

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

In the Matter of )  
 ) CC Docket No. 94-102  
Revision of the Commission's rules )  
to ensure compatibility with ) RM-8143  
enhanced 911 emergency calling systems )

NOTICE OF PROPOSED RULE MAKING

Adopted: September 19, 1994 Released: October 19, 1994

By the Commission:

Comment Date: January 9, 1995  
Reply Comment Date: February 8, 1995

TABLE OF CONTENTS

| <u>TOPIC</u>   | <u>PARAGRAPH</u> |
|--|------------------|
| I. INTRODUCTION . . . . .  | 1                |
| II. BACKGROUND . . . . .   | 3                |
| Private Branch Exchange and Dispersed Private Telephone<br>Systems . . . . . | 8                |
| Enhanced 911 and Wireless Systems . . . . .                                  | 9                |
| III. COMPATIBILITY OF PBX EQUIPMENT WITH 911 SYSTEMS . . . . .               | 11               |
| A. Adcomm and Industry Proposals . . . . .                                   | 13               |
| Adcomm Petition . . . . .  | 13               |
| Industry Efforts . . . . .   | 14               |
| Comments . . . . .   | 15               |
| B. Discussion . . . . .  | 19               |
| 911 Availability . . . . .   | 22               |
| Attendant Notification. . . . .  | 23               |
| ALI database maintenance. . . . .  | 24               |
| Station Number Identification (SNI) . . . . .                                | 26               |
| Information Protocol Standard. . . . .                                       | 27               |
| Network Interface Standards. . . . .   | 28               |
| Local Exchange Company Services. . . . .                                     | 29               |
| C. Implementation Schedule . . . . .   | 30               |
| IV. Compatibility of Wireless Services with<br>Enhanced 911 . . . . .        | 32               |
| Discussion . . . . .   | 37               |
| 911 availability. . . . .  | 41               |
| Grade of service. . . . .  | 42               |
| 911 call priority. . . . .   | 44               |

|   |           |
|---|-----------|
| User location information. . . . .                                  | 45        |
| Re-ring/call back . . . . .   | 52        |
| Common Channel Signaling . . . . .                                  | 53        |
| Access to text telephone devices (TTY) . . . . .                    | 54        |
| Equipment Manufacture, Importation, and Labeling . . . . .          | 55        |
| <b>V. ADDITIONAL CONSIDERATIONS . . . . .</b>                       | <b>56</b> |
| Privacy . . . . .   | 56        |
| Compatibility with Network Services . . . . .                       | 58        |
| Preemption . . . . .  | 59        |
| <b>VI. CONCLUSION . . . . .</b>                                     | <b>60</b> |
| <b>VII. ORDERING CLAUSE . . . . .</b>                               | <b>62</b> |
| <b>VIII. ADMINISTRATIVE PROVISIONS . . . . .</b>                    | <b>63</b> |
| Initial Regulatory Flexibility Analysis. . . . .                    | 64        |
| Comment dates. . . . .  | 65        |
| <b>APPENDIX A INITIAL REGULATORY FLEXIBILITY ANALYSIS . . . . .</b> |           |
| <b>APPENDIX B 911 CALL FEATURES . . . . .</b>                       |           |
| <b>APPENDIX C PROPOSED RULES . . . . .</b>                          |           |
| <b>APPENDIX D EMERGENCY ACCESS POSITION PAPER . . . . .</b>         |           |

**I. INTRODUCTION**

1. In this proceeding, the Commission proposes to amend its regulations to address issues raised by the provision of 911 and enhanced 911 services through certain telecommunications technologies. The primary objective of this proceeding is to ensure broad availability of 911 and enhanced 911 services to users of the public switched telephone network (PSTN) whose health and safety may depend on 911 emergency services systems. Toward this end, we intend to ensure that the effective operation of 911 services is not compromised by new developments in telecommunications. First, we address a petition filed by the Adcomm Engineering Company ("Adcomm") to amend Part 68 of the rules by proposing technical performance requirements that ensure the compatibility of private branch exchanges (PBXs) with enhanced 911 emergency services.<sup>1</sup> In this Notice of Proposed

---

<sup>1</sup> Comments were filed by Associated Public-Safety Communications Officers, Inc. (APCO), Bell Atlantic, BellSouth, GTE, South Carolina Budget and Control Board, and the Telecommunications Industry Association (TIA), and reply comments were filed by Adcomm and the North American Telecommunications Association (NATA).

Rulemaking, we seek comment on proposals for ensuring the compatibility of private branch exchanges (PBXs) and other dispersed private telephone systems with enhanced 911 emergency services.

2. Second, we propose to adopt rules that would require wireless services, in particular commercial mobile radio services (CMRS)<sup>2</sup> that provide real time voice services, to include features that will make enhanced 911 services available to mobile radio callers. These features include Station Number Identification (SNI), Automatic Location Information (ALI), Selective Routing (SR), and other features for 911 calls provided over wireless mobile units. This action responds to a Petition for Reconsideration filed by the Texas Advisory Commission on State Emergency Communications (TX-ACSEC) under the Office of the Attorney General for the state of Texas.<sup>3</sup> It also responds to the issues raised in the Emergency Access Position Paper filed recently by the Associated Public Safety Communications Officials-International, Inc. (APCO), the National Emergency Number Association (NENA), the National Association of State Nine One One Administrators (NASNA), and the Personal Communications Industry Association (PCIA).<sup>4</sup>

## II. BACKGROUND

3. Since AT&T's announcement in 1965 that the digits 9-1-1 would be made available nationally as an emergency telephone number, the use of 911 for emergency purposes has become widespread. The Commission's Network Reliability Council, in performing a special study of the reliability of 911 services, found that "the American public depends on 911 services in its

---

<sup>2</sup> CMRS is defined as "any mobile service...that is provided for profit and makes interconnected service available (A) to the public or (B) to such classes of eligible users as to be effectively available to a substantial portion of the public...." The term "interconnected service" means "service that is interconnected with the public switched network...." Omnibus Budget Reconciliation Act of 1993, Pub.L.No. 103-66, Title VI, §§6002(b)(3)(B), 107 Stat 312, 392(1992).

