

STATE OF MINNESOTA

Department of  
Administration

APR 4 1995



March 31, 1995

Ms. Maryanne V. Hruby, Executive Director  
Legislative Commission to Review Administrative Rules  
55 State Office Building  
100 Constitution Avenue  
St. Paul, Minnesota 55155

Our mission:  
To improve the quality  
and productivity  
of Minnesota  
government.

RE: In the Matter of Proposed Rules of the State Department of Administration  
Relating to Payment of Recurring Costs of Emergency 9-1-1 Telephone Systems

Dear Ms. Hruby:

The Minnesota Department of Administration intends to adopt rules relating to payment of recurring costs of emergency 9-1-1 telephone systems. We plan to publish a Notice of Intent To Adopt Rules in the April 17, 1995 State Register.

As required by Minnesota Statutes sections 14.131 and 14.23, the Department has prepared a Statement of Need and Reasonableness which is now available to the public. Also, as required, a copy of this Statement is enclosed with this letter.

For your information, we are also enclosing a copy of the Notice Of Intent To Adopt Rules and a copy of the proposed Rules in this matter.

If you have any questions about these rules, please contact me at 296-7104.

Sincerely,

James R. Beutelspacher  
State 9-1-1 Product Manager  
Telecommunications Division

Enclosures: Statement of Need and Reasonableness  
Notice of Intent to Adopt Rules  
Rules

**STATE OF MINNESOTA  
DEPARTMENT OF ADMINISTRATION  
TELECOMMUNICATIONS DIVISION**

In the Matter of the Proposed Rules  
Governing 911 Telephone Systems,  
Minnesota Rules Part 1215.1400

STATEMENT OF NEED  
AND REASONABLENESS

**I. INTRODUCTION**

This statement of need and reasonableness can be made available in other formats, including braille, large print and audio tape. TDD: 612 282-5359.

Minnesota Rules, Part 1215.1400 sets the conditions under which the State will pay the recurring costs of providing minimum 9-1-1 telephone service in Minnesota. The rules currently known as Chapter 1215 of Minnesota Rules were originally developed incorporating the 9-1-1 standards as adopted by the Metropolitan Council, and were promulgated after a hearing before an administrative law judge.

When the rules were promulgated, one 9-1-1 line was considered adequate for service in small telephone exchange area central offices because it had been estimated that there was a small likelihood of two or more simultaneous incidents requiring a 9-1-1 call in these remote areas. Likewise, it was anticipated that there would be few mis-routed 9-1-1 calls from central offices that were wholly within a Public Safety Answering Point (PSAP) service area. Consequently, it was determined that the added cost for a second 9-1-1 line and for the selective routing feature could be saved in most rural as well as some urban areas. Both rules were based on the quantity of expected calls. It was simply considered that adequate 9-1-1 service could be provided without paying for a second trunk in smaller telephone central offices or for selective routing in telephone exchange central offices where most 9-1-1 calls would already go to the correct PSAP.

The proposed rule changes address conditions which have gradually evolved, in part, because of developing technology, because of an increased number of mis-routes of 9-1-1 calls, and because of increased public expectations of the service. The proposed rule changes were developed after consultation with PSAP managers representative of all counties, and with the Executive Director of the Metropolitan 911 Telephone Board, the successor to the Metropolitan Council for purposes of 9-1-1 implementation and improvement in the Twin Cities metropolitan area.

## **II. STATEMENT OF DEPARTMENT STATUTORY AUTHORITY**

The Department of Administration's statutory authority to adopt these rules is set forth in Minnesota Statutes §403.07, Subdivisions 1 and 2 (1992), which provide:

Subdivision 1. The department of administration shall establish and adopt in accordance with chapter 14, rules for the administration of sections 403.01 to 403.12 and for the development of 911 systems in the state including:

(a) Design standards for 911 systems incorporating the standards adopted pursuant to subdivision 2 for the seven county metropolitan area; and

(b) a procedure for determining and evaluating requests for variations from the established design standards.

Subd. 2. the metropolitan council shall establish and adopt design standards for the metropolitan area 911 system and transmit them to the department of administration for incorporation into the rules adopted pursuant to this section.

For purposes of these rule changes, consultation with the management of the Metropolitan 911 Telephone Board is equivalent to incorporating Metropolitan Council design standards inasmuch as the Metropolitan 911 Telephone Board is the successor organization to the Metropolitan Council for 9-1-1 matters in the seven county Twin Cities metropolitan area.

## **III. STATEMENT OF NEED**

Minnesota Statutes §14 (1992) requires the Department to make an affirmative presentation of facts establishing the need for and reasonableness of the rules as proposed. In general terms, this means that the Department must set forth the reasons for its proposal, and the reasons must not be arbitrary or capricious. However, to the extent that need and reasonableness are separate, need has come to mean that a problem exists which requires administrative attention, and reasonableness means that the solution proposed by the Department is appropriate. The need for the rule changes is discussed below.

