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Before the  
Federal Communications Commission  
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

In the Matter of )  
)  
Revision of the Commission's Rules to En- )  
sure Compatibility with Enhanced 911 Emer- )  
gency Calling Systems )

CC Docket No. 94-102  
RM-8143

DOCKET FILE COPY ORIGINAL

To: The Commission

COMMENTS

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To: The Commission

**COMMENTS**

BellSouth Corporation ("BellSouth"), by its attorneys, hereby submits additional comments in response to the Commission's supplemental notice. FCC Public Notice, DA 96-198 (Feb. 16, 1996) ("*Supplemental Notice*"). to its pending Enhanced 911 rulemaking proceeding.<sup>1</sup> BellSouth supports the efforts of the Cellular Telecommunications Industry Association ("CTIA"), National Emergency Number Association ("NENA"), Association of Public-Safety Communications Officials ("APCO"), and National Association of State Nine One One Administrators ("NASNA") (collectively, "Proponents") that have resulted in the Consensus Agreement ("Agreement"). Although BellSouth supports Proponents' efforts to facilitate wireless compatibility with E911, it is still premature to adopt specific requirements and timetables for the provision of E911 services. BellSouth encourages the Commission to seek further information and analysis from affected groups before establishing the time frames for implementation proposed in the Agreement. Accordingly,

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<sup>1</sup> See *Notice of Proposed Rule Making*, CC Docket No. 94-102, FCC 94-237 (Oct. 19, 1994), 59 Fed. Reg. 54878 (1994) ("*NPRM*").

the Commission should not, at this time, require compliance with the proposed Phase I and II time frames in the Agreement.

### **SUMMARY**

BellSouth supports the Consensus Agreement entered into by CTIA, NENA, APSCO, and NASNA as a step in the right direction toward facilitating wireless compatibility with E911. BellSouth encourages the Commission, however, to seek further information from affected groups regarding the complex technical and standards issues and location technologies associated with E911.

BellSouth is concerned that the provision of ANI or CPN information within the proposed Phase I time frame may not be technically or economically feasible. BellSouth is also concerned with the Agreement's reliance on one vendor's equipment trials to arrive at an ALI objective of the 125 meter RMS measurement of location accuracy within the Phase II five year time frame.

### **BACKGROUND**

On October 19, 1994, the Commission released an *NPRM* proposing the adoption of a variety of rules and deadlines for making 911 services available to customers calling from Private Branch Exchanges ("PBXs") and wireless systems connected to the telephone network. BellSouth supported the overall objective of making 911 services accessible to PBX and wireless users, but indicated that the proposals set forth in the *NPRM* are premature. Specifically, BellSouth established that there was insufficient information available to establish mandates for the provision of 911 services or to set dates by which such services must be implemented.

On November 13, 1995, the Commission issued a further public notice requesting comments on a Petition for Rule Making submitted by the Ad Hoc Alliance for Public Access to 911 ("Alliance") requesting that the Commission adopt rules requiring the prompt connection of 911 calls based on strongest signal selection, without presubscription. BellSouth opposed the Alliance's

proposal due to the lack of standards and proven location technologies. BellSouth urged the Commission to support and facilitate the ongoing technological developments underway by affected groups.<sup>2</sup>

BellSouth applauds Proponents for seeking to ensure rapid implementation of universal 911 availability. Nevertheless, BellSouth is still not convinced that the proposed timetables contemplate the substantial technical challenges and implementation issues involved. Establishing time frames for the provision of certain 911 features would be premature at this time and would require affected groups to develop interim solutions which actually could delay the long term deployment and increase the cost of more advanced features. Work is underway in a variety of industry groups to address the complex technical and standards issues and location technologies associated with E911. It is not clear whether Proponents have obtained direct input from key standard groups or LECs in arriving at their Agreement. Standards groups play a critical role in establishing meaningful solutions and time frames. BellSouth continues to urge the Commission to broaden participation in such fora to include representation of all concerned in an effort to reach a consensus on a timely, efficient, technically feasible, and cost-effective way of providing wireless customers access to a variety of 911 services.