<sup>3</sup> The Petition for Reconsideration was filed in response to Amendment of the Commission's Rules to Establish New Personal Communications Services, GEN Docket No. 90-314, September 23, 1993, 8 FCC Rcd 7700 (1993) (Second Report and Order). Because this inquiry is broader than the proposals made in the TX-ACSEC petition, we are initiating this separate proceeding.

<sup>4</sup> This paper was filed on July 5, 1994, as an ex parte comment to GEN Docket No. 90-314. It is attached at Appendix D.

emergencies."<sup>5</sup> The Council found that 89 percent of the wireline access lines in the United States are served by some form of 911 service and that the service is increasingly engineered to provide a high level of reliability.<sup>6</sup> Currently, about 260,000 calls nationwide are placed to 911 every day.

4. 911 emergency services enable telephone users to receive, and state and local governments to provide, fast response to emergency situations. The ability to dial 911 offers several advantages to users. First, it is a single, nationally used three-digit number that is easy to remember and dial in emergency situations. This provides callers, including children, with easy access to emergency services in areas where the telephone number for the various emergency service providers is not readily known. Second, because 911 calls are sent to Public Safety Answering Points (PSAPs) over dedicated telephone lines, these calls are recognized and answered as emergency calls by professionals trained to assist callers in need of emergency assistance. Third, the use of 911 shortens the response time to requests for assistance because PSAP professionals have ready access to police, fire, and health emergency response service providers.

5. There are different levels of 911 services available, depending on the location. Basic 911 service is a forwarding arrangement in which calls dialed to the 911 telephone number are translated at a telephone company switch and are transmitted to a public safety agency for response. Most emergency systems, however, have enhanced this service.

6. Enhanced 911 systems help emergency services personnel achieve the shortest possible emergency response time by using Automatic Number Identification (ANI)<sup>7</sup> to route an emergency call

---

<sup>5</sup> Network Reliability: A Report to the Nation, National Engineering Consortium, June, 1993 at Section F, page 1.

<sup>6</sup> Wireline carriers and 911 service providers may employ diverse routing of interoffice facilities, multiple 911 tandem switch architectures, alternate public safety answering positions (PSAPs), special marking of 911 equipment, back-up power sources for PSAP facilities and diverse links for automatic line identification database access to ensure 911 service is reliable.

<sup>7</sup> The use of the term "automatic number identification" or "ANI" in this NPRM is not intended as a reference to billing number presentation provided as part of Feature Group B or D local exchange services. Although the number presented to a PSAP on a wireline call is often derived from Feature Group B or D services, the number presented to a PSAP on a wireless call may be generated by several other means. Thus, the term ANI merely

to the PSAP nearest the caller's location. At a minimum, enhanced 911 service provides the PSAP with the ANI of the calling party, permitting the PSAP to call back in the event the call is disconnected. A fully enhanced 911 system not only displays the ANI, but also permits an attendant at the PSAP to identify the calling party's address through the use of an external Automatic Location Identification (ALI) database. The ALI feature also permits selective routing (SR) of the call to the appropriate PSAP for the identified location and displays the public safety agencies (fire, police and emergency medical services) covering that location on the PSAP terminal.<sup>8</sup> A fully enhanced 911 system may also provide the PSAP with other information, including the name of the subscriber, city, zip code, telephone number, date, time of day, and the class of telephone service (business, residential, etc.).<sup>9</sup> Approximately 85% of 911 services include some form of enhanced 911 service.

7. Congress created the Federal Communications Commission "for the purpose [among others] of promoting safety of life and property through the use of wire and radio communication . . . ."<sup>10</sup> This Commission has jurisdiction to license the electromagnetic spectrum, and also to regulate "instrumentalities, facilities [and] apparatus" through which wire and radio services are provided.<sup>11</sup> It is difficult to identify a nationwide wire or radio communication service more immediately associated with promoting safety of life and property than 911. We believe that broad availability of 911 and enhanced 911 services will best promote "safety of life and property through the use of wire and radio communication."

8. Private Branch Exchange and Dispersed Private Telephone Systems. Private Branch Exchange (PBX) and other dispersed

---

identifies a number associated with the caller and used to reference the caller's location. The term does not reflect a specific service or technology.

<sup>8</sup> Selective routing is not needed in all areas. This feature is useful when telephone exchange boundaries extend into two or more PSAP jurisdictions.

<sup>9</sup> A list of the 911 call features currently available to many emergency call taking organizations, listed in order of importance as defined by NENA/APCO leadership, is shown in Appendix B.

<sup>10</sup> 47 U.S.C. §151.

<sup>11</sup> 47 U.S.C. §151, §153(a), (b), Titles II and III.

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.