

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of

Amendment of Part 22 of the Commission's  
Rules to enable a cellular telephone user  
effective and reliable access to 911 service

)  
DOCKET FILE COPY ORIGINAL

) CC Docket No.  
) 94-102

REPLY COMMENTS OF THE  
AD HOC ALLIANCE FOR PUBLIC ACCESS TO 911

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The Ad Hoc Alliance for Public Access to 911 ("Alliance") hereby submits its reply to the Comments filed in response to the above captioned rulemaking by five cellular telephone carriers<sup>1</sup> and the two cellular telephone trade associations<sup>2</sup>. The members of the Alliance are: Alliance for Technology Access, Arizona Consumer League, National Consumers League, World Institute on

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<sup>1</sup> North Carolina RSA 3 Cellular Telephone Company d/b/a/ Carolina West; Bell Atlantic NYNEX Mobile, Inc. ("BANM"), (the managing general partner of Cellco Partnership); BellSouth Corporation and Bell South Cellular Corp. (collectively called "BellSouth"); Southwestern Bell Mobile Systems, Inc. ("SBMS"); and AT&T Wireless Services, Inc. ("AT&T"). These were the only comments served upon the Alliance in response to its petition for rulemaking. The Alliance does not know whether other comments were filed. An effort to review whether other comments were filed was hampered by the FCC shut downs. The Alliance previously requested a three week extension to respond to any comments it may not have seen. We are filing this reply within the automatic extension period detailed by the Commission in its notices DA96-1 & DA96-2. We reserve our request for extension to file additional reply comments if it is determined that there are other comments filed but not served upon the Alliance.

<sup>2</sup> Cellular Telecommunications Industry Association ("CTIA") and the Personal Communications Industry Association ("PCIA").

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Disability (WID), National Emergency Number Association - California Chapter, Crime Victims United, Justice for Murder Victims, California Cellular Phone Owners Association, Florida Consumer Fraud Watch, Center for Public Interest Law, Consumer Action, Consumer Coalition of California, Consumers First, California Alliance for Consumer Protection, Californians Against Regulatory Excess (CARE), The Office of Communication of The United Church of Christ, Utility Consumer Action Network (UCAN), Children's Advocacy Institute and the Honorable Donald Vial (past president of the California Public Utilities Commission).

Three of these carriers state that they do not block 911 calls from transient or non-system subscribers **at the present time**.<sup>3</sup> BellSouth and BANM do not state what their current practice is with respect to blocking 911 calls but urge the Commission to restrict 911 calls to **customers** "in a home service area or a subscribed-to roamed service area".<sup>4</sup> CTIA supports "the provision of 911 access to all service-initiated [cellular] customers, including customers who are roaming."<sup>5</sup> PCIA states that "service providers should be permitted voluntarily to determine whether to allow unrestricted access to 911 by

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<sup>3</sup> Caroline West, Comments, p. 1.; SBMS, Comments, p. 3; and, AT&T, Comments, p. 3, fn 5.

<sup>4</sup> BellSouth Comments, p. 5.

<sup>5</sup> CTIA Comments, p. 8.

unregistered callers."<sup>6</sup> These Comments amply show the need for the rulemaking proposed by Alliance. There is an urgent need for a nationwide uniform policy of automatic unimpeded access to 911 service by all cellular telephone customers. Nothing could be more confusing and damaging to the public than to maintain the current uneven, uncertain and ephemeral self adopted policies which vary from carrier to carrier and from time to time.

The Comments reviewed by the Alliance present three areas of concern with respect to the Alliance proposal. First, they question the technical feasibility of the Alliance proposal. Second, they argue that our proposal presents increased risk of fraud. Third, they express a repugnance for alleged "free riders".

We demonstrate clearly in this reply that each of these concerns are illusory when it comes to the public **need** for access to 911 over the nation's cellular telephone system. At the end of the day, the cellular carriers who received billions of dollars in free spectrum want to squeeze each and every nickel out of that spectrum without the public service obligation that is implicit in the use of the public's spectrum.<sup>7</sup>

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<sup>6</sup> PCIA Comments, p. 3.