### **Equipment failures.**

Although there is a small likelihood of two simultaneous emergencies in remote areas, several instances of equipment failure have occurred which have temporarily disabled 9-1-1 service in telephone exchange area central offices which, due to their small number of subscribers, qualified for only one 9-1-1 line. In those instances, the lack of a second method of completing the 9-1-1 call meant the loss of all 9-1-1 service from that central office. If there had been a second line or another path to complete the call, 9-1-1 service could have continued during the time interval needed to correct the failure.

### **Foreign Exchange Service and Off-Premises Extensions.**

Some telephone applications are accomplished through the use of FX (foreign Exchange) lines or OPX (off-premises extensions). These arrangements provide for telephone service from one central office or telephone system to a location which may be in another telephone exchange area central office. The result is that when 9-1-1 is dialed from a telephone connected to an FX or OPX line, there is a possibility that the call will not be routed to the proper PSAP. The increased use of these FX and OPX services has added to the need for selective routing, the most common automated method of ensuring that 9-1-1 calls from one of these telephones is correctly routed to the proper PSAP.

### **Host-Remote Central Office Switches.**

Since the promulgation of the 9-1-1 rules, technological advances have made new digital telephone network configurations possible. One of the developments has been remote central offices. A remote telephone exchange area central office is a digital switch which replaces existing central office equipment, and can provide modern services less expensively if the computer processor of the switch is located in and shared with a different, host, central office. The host central office could be up to several hundred miles from the remote central office. An extensive deployment of host-remote switches has occurred, and the effect on 9-1-1 is that the possibility of central office isolation from the 9-1-1 network has increased. Consequently, alternate paths or methods of completing 9-1-1 calls must be considered in order to provide and maintain reliable 9-1-1 service. The rules covering State payment for 9-1-1 service must be adjusted in order to allow State payment of alternate means of completing 9-1-1 calls to the appropriate PSAP.

### **Overlay Networks.**

A variation of the remote switch is sometimes used to provide digital telephone services to specified subscribers without replacing an entire analog central office switch. In this scenario, a small remote is installed in the same location and as an addition to the normal analog switch. Subscribers who need digital telephone services are connected to the remote switch, which is, in turn, connected to the distant host digital central office. The effect on the 9-1-1 network is a blurring of exchange boundaries, in that calls from the same telephone exchange could be routed through different central offices. This situation increases the need for selective routing in connected enhanced 9-1-1 systems to ensure that the 9-1-1 calls go to the appropriate PSAP.

### **Cross Tandem Transfers.**

In Minnesota, many of the enhanced 9-1-1 systems use multiple switching centers, which are known as tandem switches. In order to serve Public Safety Answering Points from multiple tandems, extra connections are used, complicating the 9-1-1 network, and adding to the overall cost of 9-1-1. Transferring calls between tandems would eliminate the additional connections, and is best accomplished if the central offices involved are selectively routed.

### **Interchangeable Central Office Codes.**

In the next few years, all the available telephone number prefixes in the 612 area code will be in use. In order to add to the pool of available numbers in the 612 area and other metropolitan areas, the telephone numbering plan has been modified. This will allow the re-use of numbers within the same area code, and even the use of multiple area codes within the same serving area. Re-use of telephone prefixes will give telephone companies a greater number of telephone numbers to choose from, and also allow the use of separate series of thousands groups in separate central offices. For example, telephone numbers 555-0001 through 555-0999 could be used in a small central office that needs fewer than 1,000 numbers, while the numbers 555-1000 through 555-9999 could be used in another central office. This change in the allocation and use of telephone numbers will present an insurmountable problem to routing 9-1-1 calls in the existing 9-1-1 system unless the selective routing feature is included as part of the 9-1-1 service.

### **Public Expectation.**

The spread of basic and advanced life support ambulance services to rural areas, dramatic news stories featuring fast response to emergencies, and television docu-dramas such as Rescue 911 heighten awareness of advanced 9-1-1 features, and have increased public expectations of the 9-1-1 system. Consequently, states which are now implementing 9-1-1 rules and statutes either recommend or require a minimum of two 9-1-1 lines or routes for 9-1-1 calls from each central office, regardless of population, and recommend selective routing in each enhanced 9-1-1 system regardless of the expected number of mis-routed 9-1-1 calls. The recently published ASTM Standard Guide for Implementation of 9-1-1 Enhanced Systems recommends two paths from each central office.

#### **IV. STATEMENT OF REASONABLENESS**

The Department of Administration is required by Minnesota Statutes, Chapter 14 to make an affirmative presentation of facts establishing the reasonableness of the proposed rules changes. Reasonableness is the opposite of arbitrariness or capriciousness. It means that there is a rational basis for the Department's proposed action. The reasonableness of the proposed rule changes is discussed below.

##### **A. Reasonableness of the Rules as a Whole**

The proposed changes appropriately provide solutions to the problems discussed in the above statement of need because Minnesota Statutes 403.07, Subdivision 1 requires the Department to establish and adopt rules for the administration of Minnesota Statutes 403 and for the development of 9-1-1 systems in Minnesota. It is reasonable to use the rule making process to make changes to rules which were adopted through the rule making process.

