

Ad Hoc Alliance for Public Access to 911

Alliance for Technology Access • Arizona Consumers League • National Consumers League • World Institute on Disability • 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 • The Office of Communication of the United Church of Christ • Utility Consumer Action Network • Children's Advocacy Institute

EX PARTE OR LATE FILED

August 4, 1997

John Cimko
Wireless Division
Federal Communications Commission
2025 M Street, NW
Room 5002A
Washington, DC 20554

RECEIVED
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re: CC Docket 94-102
Ex Parte Communication

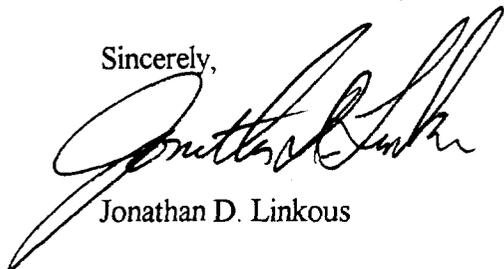
Dear John :

Enclosed for your information is a table prepared by the Ad Hoc Alliance comparing the responses by the Alliance, the Wireless E 9-1-1 Coalition and GTE to each of the questions contained in the questionnaire your office prepared regarding technical aspects of implementing the 9-1-1 rulemaking. These were prepared to help clarify our responses as compared to those submitted by the other two groups.

The Alliance has also responded to several questions raised by the National Emergency Number Association (NENA) regarding our earlier submission. You will shortly receive a copy of our letter to NENA.

Please call me with any questions or if you need any clarification on our responses.

Sincerely,



Jonathan D. Linkous

cc: William Caton, Secretary

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FCC E911 Questions

<p>FCC E911 Question</p>	<p>Q1:What are the relevant technologies, services and switch vendors?</p>	
<p>AdHoc Alliance Response filed July 11, 1997</p>	<p>GTE Response filed July 7, 1997</p>	<p>Coalition Response filed July 10, 1997</p>
<p>A1: Only AMPS/TDMA/CDMA will be addressed in the answers. The matrix appears to be a comprehensive list of current service options and vendors.</p>	<p>A1: Only AMPS and CDMA will be addressed in the answers.</p>	<p>A1: Addresses all current CMRS technologies and expands on list of handset manufacturers.</p>

FCC E911 Questions

<p>FCC E911 Question</p>	<p>Q2: For each technology, what codes are programmed into the handset and transmitted to the switch to gain access?</p>	
<p>AdHoc Alliance Response filed July 11, 1997</p>	<p>GTE Response filed July 7, 1997</p>	<p>Coalition Response filed July 10, 1997</p>
<p>A2: The Mobile Identity Number (MIN) & Electronic Serial Number (ESN) are transmitted from the handset to the switch during call initiation.</p>	<p>A2: Incorrectly describes the NULL MIN programmed by the manufacturer as 111 111 0111. The TIA standards specify the encoding of the MIN field from a handset by the addition of this sequence to the assigned MIN when the field is transmitted.</p>	<p>A2: Also incorrectly describes the NULL MIN programming by the manufacturer. Correctly defines GSM, iDEN and TDMA at 1.8Ghz.</p>

FCC E911 Questions

<p>FCC E911 Question</p>	<p>Q2 Contd: Which of these codes are programmed by: a) the manufacturer; b) the dealer & c) the carrier?</p>	
<p>AdHoc Alliance Response filed July 11, 1997</p>	<p>GTE Response filed July 7, 1997</p>	<p>Coalition Response filed July 10, 1997</p>
<p>A2 Contd: a) the manufacturer programs the unalterable, unique ESN which forever identifies the handset. b) & c) Either the dealer or carrier will program the MIN and the System Identity (SID) into the handset</p>	<p>A2 Contd: The Manufacturer leaves the MIN field EMPTY (ie full of NULLS which are not the same a decadic zeroes) Retail center and carrier enter NANP compliant MIN in place of these NULLS.</p>	<p>A2 Contd: Overall accurate description of the programming process.</p>

FCC E911 Questions

<p>FCC E911 Question</p>	<p>Q3: What is the source of these codes: a) North American Numbering Plan; b) ESN; c) Dealer code; d) Carrier code?</p>	
<p>AdHoc Alliance Response filed July 11, 1997</p>	<p>GTE Response filed July 7, 1997</p>	<p>Coalition Response filed July 10, 1997</p>
<p>A3: a) NANP supplies dialable telephone numbers used as MINS; b) ESN code is two part with first part assigned by FCC to id the manufacturer and second part assigned by the manufacturer to id the handset; c) not known; d) SID is assigned by FCC to MSA.</p>	<p>A3: Here GTE states ESN is built into the phone. In fact, the ESN is "programmed" into the phone by the manufacturer as a final step in the manufacturing process, NOT built in!.</p>	<p>A3: Accurate.. describes GSM and iDEN use of TMSI to temporarily identify a handset with a switch assigned value. Functionality the same as the pseudo-MIN the Alliance is proposing for AMPS/TDMA/CDMA 911 calls.</p>

