureau that they have taken an active role in addressing the unintentional 911 calls problem.

Carrier actions include employing some or all of the solutions proposed by NENA in its December 12, 2001, letter. At a minimum, nationwide carriers have requested that their vendors cease shipping phones with an active, auto-dial 911 feature. In nearly all cases, wireless phones distributed by these carriers have not had an auto-dial 911 feature since at least February of this year.

Beginning in December, 2000, Nextel Communications, Inc. (Nextel), for instance, requested that its sole handset manufacturer, Motorola, no longer include an auto-dial 911 feature on the phones supplied to Nextel.<sup>15</sup> Nextel has provided its customers with a free software upgrade to remove the feature from customers’ existing handsets.<sup>16</sup> Nextel also has instituted employee education programs, advising its employees of the unintentional 911 calls problem and directing them to encourage their customers to deactivate the feature or to use the keypad lock on the handset to avoid accidentally dialing 911.<sup>17</sup> Nextel has further provided its customers with additional consumer information through billing inserts and flyers, and by listing 911 calls on its customers’ monthly bills.<sup>18</sup>

Cingular Wireless (Cingular) also is implementing a plan to address the unintentional 911 calls problem.<sup>19</sup> Cingular does not sell or donate any wireless handsets preprogrammed with an auto-dial 911 key. Cingular also has provided its customers with consumer information through billing inserts with reference to its website where customers can read a more detailed explanation of the problem, and receive information on whom to contact to disable an auto-dial 911 feature on their handsets.<sup>20</sup>

---

<sup>13</sup> See Letter from Michael Altschul, Senior Vice President, Policy and Administration and General Counsel, Cellular Telecommunications and Internet Association, to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, dated October 23, 2002 (*CTIA Letter*).

<sup>14</sup> CTIA’s Certification Program is a voluntary program for suppliers and carriers. It provides impartial evaluation of new wireless products, such as handsets, to ensure these products meet established industry performance standards and consumer information requirements. See *CTIA Letter*.

<sup>15</sup> See Letter to Roger Hixson, NENA Technical Issues Director, dated February 6, 2002, issued by Nextel at 2.

<sup>16</sup> *Id.* at 2.

<sup>17</sup> *Id.* at 2.

<sup>18</sup> *Id.* at 2-3.

<sup>19</sup> See E-Mail to Roger Hixson, NENA Technical Issues Director, dated February 12, 2002, issued by Cingular.

<sup>20</sup> *Id.* at 2-3.

ALLTEL Communications, Inc. (ALLTEL) requested that its handset manufacturers cease pre-programming an auto-dial 911 feature into its handsets, and is advising its sales channels to disable all auto-dial 911 features on handsets currently in stock.<sup>21</sup> ALLTEL does note that one of its vendor's handsets is pre-programmed with an auto-dial 911 feature that cannot be disabled, but this is not a standard model for ALLTEL.<sup>22</sup> ALLTEL also is providing its customers with informational flyers with their new handsets.<sup>23</sup> ALLTEL additionally will provide each customer with information on their monthly bill, and will advise them on how to disable the auto-dial 911 feature on their handsets.<sup>24</sup>

Sprint PCS (Sprint) does not support the manufacture of handsets with auto-dial 911 features.<sup>25</sup> Sprint states that only a small minority of handsets being used by current subscribers have a pre-programmed 911 button.<sup>26</sup> In addition, Sprint states that since the majority of its handsets are a "clamshell" design, where the user must open the handset in order to access the keypad, the chances of unintentional 911 calls are greatly reduced.<sup>27</sup> Sprint's customer bills list all 911 calls made by the handset, and Sprint has also updated its website with instructions to consumers on how to disable the auto-dial 911 feature.

In addition to taking active steps to curb unintentional 911 calls made by their customers, in response to NENA's letter, all of the wireless carriers surveyed for this report have expressed an interest in working directly with public safety officials on this issue by participating in dialogs with national public safety organizations.<sup>28</sup> All of the wireless carriers surveyed also have offered to work with individual PSAPs in gathering specific information on any customer who has made numerous unintentional 911 calls to the PSAP.<sup>29</sup>

In response to the Bureau's August 6 request, Verizon Wireless states that it believes that the unintentional calls problem is not widespread among its equipment base<sup>30</sup> because it has not required handset vendors to provide the "one-touch emergency 911 dialing" feature. Verizon also states that it has made a written request to all vendors that the one-touch 911 feature be deactivated from all handsets being shipped. Verizon states that it will not offer any new handset models that have the one-touch feature, and Verizon further notes that it will provide instructions to its customers via its website on how to deactivate the auto-dial feature. Finally, Verizon states that it is unable due to billing system limitations, to itemize 911 calls on its customers' bills.

---

<sup>21</sup> See Letter to Roger Hixson, NENA Technical Issues Director, dated February 13, 2002, issued by ALLTEL at 1.

<sup>22</sup> *Id.* at 1.

<sup>23</sup> *Id.* at 1.

<sup>24</sup> *Id.* at 1-2.