##### **B. Reasonableness of individual Rules**

The following discussion addresses the specific provisions of the proposed rule changes to Minnesota Rules, Chapter 1215.1400.

##### **Subpart 2A: Backup or alternate circuit in lieu of second 9-1-1 trunk and State payment for second path to all 9-1-1 systems regardless of size.**

This is reasonable because the technology in existence when the original rules were written could only accommodate the 9-1-1 features if dedicated lines were used. Later developments allow features such as ANI (Automatic Number

Identification) to be sent over other than dedicated lines, such as the public switched telephone network or a cellular network. The proposed changes to the rules allow either a dedicated 9-1-1 line or a switched line to be used as an alternate path. The change allows the State to take advantage of the new technology, and provide the equivalent of a dedicated second line at an overall lower cost. Also, by allowing the second path to take a non-traditional route, the diversity and reliability of the 9-1-1 network is increased substantially.

The proposed change to the criteria for eligibility for State payment for the second 9-1-1 line or path is also reasonable in that it is permissive. It does not require a second path, but authorizes State payment of recurring costs if a county chooses to order and pay start-up charges for a second path. It simply provides a method of improving 9-1-1 service at a reasonable cost.

**Subpart 2B: Selective routing from telephone exchange central offices which are already connected to the PSAP.**

Allowing payment of selective routing costs where telephone exchange central offices are already connected, as in a tandem-based enhanced 9-1-1 service area, is also a reasonable change. This change would not mandate selective routing, but provides funding where existing connectivity makes the monthly cost of the selective routing feature a small incremental cost over the cost of a non-selective routing system. The proposed rule change would provide a simple and consistent basis for payment of the recurring costs of selective routing in all connected enhanced 9-1-1 systems, and still allow a variance for further state payment in unusual circumstances, where the added expense of providing new connectivity is justified.

**V. SMALL BUSINESS CONSIDERATIONS IN RULE MAKING**

Minnesota Statutes, section 14.115, subdivision 2, requires the Department, when proposing rules which may affect small businesses, to consider the following methods for reducing the impact on small businesses:

- (a) The establishment of less stringent compliance or reporting requirements for small businesses;
- (b) the establishment of less stringent schedules or deadlines for compliance or reporting requirements for small businesses;

- (c) the consolidation or simplification of compliance or reporting requirements for small businesses;
- (d) the establishment of performance standards for small businesses to replace design or operational standards required in the rule; and
- (e) the exemption of small businesses from any or all requirements of the rule.

Chapter 1215 contains rules which directly affect Minnesota businesses by establishing conditions and requirements for contracting with telephone companies for 9-1-1 and paying for the system costs. The existing 9-1-1 rules provide the vehicle for implementation and administration of the Minnesota 9-1-1 program as required by Minnesota Statutes 403.01 through 403.12. The rules have an immediate, substantial, and necessary impact on the 9-1-1 program because they establish an administration procedure for the 9-1-1 program, the 9-1-1 program cannot be achieved without these procedures, and the rules are necessary to continue the program.

The changes proposed herein have been reviewed to determine their effect on the small businesses of Minnesota. It has been determined that the proposed changes do not alter the effects of the rules on small businesses, and the existing rules meet the criteria for reduced impact on small businesses contained in the above list.

## **VI. IMPACT ON AGRICULTURAL LANDS AND FARMING OPERATIONS**

Minnesota Statutes section 14.11, subdivision 2, requires that if an agency proposing adoption of a rule determines that the rule may have a direct and substantial adverse impact on agricultural land in the state, the agency shall comply with specified additional requirements. The proposed rule changes have been examined, and have been determined to have no direct and substantial impact on agricultural lands and farming operations.

## **VII. COSTS TO LOCAL PUBLIC BODIES**

Minnesota Statutes, section 14.11, subdivision 1, requires a state agency to include a statement of the rule's estimated costs to local public bodies in the notice of intent to adopt rules if the rule would have a total cost of over \$100,000 to all local bodies in the state in either of the two years immediately following adoption of the rule. This provision



is not applicable because the proposed rule changes are permissive in nature and do not impose costs on local public bodies.

### **VIII. COMMISSIONER OF FINANCE APPROVAL OF FEE**

Minnesota Statutes section 16A.128, subdivision 1 requires Commissioner of Finance approval for fees proposed by agency rule making. This provision is not applicable because the proposed rule changes do not establish or adjust fees.

### **IX. CONCLUSION**

The Department is authorized and required by Minnesota Statute 403.07 to issue and maintain rules regarding 9-1-1 to implement, continue, and improve 9-1-1 systems in Minnesota pursuant to Minnesota Statutes 403.01 to 403.12. This statement of need and reasonableness demonstrates that 9-1-1 rule changes are needed to keep current with changing conditions.

The proposed 9-1-1 rule changes are needed to continue and improve the Minnesota 9-1-1 program, and provide a reasonable method of achieving those improvements with no negative impact on small businesses in Minnesota, no impact on agricultural lands and farming operations, no costs to public bodies, and no effect on fees.