**I. IT IS PREMATURE TO ESTABLISH PHASE I AND PHASE II TIMETABLES FOR SPECIFIC 911 LOCATION IDENTIFICATION REQUIREMENTS FOR WIRELESS SYSTEMS**

BellSouth generally supports a two phase approach to full implementation of 911 service by wireless providers. At the same time, BellSouth has concerns regarding the technical feasibility of the time frames, and there are solutions that have not been fully investigated. In its initial comments

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<sup>2</sup> BellSouth Comments in Ad Hoc Alliance for Public Access to 911, Petition for Rule Making, CC Docket No. 94-102, at 2.

responding to the *NPRM*, BellSouth supported requiring wireless operators to provide pseudo-ANI<sup>3</sup> information within 1 to 2 years of adoption of the rules in this proceeding. Thus, BellSouth supports the Agreement to the extent it would require wireless operators to provide cell site information using pseudo-ANI within 18 months. BellSouth is concerned, however, with Proponents' proposal to extend this requirement to include the provision of calling party number ("CPN") information within this same Phase I time frame.

**A. The Provision of ANI or CPN Within the Phase I Time Frame May Not Be Technically or Economically Feasible**

The passage of CPN information requires the existence of Switching System 7 ("SS7") and ISDN user part (ISUP)<sup>4</sup> capabilities in both the wireline and wireless networks. Some LECs and wireless service providers may not have current plans to fully deploy all the necessary SS7 components with ISUP capabilities within 18 months.<sup>5</sup> Such a requirement would, at a minimum, impose substantial additional costs to these parties, and may not even be economically or technically feasible in some cases. In its recent rulings on Caller-ID/CPN, the Commission has chosen to require passage of CPN on interstate calls only when carriers become equipped with the appropriate SS7 capabilities.<sup>6</sup> It did not require carriers to incur substantial additional costs in order to meet its

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<sup>3</sup> "Pseudo-ANI" refers to the transmission of coded information identifying a cell site or sector instead of the billing number ordinarily transmitted as ANI.

<sup>4</sup> ISUP is an element of the SS7 protocol which supports the signaling use or call set-up between switches.

<sup>5</sup> BellSouth plans to evolve its wireless systems to the required SS7/ISUP capabilities as soon as possible. The needed capabilities, however, are not yet fully supported by some of our infrastructure vendors.

<sup>6</sup> *In the Matter of Rules and Policies Regarding Calling Number Identification Service-Caller ID*, CC Docket No. 91-281, *Memorandum Opinion and Order, Second Report and Order and Order, and Third Notice of Proposed Rule Making*, 10 F.C.C.R. 11700 (1995).

CPN requirements. To establish requirements in this proceeding that are contrary to its caller-ID/CPN policies, would be inappropriate without further consideration.

If it is the intention of the agreement that ANI be used instead of CPN for an interim period, the Commission should consider the limitations of this intention. ANI does not always reflect the actual caller's number as its primary use is for billing purposes. As wireless PBXs and other enhanced wireless applications are implemented, the likelihood that the ANI will be different from the caller's actual number may become more prevalent.

**B. The Agreement Should Not Limit Implementation of ALI in Phase II, to the 125 RMS Measurement of Location Accuracy**

Under Phase II of the Agreement, Automatic Location Information ("ALI") of wireless callers would be required with an accuracy of 125 meters Root Mean Square ("RMS"). BellSouth supports this objective, as a more realistic and obtainable objective, than that proposed in the *NPRM*, but remains concerned with Proponents' reliance on the results of one vendor's equipment trials used to arrive at the 5-year time frame. A different vendor's solutions may provide differing, but higher quality results or better accuracy over a broader range of technologies and geographic areas. Any rules established by the Commission must permit service providers to select the technology or vendor it determines will best meet the needs based upon industry standards, once these standards have been established.