<sup>7</sup> BellSouth also raises the question of the fairness of imposing a burden on cellular carriers that is not imposed on others. For example, BellSouth states "One cannot buy a landline telephone at K-Mart and use it to call 911 without connection

**I. The "technical" arguments are in the nature of scare tactics and are without merit or substance.**

Carolina West states that within its service area there are locations where the signal from distant cellular systems are stronger than Carolina West's local signal. In some locations "within one-half mile of Carolina West's mountain cells, surrounding terrain blocks Carolina West's signal, so that originated calls are captured by the system in Johnson City, Tennessee, thirty miles away."<sup>8</sup> Thus, the emergency call in these situations is not directed to the nearest Public Safety Answering Point ("PSAP"). This example illustrates the problem where the cellular carrier offers spotty and/or weak coverage within its service area. In the example given by Carolina West, it concludes that it would be better for the injured or ill person to await discovery by some passer by rather than to communicate immediately with a PSAP some thirty miles away. The Alliance believes that this line of reasoning is ludicrous. The example given by Carolina West also points out the problem where the cell phone only scans one block of cell channels. In the cases cited by

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it to a subscribed telephone line." BellSouth Comments, p. 6. In fact, you can do just that in Los Angeles, Dallas and Tampa and perhaps in other cities as well, because Pacific Bell and GTE offer "warm dial tone" in those cities which permits the non-subscriber to place 911 calls. It also bears mentioning that the owners and operators of private pay telephones must also handle 911 calls without payment of the quarter needed to initiate a regular telephone call.

<sup>8</sup> Carolina West Comments, p. 2.

Carolina West, the cell phone was captured by distant carriers operating on the same cell frequencies. With the rule change proposed by Alliance, in that same situation, the cell phone would have scanned both sides and perhaps found a stronger competing side signal.

Some of the carriers object that the selection of the strongest signal will be negated as the caller moves,<sup>9</sup> be incompatible with the forthcoming deployment of digital technologies and penalize the carrier with the best coverage.<sup>10</sup> CTIA goes so far as to state that the Alliance proposal "reflects a naive misunderstanding of how" cellular systems work<sup>11</sup> and then mistakenly concludes that the proposed rule change would require a hand off of 911 calls "between carriers"<sup>12</sup> The proposed rule change would simply cause the cell phone to seek out the strongest compatible control channel signal to determine which cellular system can best handle the 911 call. Once the system for the

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<sup>9</sup> BANM states that "signal strength varies considerably as the caller moves." BANM Comments, p. 4. The Alliance proposal is to select the strongest signal when the 911 call is initiated. It is reasonable to assume that most of the calling parties are stopped or moving slowly at the time the call is initiated. A 911 call is usually of short duration. Even if the calling party is moving the signal selected should be usable for a quarter of a mile in a well designed system. It is evident that the chances of selecting the best, most usable signal in 911 situations will be greatly enhanced when the cell phone can look across both systems.

<sup>10</sup> BANM Comments, p. 4; BellSouth Comments, p. 3; AT&T Comments, p. 7 - 8; CTIA Comments, p. 10 - 12; and, PCIA Comments, p. 6 - 7.

<sup>11</sup> CTIA Comments, p. 10.

<sup>12</sup> CTIA Comments, p. 11.

origination of the 911 call has been selected, that system will handle the call for its duration including any and all hand-offs to other cells of the selected system. No inter-system HAND-OFF was implied or defined by the rule change requested. Call hand-off is controlled by the cellular base station for the thirty-five plus million analog cell phones in use today.