FCC E911 Questions

<p>FCC E911 Question</p>	<p>Q4: Which of these codes uniquely identifies the handset?</p>	
<p>AdHoc Alliance Response filed July 11, 1997</p>	<p>GTE Response filed July 7, 1997</p>	<p>Coalition Response filed July 10, 1997</p>
<p>A4: The ESN is the unique identifier. Since this code cannot be altered, it reliably identifies the handset.</p>	<p>A4: Misleading response coupling the MIN to the ESN as a pair, as if the question relates to subscriber identification.</p>	<p>A4: Accurate. Also broadened their response to couple MIN and ESN as "only way" to identify the subscriber for callback. Still more support for the use of TMSI as a pseudo-MIN function for GSM and iDEN.</p>

FCC E911 Questions

<p>FCC E911 Question</p>	<p>Q5: Which of these codes can be used for callback by the PSAP: a) directly in the case of a NANP code; b) indirectly through database lookup?</p>	
<p>AdHoc Alliance Response filed July 11, 1997</p>	<p>GTE Response filed July 7, 1997</p>	<p>Coalition Response filed July 10, 1997</p>
<p>A5: a) This would be a dialable valid MIN. b) Any handset can be called back through the use of a pseudo-MIN assigned by the switch at the time the 911 call is received. This is the same method in use to call "roamers" today.</p>	<p>A5: "NANP compliant MIN is an absolute minimum requirement for callback." The Alliance agrees! However the source of the MIN can be the switch itself through the pseudo-MIN capability. Subscription is NOT a requirement!</p>	<p>A5: Agrees that dialable MIN is fundamental for callback but ignores the use of pseudo-MIN for this function. Instead insists that subscription is the only way callback can occur. Also ignores TMSI as viable callback alternative.</p>

FCC E911 Questions

<p>FCC E911 Question</p>	<p>Q6: Can the wireless switch route calls to PSAPs based on whether one or more of these codes is initialized in the handset? Which ones? Does the answer differ because; e.g., of the model of the switch, software or other factors?</p>	
<p>AdHoc Alliance Response filed July 11, 1997</p>	<p>GTE Response filed July 7, 1997</p>	<p>Coalition Response filed July 10, 1997</p>
<p>A6: The wireless switch can, of course, be programmed to use any code information to route calls. As noted above, a temporary MIN can be assigned by the cell switch to any handset based on its ESN.</p>	<p>A6: The description is almost correct...but, the mobile (handset) NEVER sends its home SID in any message to the switch. Therefore it would not be possible for the switch to compare Mobile SID to the serving system's SID as described in step 1.</p>	<p>A6: All calls routed or only validated calls for AMPS/TDMA/CDMA at 800Mhz. Ignores TMSI as a callback solution for GSM/iDEN. Does not address pseudo-MIN as callback solution for AMPS/TDMA/CDMA</p>

FCC E911 Questions

<p>FCC E911 Question</p>	<p>Q7: Describe the validation process for each technology. Is there more than one type of validation; e.g., for service initialization, credit worthiness, etc.?</p>	
<p>AdHoc Alliance Response filed July 11, 1997</p>	<p>GTE Response filed July 7, 1997</p>	<p>Coalition Response filed July 10, 1997</p>
<p>A7: The validation process occurs when the call is initiated. The cell carrier compares the MIN/ESN from a calling / called handset against its list of paid up subscribers and paid up roamers with valid roaming agreements.</p>	<p>A7: Correctly describes the reality of today. All calls must be validated or NO calls need be validated for access to 911.</p>	<p>A7: Accurate description of call validation in use today.</p>

FCC E911 Questions

<p>FCC E911 Question</p>	<p>Q8: Do you consider it impossible, at the present time, for wireless switches to route all 911 calls from handsets that are code-identified to PSAPs?</p>	
<p>AdHoc Alliance Response filed July 11, 1997</p>	<p>GTE Response filed July 7, 1997</p>	<p>Coalition Response filed July 10, 1997</p>
<p>A8: There is nothing in the Order or the Rules which say that the MIN must be preassigned and resident in the handset. Current switch technology can assign temporary MINs to handsets at time of a 911 call and send this number to PSAP for callback.</p>	<p>A8: Avoids answering the question of whether "code-identified" call can be passed to the PSAP.</p>	<p>A8: Answer is accurate but focused on effort now expended to pass all calls versus only validated calls.</p>

FCC E911 Questions

<p>FCC E911 Question</p>	<p>Q8 Contd: What are the technical constraints and factors that make it currently impossible to route some or all code-identified 911 calls to the PSAP? Is it possible to modify the switch software to route code-identified calls?</p>	
<p>AdHoc Alliance Response filed July 11, 1997</p>	<p>GTE Response filed July 7, 1997</p>	<p>Coalition Response filed July 10, 1997</p>
<p>A8 Contd: As stated above, all 911 calls can be easily code identified to PSAPs with call-back capability, as contemplated by the Order, Today!</p>	<p>A8 Contd: See above.</p>	<p>A8 Contd: See above.</p>

FCC E911 Questions

FCC E911 Question	Q9: Is it correct that if only service initialized calls are routed to PSAPs, the calls must be validated for some technologies, e.g. AMPS and CDMA?	
AdHoc Alliance Response filed July 11, 1997	GTE Response filed July 7, 1997	Coalition Response filed July 10, 1997
A9: Yes, this is correct.	A9: Yes!	A9: Yes!