**C. It Is Premature to Establish Deadlines For Wireless 911 Location Information**

As BellSouth stated in its earlier comments, before high quality location information can be provided to satisfy the requirements of routing to the appropriate PSAP and timely response, a number of advances must be made in wireless systems, interconnected telephony networks, and PSAPs. Moreover, any standards should be equally applicable to all CMRS providers using a variety of analog and digital technologies. Examples of the developments that must occur include:

- Selection of a location technology that can be deployed across diverse wireless systems such as 800 MHz cellular, enhanced specialized mobile radio, and 1.8 GHz PCS. Such technology must operate with a range of air interface methods, must provide consistent location accuracy commensurate with the expectations of the PSAP, and must meet certain cost goals. Today, no location technology has passed these hurdles and most proposed technologies are in their infancy with regard to commercially viable deployment.
- The ability to pass the location information to the existing interconnected networks for the purposes of routing and information retrieval must be developed once a particular location technology is chosen. Many systems currently providing 911 services cannot accommodate new information elements. Many systems will require the deployment of extensive modifications; others will require new equipment designed to meet new standards.
- All industries (wireless, telephony, public safety, *etc.*) will need to develop extensive verification procedures to ensure that the location information can be provided end-to-end in a unified manner across the diverse telecommunications networks that exist today and will be deployed in the foreseeable future.
- Manufacturers must commit to develop the needed technologies and all affected entities must implement the requisite changes. Massive system conversions can take years to accomplish.

The Agreement proposes that the ALI objective be achieved by the wireless industry within 5 years after adoption of the rules. BellSouth supports this objective as a general matter. Nevertheless, the analysis in the agreement is insufficient to ensure the feasibility of this time frame. BellSouth notes that the information provided in the Agreement only addresses analog Cellular architecture, and does not address digital cellular, PCS, and ESMRs, all of which pose complex feasibility issues. The Commission must determine whether the consensus reached in the Agreement will apply equally to these other forms of CMRS, consistent with the statutory requirement of regulatory parity.<sup>7</sup> If not, what standards will apply to these services so as to comply with the Commission's ultimate goal of universal 911 consistent with regulatory parity?

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<sup>7</sup> See 47 U.S.C. § 332(c); Regulatory Treatment of Mobile Services, 9 F.C.C.R. 1411, 1418, 1493 (1994).

BellSouth has recently issued a Request for Information (“RFI”) for the express purpose of soliciting information directly from industry suppliers regarding the technical feasibility of providing wireless caller location for E911 services. Input on 33 issues is being sought from suppliers of technology, hardware, software, network, and operational support infrastructure, and subscriber terminals. Additionally, responses are being requested from emergency service providers and wireless service providers to ensure that the full impact of providing wireless location identification is understood. This RFI is included as Attachment A to these comments.

BellSouth supports Proponents’ goal of achieving ALI of wireless callers within 125 meters RMS but believes that further standards work and other efforts such as BellSouth’s RFI are needed before a specific technical objective or implementation date are determined.

**II. THE COMMISSION SHOULD PREEMPT THE STATES FROM IMPOSING DIFFERING 911 REGULATIONS AND TIME FRAMES**

BellSouth supports Proponents’ proposal to ask the FCC to declare that state and local 911 fees or taxes should not discriminate between wireline and wireless carriers and should be applied in a fair and equitable manner. In addition, fees or taxes reasonably related to the recovery of prudently incurred wireless system or service costs should be authorized to ensure that wireless 911 costs are recovered by the carriers.

Moreover, BellSouth also urges the Commission, to preempt states from imposing different requirements and time frames for the funding of wireless, wireline, and PSAP investments in E911 technology and 911 cost of service. Because the Commission is proposing to provide wireless customers similar 911 service, with respect to location and calling party information, to that enjoyed

by traditional landline customers, a mechanism for recovering the costs of providing these service enhancements must be developed by the Commission, before implementation by the states.<sup>8</sup>

In order to impose uniform requirements, BellSouth agrees with the Commission's proposal in its *NPRM* that state laws mandating specific capabilities and time frames for wireless provision of E911 services should be preempted. Once a consensus regarding technical standards is achieved with respect to the compatibility of wireless equipment with E911 systems, the Commission should promulgate uniform federal rules adopting such technical requirements. This would ensure nationwide compatibility, which is particularly important because wireless users roam not only between neighboring wireless markets but also throughout the nation. A uniform approach will prevent states from mandating different and conflicting requirements, which could significantly delay service, create customer confusion, and result in unnecessary costs.