The common air interface throughout the deployed cellular systems is analog. Part 22, sub part k, paragraph 22.933, which incorporates OST-53 cellular system mobile station-land station compatibility specifications, which is the subject of the proposed rule change, addresses analog systems and *has no bearing on digital formats*. The nation's roaming system is based on this common analog interface. The notion that cellular telephone carriers are going to abandon this common ubiquitous interface when they convert some of their systems to digital, end roaming over their systems and strand millions of analog cell phone users is simply absurd.<sup>13</sup>

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<sup>13</sup> BellSouth argues that "The Alliance's proposal ignores the significant intersystem hand-off problems that would be generated by processing nonsubscriber calls without ensuring that the technology in the nonsubscriber's mobile unit will be compatible with technology used by the LEC and the local PSAP." BellSouth Comments, p. 6. This is simply inane. The cell phone has the capability to interface with the cellular system. There is nothing in the cell phone which is incompatible with the cell system which suddenly become compatible when the user of that cell phone becomes a subscriber to the cell system. This kind of illusory argument is really a disservice to the Commission and public alike.

The construction and operation of the nation's analog cellular system is based upon the capturing of the cell phone by the base station control channel signal. The cell phone seeks out the strongest control channel signal during every rescan cycle as this normally represents the closest and clearest voice channel signal as well. The cell phone is required to rescan for the strongest control channel signal prior to releasing every call origination attempt to the cellular system. This is how the cellular system is designed.<sup>14</sup> The Alliance seeks to improve this design by introducing a trivial software change into the cell phones. With the suggested improvement, the cell phone looks across both systems for the strongest control channel signal at the time of origination of a 911 call. The user will invariably obtain the clearest voice channel connection for the call. The arguments to the contrary are incorrect and simply designed to confuse and obscure the issue.

Whether the control channel signal is omni or "signal-on-sector", the associated voice channels will match the control and signal quality. That is why each cell site has a separate control

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<sup>14</sup> AT&T in its Comments, at page 8 states that "Alliance does not explain why selecting the carrier with the stronger control signal will necessarily guarantee the strongest voice signal." The control channel and its associated voice channels are matched for coverage and strength to allow the cell phones to clearly differentiate between the signals from nearby and distant cells. Thus, the user will always receive the clearest voice channel.

channel as a beacon for cell phones to lock onto. By monitoring the strength of this control channel signal, the cell phone can determine when to switch to another cell site's control channel as the cell phone is moved about.

One of the objectives of the Alliance's proposed rule change is to mitigate the swamping or capturing effect that occurs when a cell phone is in close proximity to the cell site of the competing system. This swamping or capturing effect can and does block the signal from the desired system and the cell phone user may be unable to place or receive calls. This phenomenon occurs frequently in large metropolitan areas. Moreover, the effect is not eliminated by allowing the cell phone to scan for service on a "preferred" rather than a "restricted" basis. As a matter of record, the subscriber to either system provider in a given MSA is not allowed to obtain roaming service from the competing carrier in the same market through the manipulation of the system select criteria to prevent the cell phone from automatically switching to the competing system where a stronger signal may be present.<sup>15</sup>

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<sup>15</sup> The arguments that "no equipment manufacturer has offered such a 911 specific feature" (SBMS Comments, p. 3) and "the technology does not exist, nor is it under development, for handsets to select the stronger of the two cellular signals on a per-call basis" (BellSouth Comments, p. 3) are belied by the fact that the cell carriers have prevented the deployment of such technology because it is not in their self interest. No manufacturer filed comments stating that the Alliance proposal is technically infeasible. Cell phones are already designed to scan both sides for the strongest signal. A *trivial* software change in the cell phone is all that is required to accomplish the desired objective and all of the carriers and

**The appropriate response to fraud does not include blockage of legitimate 911 calls**

The Carriers' argument concerning fraud is based on flawed syllogistic logic. The major premise is that there is a certain segment of the public who break the law and abuse the 911 system. The minor premise is that it will be easier for these law breakers if it is more difficult to identify and locate them. Thus, the conclusion: all 911 calls from unregistered cell phones should be banned -- legitimate or fraudulent. This throw out the baby with the bathwater mentality misses the point. The appropriate response to law breakers is to "increase the penalties for false 911 calls".<sup>16</sup> AT&T states that it has assisted in fighting prank 911 calls by terminating access to 911 from all cell phones that have been identified as stolen, cloned, or non-activated.<sup>17</sup> Repeated prank or false calls from such cell phones can still be turned off because the ESN and MIN are trapped at the switch. The idea that the carrier must turn off all cell phones to stop the abuse by one user is simply false and misleading.<sup>18</sup>

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their trade associations know, or should know, that there are no technical barriers to this small, but important, change.