FCC E911 Questions

<p>FCC E911 Question</p>	<p>Q9 Contd: Where calls must be validated, a) what does this mean? For example, if a caller is a roamer without a roaming agreement, would the validation process delay the call? b) Would the caller be required to provide a credit card number ...?</p>	
<p>AdHoc Alliance Response filed July 11, 1997</p>	<p>GTE Response filed July 7, 1997</p>	<p>Coalition Response filed July 10, 1997</p>
<p>A9 Contd: a) ..validation means.., the call will not be connected unless the caller's MIN/ESN is on the carrier's list of paid up subscribers. b) The unauthorized roamer will divert to operator, be required to establish credit, can then call 911 free!</p>	<p>A9 Contd: Correctly describes an open access to 911 policy today. Ignores the pseudo-MIN solution for call back to roamers that has been proposed by the Alliance.</p>	<p>A9 Contd: Correctly defines validation.</p>

FCC E911 Questions

<p>FCC E911 Question</p>	<p>Q10: If a switch is set to transmit all 911 calls to PSAPs, can it also transmit - a) 7-digit ANI; b) 10-digit ANI; c) 10-digit ANI & 10-digit pseudo-ANI</p>	
<p>AdHoc Alliance Response filed July 11, 1997</p>	<p>GTE Response filed July 7, 1997</p>	<p>Coalition Response filed July 10, 1997</p>
<p>A10: Yes. Some PSAPs are limited in the use of ANI by their equipment. The solution here is to deliver a 7-digit local number, the temporary pseudo-MIN, to the PSAP.</p>	<p>A10: Correctly answers the question. Added caveat on 7-digit ANI not understood.</p>	<p>A10: Correct description of switch action.</p>

FCC E911 Questions

<p>FCC E911 Question</p>	<p>Q11: Can the switch selectively route calls differently to different PSAPs, e.g. , all calls to some PSAPs and only service initialized calls to others?</p>	
<p>AdHoc Alliance Response filed July 11, 1997</p>	<p>GTE Response filed July 7, 1997</p>	<p>Coalition Response filed July 10, 1997</p>
<p>A11: Such routing capability is not within the current switch software for AMPS/TDMA/CDMA. ...software modification...does not seem justified in view of the current switch capacity to provide temporary pseudo MINs for call back by all PSAPs.</p>	<p>A11: Again avoids directly answering the "code-identified user that is NOT a valid subscriber" issue by referring back to Q8 which speaks only to non-MIN handset issues.</p>	<p>A11: No for all current technologies.</p>

FCC E911 Questions

<p>FCC E911 Question</p>	<p>Q12: Do you believe more time will be needed to successfully implement - a) Basic 911 Requirements (Currently scheduled for October 1, 1997); b) E911 Phase 1 (Currently scheduled for April 1, 1998)?</p>	
<p>AdHoc Alliance Response filed July 11, 1997</p>	<p>GTE Response filed July 7, 1997</p>	<p>Coalition Response filed July 10, 1997</p>
<p>A12: a) No. b) No. The FCC provided more than sufficient time in the Order for compliance. More time is not justified.</p>	<p>A12: a) Wants to introduce "immunity" for carrier as reason to delay. b) Does not identify any reasons for delay.</p>	<p>A12: a) No! b) Hedging answer based on outcome of FCC reconsideration.</p>

FCC E911 Questions

<p>FCC E911 Question</p>	<p>Q13: It has been suggested that transmission of non-code identified calls might actually impair PSAP call back or other capabilities from service initialized calls from subscribers or roamers. Can this occur? When? Why? Are there remedies?</p>	
<p>AdHoc Alliance Response filed July 11, 1997</p>	<p>GTE Response filed July 7, 1997</p>	<p>Coalition Response filed July 10, 1997</p>
<p>A13: ...no... many cell carriers pass all 911 calls and have no difficulty in providing ANI from its service initialized callers. Call back capability can be provided for all calls by the use of pseudo MINs as described in the above answers.</p>	<p>A13: Correctly dispels this "rumor" as untrue and unfounded. ANI is collected and passed when it is available.</p>	<p>A13: Talks around issue but finally agrees that "non-code-identified" calls will not interfere with or impair code-identified calls.</p>