### **III. LIMITED LIABILITY AND PRIVACY**

BellSouth supports the Proponents' conclusion that wireless 911 callers should be deemed to consent to the disclosure of calling number, location, and associated information just as is currently the case for wireline callers. BellSouth agrees with Proponents that Congress, in the Communications Assistance for Law Enforcement Act of 1994,<sup>9</sup> did not intend to preclude location determination and disclosure in the ordinary course of good-faith 911 operations.

In addition, BellSouth urges the Commission to recognize that problems may exist with respect to state requirements for caller-ID blocking. Current technology may not allow override of per line blocking in some cases. Thus, the Commission should extend liability protection to carriers

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<sup>8</sup> There are a number of funding alternatives which should be considered. For example, funding could be from a 911 wireless state fund or from a fee similar to the surcharge added to the landline customer's monthly bill.

<sup>9</sup> Communications Assistance for Law Enforcement Act of 1994, § 103, 108 Stat. 4279, 4281 (1994).

who are technically unable to provide CPN to PSAPs without also passing the number on other calls.<sup>10</sup>

The Commission should also address and resolve issues concerning carriers' and PSAP's legal liability. However, there should be a limited liability provision in any rules adopted requiring 911 wireless accessibility. The limitations inherent in radio communications make it impossible for wireless providers to provide uninterrupted service. In many cases, this is explicitly addressed in the contracts between wireless providers and subscribers, which provide that the wireless provider is under no duty to provide uninterrupted service. The limitations which give rise to this contractual language equally apply to wireless 911 calls. Wireless providers should be further absolved of any liability for "dropped" 911 calls. Additionally, BellSouth urges the Commission to protect wireless and wireline carriers from liability for the information provided to emergency systems. Such protection should extend to potential maintenance errors in the ALI database, as well as to the required transmission of information regarding the caller in the course of providing emergency service.

#### **IV. OTHER ISSUES**

##### **A. Access to 911 by Speech/Hearing Impaired Callers.**

BellSouth supports a requirement such as that in the Agreement for access by speech/hearing impaired callers using TDD devices. The Agreement, however, could be interpreted to require that direct 911 connections be possible through all sorts of devices (e.g., modems and fax machines) and wireless data services such as CDPD. The Commission should make clear that there is no such requirement, which would require extensive additional development work and substantial costs. If the Commission does intend to require 911 access from data devices other than TDDs, BellSouth

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<sup>10</sup> Law enforcement and certain abuse agencies and hotlines typically have per-line blocking. It may not be technically feasible to pass CPN if 911 is dialed and block it for all other calls.

suggests seeking input from terminal device manufacturers to establish the feasibility of this goal and a reasonable time frame for meeting it.

### **B. Re-Ring/Callback**

BellSouth supports the Proponents' agreement to require wireless systems to provide PSAP attendants with the capability to call the 911 caller back if the call is disconnected, as long as the mobile user has not turned off the mobile unit. Any time frames for this provision, however must consider the SS7/ISUP implementation plans of providers and the costs associated with implementing the capabilities in the PSAP systems. Issues which need to be addressed include:

- The number of digits of a telephone number that a PSAP can handle today, versus the number of digits that will be required for call back capabilities in the future.
- Development of new interfaces between wireless systems and PSAPs to allow for more direct call back into the system handling the call, versus a call back to the mobile caller's home system.
- Development of capabilities to override subscriber enabled features such as call transfer, voice mail, automated answering, etc. These issues are not unique to wireless and impact landline callbacks as well.