<sup>16</sup> AT&T Comments, p. 4 citing the response of the New Jersey state legislators to the problem of false 911 calls.

<sup>17</sup> AT&T Comments, p. 5.

<sup>18</sup> AT&T attempts to scare the Commission by stating that "These worthwhile initiatives would have to be discontinued if the broad relief requested by the Alliance were granted without qualification." AT&T Comments, p. 5. The simple and direct question is why?

### III. The cellular carriers are the real "free riders".

AT&T states that "[t]here is no justification for creating a class of free riders who are entitled to the benefits of 911 service without helping to shoulder the associated burdens."<sup>19</sup> The Alliance never suggested that calls not be paid for. Indeed, it may be appropriate to levy a small surcharge on the sales of all cell phones to support the cost and expense of providing 911 service.<sup>20</sup> It is important however, to determine who the so-called "free riders" would be under AT&T's theory. AT&T states that "the significant majority of mobile 911 calls are used to report accidents or incidents not involving the calling party."<sup>21</sup>

CTIA cites the example of a car sold with an installed cell phone which has been deactivated.<sup>22</sup> Suppose that cell phone is used to report an injury accident on the freeway that does not involve the calling party. Who is the "free rider" in this example? Is the calling party a "free rider"? Who benefited from this 911 call? Obviously the injured party benefited and indirectly the public benefited by reason of prompt treatment of injuries that may have otherwise become fatal, disabling or require longer treatment.

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<sup>19</sup> AT&T Comments, p. 5.

<sup>20</sup> Indeed, it is probable that every cellular user also has a land account and contributes to 911 service in their home or business.

<sup>21</sup> AT&T Comments, p. 7, fn 10.

<sup>22</sup> CTIA Comments, p. 6.

The parsimonious attitude on the part of the carriers that some one must pay them before they will process emergency calls is reason enough for the Commission to act to stem such repugnant conduct. The use of 911 for emergency purposes is encouraged by numerous roadside signs, bumper stickers and other means of advertising. The Commission should aid in that effort by mandating the unrestricted use of the nation's cell phone system for 911 calls.

The "free riders," it is clear, aren't the good Samaritans who would be reporting emergencies, but in fact are the cellular carriers who received billions of dollars worth of the public's airwaves and do not now want to permit a very minor fraction of the time available over those airwaves to be used to serve the public interest in emergency situations unless they, the carriers, are first paid. The public will not stand for this avaricious conduct when it is known and understood and the Commission should not tolerate this abuse of the public's airwaves by the cellular carriers.

**IV. Carriers are responding to the growing use of cell phones to call 911 by finding ways to profit from the situation at the expense of the public.**

Perhaps the most egregious comment is the claim that the cellular carriers are currently meeting the public's need for 911

service.<sup>23</sup> PCIA agrees with Alliance that sixty-eight percent of cell phones are purchased for safety and security reasons.<sup>24</sup> Some of the carriers argue that this need is being met by the offering of low cost safety and security plans.<sup>25</sup> What is not mentioned is that these "safety and security" plans, offered at \$25 per month or more, are usually **restricted** to use within the carrier's home market and cannot be used to roam into other markets. This is exactly the type of illusion that the Alliance objects to and seeks to prevent. A customer purchases a cell phone and subscribes to service on a safety and security plan without understanding the system selection criteria of today's cell phone system. That customer simply wants service in an emergency and is entitled to receive the best signal where ever located when, and if, such emergency occurs.