<sup>25</sup> See Letter to Roger Hixson, NENA Technical Issues Director, dated February 21, 2002, issued by Sprint at 1.

<sup>26</sup> *Id.* at 1. In a staff conversation, Sprint stated that only three of over 80 handsets Sprint has marketed have ever had the auto-dial 911 feature.

<sup>27</sup> *Id.* at 2.

<sup>28</sup> See Nextel letter at 3; Cingular e-mail at 2; and Sprint letter at 2.

<sup>29</sup> See Nextel letter at 3; Cingular e-mail at 2.

<sup>30</sup> See Letter from John T. Scott, III, Vice President and Deputy General Counsel, Regulatory Law, Verizon Wireless, to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, dated August 21, 2002.

AT&T Wireless responds that it has worked with vendors to ensure that the auto-dial for 911 is pre-programmed to “OFF.”<sup>31</sup> In a recent staff conversation, AWS confirmed that all phones come with the auto-dial feature disabled. AWS further states that its website advises customers about the one-touch feature problem and instructs them to disable the feature. AWS has also provided direction to its customers in its “Welcome Guide,” an instructional booklet included with each handset, and other newsletters. AWS notes that it does not itemize calls on its customer bills because its billing system is not designed to capture non-billed call data.

T-Mobile (formerly VoiceStream Wireless) responds that all of its handsets come from the handset manufacturer with the 911 speed-dialing feature disabled.<sup>32</sup> T-Mobile states that it is working with its marketing department and handset vendors to modify its instructional booklet and handset manuals to address the unintentional 911 call issue and to encourage the use of the “key lock” feature on phones. VoiceStream further states that it provides 911 call details on post-paid customer bills and that it will be putting a message directly on customer bills and providing bill inserts to address the unintentional 911 call problem.

#### **IV. CONCLUSIONS**

Based on the information received by the Bureau’s investigation regarding unintentional 911 calls, it appears that wireless handset manufacturers, wireless carriers, and public safety associations are working to reduce the incidence of unintentional 911 calls made to PSAPs. It also is apparent that a concerted effort among all interested parties may be the most cost-effective and least burdensome means by which an adequate resolution to this issue can be reached. Handset manufacturers and wireless carriers have acknowledged the problem as reported by the PSAPs, and have made commitments to take affirmative steps to reduce the likelihood that wireless customers will unintentionally dial 911.

Based on the information received by the Bureau, it appears that many of the affected parties are interested in resolving this issue voluntarily. We encourage all parties to continue to work together to resolve the problem of unintentional 911 calls. Future action by the Bureau or Commission, if necessary, will be based on the actions or inactions of the affected parties.

#### **V. NEXT STEPS**

Commission staff will undertake the following steps in the next few months to further address the unintended calls problem:

Concurrently with today’s report, the Consumer and Governmental Affairs Bureau is releasing a Consumer Alert that calls attention to the issues in this report and informs consumers on how to prevent unintended 911 calls. In addition to placing the Consumer Alert on the Commission’s website,<sup>33</sup> the Bureau will send the Alert electronically over the next few days to the roughly 1,300 consumer groups

---

<sup>31</sup> See Letter from Douglas I. Brandon, Vice President, External Affairs and Law, AT & T Wireless Services, Inc. to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, dated August 21, 2002.

<sup>32</sup> See Letter from Brian T. O’Connor, Vice President, Legislative and Regulatory Affairs, VoiceStream Wireless Corporation, to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, dated August 22, 2002.

<sup>33</sup> This Consumer Alert can be found on the Commission’s website at [www.fcc.gov/cgb](http://www.fcc.gov/cgb), by clicking on “Consumer Alerts and Factsheets.”

and individual consumers who subscribe to the Consumer and Governmental Affairs Bureau's consumer information e-mail service.<sup>34</sup>

Working with nationwide public safety organizations and CTIA, we will contact carriers in addition to those mentioned in this report to alert them to the issue, point out best practices, and gather information about what steps they have taken to mitigate this problem.

Working with nationwide public safety organizations and CTIA, we will contact wireless handset manufacturers in addition to those mentioned in this report to alert them to the issue, point out best practices, and gather information about what steps they have taken to mitigate this problem.

In a continuing partnership with nationwide public safety organizations, we will:

- monitor developments in this area to see whether these steps, in conjunction with handset churn, are beginning to lead to reduction in the portion of wireless E911 calls that are unintentional.
- seek specific information about the causes, and initiate action to reduce the volume of unintentional wireless 911 calls, if the actions taken by wireless carriers and equipment manufacturers do not appear to be ameliorating the problem of unintentional 911 calls.

#### **Further Information**

For further information regarding this report, contact Andra Cunningham, Policy Division, Wireless Telecommunications Bureau, at (202) 418-1310 (voice) and (202) 418-1169 (TTY).

---

<sup>34</sup> To subscribe to this Consumer Alert and automatically receive information on other consumer topics, a consumer need only contact [www.fcc.gov/cgb/emailservice.html](http://www.fcc.gov/cgb/emailservice.html).