The same approach outlined in the previous section to ensure implementation of location information, *i.e.*, the establishment of flexible goals while permitting the continuance of industry-wide developmental efforts, also should be used to develop standards and drive the implementation of these aspects of emergency services.

### **C. 911 Availability**

BellSouth supports Proponents' conclusions that a caller should have the ability to reach emergency services from any *service initialized* mobile radio handset in a home service area or a subscribed to roamed service area by dialing 911. Requiring unconditional processing of 911 calls, regardless of the status of the cellular telephone used to place the call, would create the potential for fraudulent and prank 911 calls. No public interest is serviced by requiring cellular carriers to

complete 911 calls from such phones. Due to the interconnection and hand-off problems associated with a unsubscribed/uninitialized handset, the perpetrator of such pranks will escape local police authorities due to the inability to trace or obtain location information regarding the call.<sup>11</sup> BellSouth supports Proponents' conclusion that the industry will continue to work on methods and language for consumer education to ensure compliance with the objectives in the 911 proceeding that do not depend on subscriber equipment.

**D. Subscriber Equipment Labeling**

In the NPRM, the Commission sought comment on the benefit of placing warnings on phones or their outside packaging to advise consumers of wireless 911 limitations. BellSouth supports Proponents' conclusion that the industry will continue to work on methods and language for consumer education to ensure compliance with the objectives in the 911 proceeding that does not depend on subscriber equipment labeling.

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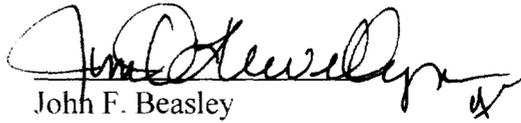
<sup>11</sup> See BellSouth Comments to Alliance Petition for Rule Making, at 6.

## CONCLUSION

For the forgoing reasons, BellSouth urges the Commission to adopt the Consensus Agreement reached by CTIA, NENA, APCO, and NASNA, but urges the Commission to not implement any limitations until an industry consensus can be reached regarding how best to provide access to 911 and E911 services.

Respectfully submitted,

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March 4, 1996

**ATTACHMENT A**

**BELLSOUTH**  
**WIRELESS, INC.**

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**Wireless Location for  
Enhanced 911 Emergency Services  
(E911)**

**Industry Request for Information**

**March 1996**

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March 1, 1996

**TO: Recipients of *Wireless Location for Enhanced 911 Emergency Services (E911)* Industry Request For Information**

The enclosed Request For Information (RFI) invites your company to supply information about technology, products, systems, hardware, and software and ideas that BellSouth could employ to provide wireless caller location information for E911 emergency services. This information may relate to current or future offerings, including those under development or in the advanced stages of research.

The main thrust of this RFI is to determine the availability of the technology required to provide improved location capability for wireless E911 calls originating from cellular, PCS, SMR, or other wireless services. BellSouth Wireless, Inc. is seeking to facilitate the advancement of location technologies in commercial wireless systems by supporting key developments and standards and to promote requisite changes in intervening networks and public safety answering points to ensure full utilization of these capabilities.

BellSouth Wireless, Inc. recognizes the complexities and the challenges to be faced before the full benefits of improved wireless E911 location can be realized. Therefore, we are addressing this RFI to a broad audience that includes emerging and established companies in the fields of telecommunications, location, and public safety.

We appreciate your thoughtful consideration of this RFI and look forward to your response. Additionally, we see this RFI as a starting point for insightful dialog between BellSouth and the individual responding companies on this topic.



**Attachment**

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## 1. SUMMARY

The purpose of this document is to solicit information about the technical feasibility of providing wireless caller location for E911 emergency services. Information is sought from suppliers of technology, hardware, software, network and operational support infrastructure and subscriber terminals within the emerging and broader wireless telecommunications industry.

Currently, wireless services do not provide adequate caller location information to allow intelligent routing of an emergency 911 call to an appropriate PSAP or response agency through the PSTN. Indeed, in many emergency situations the caller is not aware of their exact location or is suffering additional disorientation caused by the emergency. This lack of location information often extends the call process and delays the dispatch of the proper response agency.