Equally repugnant is the argument, or implication, that PSAPs do not want emergency calls unless accompanied by call back features only available if the call is made by a subscriber to the

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<sup>23</sup> PCIA states that it "has been at the forefront of wireless industry efforts to promote public safety." PCIA Comments, p. 2. Its response to the Alliance petition is to suggest that the cellular carriers decide for themselves whether or not to permit the use of the public airwaves by the public for emergency service. PCIA Comments, p. 3. In sum, being at the "forefront" means getting out of the way.

<sup>24</sup> PCIA Comments, p. 5.

<sup>25</sup> "Many cellular carriers have special rate plans for low-usage customers wanting a cellular phone for personal security." BellSouth, Comments, p. 4.; See also, AT&T Comments, p. 3.

system which handles the call.<sup>26</sup> Of course, PSAPs want every bit of information available. That does not mean that the most critical information concerning the existence of an emergency should be blocked by the cellular carriers. Most of the comments agree that 911 should be available to roamers.<sup>27</sup> The PSAP is faced with the same problem of a dropped call with respect to a roamer as it is with an uninitialized cell phone. Both do not present a local call back number. In the case of the roamer, the MIN call back number presented to the PSAP will contain the distant Area Code as well as the user's phone number. The PSAP operator will have to dial this long distance number, that may or may not be call forwarded, or will have to dial the "Roamer Access Port" telephone number and enter the full MIN. The most likely scenario is that the disconnected caller will replace the call.

In sum, there is little to no difference in a dropped 911 call initiated by a roamer or by uninitialized cell phone. Improvements to the 911 system should not be used as arguments to screen out and block legitimate 911 calls. The Alliance is all for improvements but the fundamental purpose of 911 is to provide the public with access to help in emergency situations. That

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<sup>26</sup> AT&T Comments, p. 5. and CTIA Comments, p. 4.

<sup>27</sup> AT&T Comments, p. 1; SBMS Comments, p. 3; BellSouth Comments, p. 7; Carolina West Comments, p. 1; and CTIA Comments, p. 8.

purpose should not be thwarted by cellular carriers who block 911 calls on the pretext of helping PSAPs.

**V. The Alliance agrees with SBMS conclusion that the word "priority" is not a good choice of words.**

SBMS points out that the Alliance's rule change, as written, is unreasonable because it is not technically and economically feasible to provide "priority" access to wireless 911 calls.<sup>28</sup> The substitution of the word "prompt" for the word "priority" is appropriate and carries out the intent of Alliance without causing the technical problems pointed out by SBMS. Therefore, the proposed addition to Part 22, sub part k, paragraph 22.911(b) should read: "Base stations must render ~~priority~~ prompt, unrestricted, etc."

**VI. Conclusion**

The Alliance respectfully submits that the arguments advanced against the proposed rule making are totally without merit. The carriers' positions in this proceeding are patently driven by their economic interests and they simply are unwilling to forego any potential profit that they may derive from emergency situations. This grotesque quest for revenue leads the cell carriers to the conclusion that legitimate emergency 911 calls

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<sup>28</sup> SBMS Comments, p. 2.

should be blocked because such calls may erode their profit. This unconscionable attitude is manifest in the Comments filed by the cell carriers and their trade associations. The Alliance is shocked that the recipients of billions of dollars worth of the public's airwaves see no public service obligation, no reason to handle emergency calls without regard to profit, no reason to worry about life and injury of others, only their own pocket book.

The public is not yet aware of this deplorable situation and would not, will not, tolerate this free ride on the public airwaves by the cellular carriers.

The fact is that public policy is and should be to promote the broadest availability and highest level of appropriate use of 911 service over all telephone systems, but especially the cellular service. It is impossible to place a value on the positive contribution already made by the use of cell phones in emergency situations. Our rule will simply grow and expand that benefit.

It is technically feasible to implement the proposal submitted by the Alliance with the potential result of a large number of additional 911 calls being made in time of emergency. The cost to the industry to adapt their systems and then to transmit the calls is insignificant relative to the profitability and revenue streams being enjoyed by this industry.

The Alliance respectfully requests that its petition, with the small word change noted above, be granted.

Respectfully submitted,

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