Fundamentally, there are two issues to be addressed for wireless services to provide wireline-compatible emergency 911 information. First, the mobile nature of wireless telecommunications and the unique characteristics of radio communications make location information difficult to determine. Second, once the location information is known, it has to be transferred seamlessly and rapidly through the interconnecting networks to the appropriate rapid response agency. Before high quality location information can be advantageously used to satisfy the requirements of routing to the appropriate PSAP service provider for a timely response, a number of advances must be made in wireless telecommunications systems, the associated interconnecting networks, and the PSAP systems themselves.

The choice of which location technology is 'best' suited for the 911 application is a complex question that has to be evaluated with the application requirements firmly in view. The impact on the wireless network infrastructure will determine the optimal suitability of the myriad of technologies under development.

Due to the complexities of the existing and emerging wireless marketplace (multi-standards environment and multiplicity of service providers), BellSouth believes that the preferred solution for incorporating wireless location functionality is likely to be 'network-centric'. With approximately 30 million cellular subscribers, and growth rates that lead to a doubling of that number along with an additional 10 million PCS subscribers by the year 2000, the installed subscriber terminal base is an important consideration. The level of network integration, it is recognized, will change with time as improved performance location technology becomes commercially feasible. However, a mobile subscriber terminal based solution, on a going forward basis, may provide additional capabilities or advantages. A subscriber terminal based solution will have significant hurdles to overcome, such as size, weight, battery life, cost, etc.

This RFI seeks to answer some the critical questions regarding the impact of implementing a location technology in the wireless network, the factors affecting the choice of location determining technology, the feasibility, timing and cost effectiveness of a solution in the near future. Importantly, this RFI is seeking the answers to these questions from as wide an audience as possible, including emergency service providers, wireless and wireline service providers, as well as technology suppliers and developers.

## **2. SCOPE**

This RFI is being issued by BellSouth Wireless, Inc. BellSouth stands at the top of the telecommunications industry as a world leader in mobile communications. BellSouth and its partners operate mobile systems in 15 countries, serving more than 5.7 million cellular, paging, and mobile data customers in service areas with a combined population of more than 360 million.

BellSouth serves more than 3 million cellular customers, on a proportionate basis, in numerous cities across the US, including Los Angeles, Houston, Atlanta, Miami, and Milwaukee.

BellSouth Personal Communications, Inc. (PCI) will operate a wireless voice and data network in the 1.8 GHz range in two MTA's covering most of North and South Carolina, the eastern third of Tennessee, and portions of eastern Kentucky and southwest Virginia.

BellSouth's European cellular networks are based on the GSM standard. The company is a pioneer in exporting the GSM standard to countries outside of Europe, as it has done in Australia, New Zealand and India.

This RFI is for emerging and existing technology, equipment and systems capability that will enable BellSouth to provide wireless access to enhanced 911 emergency services to its current and future customers. This effort is directed as an inquiry into the technical solutions and functional requirements for wireless location to provide capabilities in the cellular, PCS and other wireless markets. Primary focus is the domestic US market; however, implications for international markets will be considered.

This RFI is being released to the industry in as broad a way as possible to include core technology developers, suppliers, equipment developers and manufacturers, network infrastructure and systems support suppliers and integrators, emergency service providers and organizations who could potentially contribute to the development and implementation of wireless location for enhanced 911 emergency services.

BellSouth will review all information, and any proposals, supplied as a response to this RFI. The evaluations will not be disseminated to any organization outside of BellSouth and its affiliated companies. There will be no ranking of responses, nor will there be an "approved vendor" list resulting from this RFI. Discussions may follow with a selected group of organizations to further the development and test of possible solutions. Respondee's have an opportunity via this RFI to contribute to BellSouth's wireless vision.

### ***2.1 Document Organization***

This document is organized as follows:

- Sections 1, 2, and 3 contain the Summary, Scope, and Objective of this RFI, respectively.
- Section 4 contains the RFI Policy, including licensing, and mailing address for responses.
- Section 5 contains the Confidentiality of Responses which outlines the protection afforded to vendor information and proposals

- Section 6 contains the Response Preparation Instructions and the Format that vendors should follow in submitting information and proposals.
- Section 7 contains the Introduction, which describes the purpose, background, market and technological environment to the request.
- Section 8 explores the emergency call answering service providers' requirements and outlines the BellSouth's requirements for a wireless location solution. These requirements form the basis of this RFI.
- Section 9 contains a discussion related to wireless location enabling technologies and explores the issues and possible impact of the requirement.
- Section 10 contains a complete checklist of the key questions posed throughout the sections of this RFI.
- Appendix A contains a list of references and source material that pertain to the development of this RFI.
- Appendix B contains a list of terms and acronyms.
- Appendix C consists of the RFI mailing list.

March 1996

Wireless 911 Location RFI

### 3. OBJECTIVE

In October 1994, The Federal Communications Commission released a Notice of Proposed Rule Making, CC Docket No. 94-102 regarding wireless access to enhanced 911 (E 911) emergency services. BellSouth supports the FCC's objective that "all mobile radio services offering access to real-time voice services provided on the public switched network" should be capable of providing access to emergency services. Establishing ubiquitous wireless access to emergency services must be a coordinated effort among numerous affected groups, including wireless service providers, equipment vendors, manufacturers, local exchange carriers (LECs), public safety answering point service providers (PSAPs), etc.

A great deal of work has already been done by many of these groups addressing the development of the most efficient means of accessing E 911 emergency services from the wireless networks. BellSouth has been an active participant in many of the joint working groups formed to assist in the development of standards for the implementation of wireless access to emergency services, including the development of recent positioning papers by PCIA and TIA (see Appendix A References).

The objective of this RFI is to determine the technical feasibility of providing wireless caller location for E 911 emergency services. As part of that objective BellSouth is aiming to:

- build an information base to enable BellSouth to understand the market and technical environment for providing wireless location services
- ascertain the availability of critical elements, including needed technology development
- stimulate further development
- assemble support from potential suppliers
- encourage industry cooperation to accelerate the development of relevant standards, and to provide leadership so as to guide the regulatory process
- invite proposals and recommendations for joint development and testing.

The information and any resulting proposals or recommendations collected during this RFI process may be used to influence BellSouth's future development plans.

In addition, if location technology is to be deployed as part of enabling wireless access to enhanced emergency services, BellSouth is very interested in exploring other commercial services that would expand the use of the technology and accelerate its development. BellSouth is extremely interested in sharing information that might support such developments, and thereby affect the choice of technology

## 4. RFI POLICY, GUIDELINES, LIMITATIONS AND TIMESCALES

### *4.1 Intellectual Property Rights Matters*

Vendors will be expected to obtain all necessary intellectual property rights for all technology, hardware, software and systems relevant in response to this RFI. In addition, vendors must identify, within their information or proposals, any proprietary technology embodied in the equipment, software or systems supplied in response to this RFI.

BellSouth would prefer that vendors be willing to cross-license any proprietary technology to other qualified developers and manufacturers in order to avoid single-sourcing and to promote interoperability among the equipment and systems. Vendors should include a statement that clearly expresses their company policy toward licensing technology to other vendors.

### *4.2 RFI Policy*

Any entity who intends to respond to this RFI must submit a letter or fax by the close of business on **Friday March 22, 1996**, as evidence of their intention to supply information. This should be sent to the following address:

BellSouth Wireless, Inc.  
Room 803  
1100 Peachtree Street NE  
Atlanta, GA

Fax: 1-404 249 5157 or  
1-404 249 4343

Attention: Mr Stephen M. Blust, Project Manager

Tele: 1-404 249 5058

Entities that have sent an intent-to-supply letter should submit 3 original copies of their information packages by close of business on **Thursday April 19, 1996**, to the above address.

BellSouth reserves the right to extend the above-mentioned intent-to-supply and/or RFI response deadlines or change in any way these submission provisions.