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OFFICE OF THE SECRETARY

October 30, 1998

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
1919 M Street, N.W. Room 222
Washington, D.C. 20554

Ex Parte

Re: Multiple Address Systems
WT Docket No. 97-81

Dear Ms. Salas:

Pursuant to Section 1.1206 of the Commission's Rules, this is to provide you with two copies of the attached written presentation in the above-referenced docket. This presentation has been delivered to each of the Commissioners' offices and the staff of the Wireless Telecommunications Bureau, on behalf of the American Petroleum Institute, American Water Works Association, Association of American Railroads, East Bay Municipal Utility District, and UTC, The Telecommunications Association.

Should any questions arise concerning this matter, please let me know.

Very truly yours,

Jeffrey L. Sheldon
VP & General Counsel

cc: Daniel Phythyon, Wireless Telecommunications Bureau
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Peter Tenhula, Office of Commissioner Powell
Karen Gulick, Office of Commissioner Tristani

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

In the Matter of	)	
	)	
Amendment of the Commission's Rules	)	WT Docket No. 97-81
Regarding Multiple Address Systems	)	

To: The Commission

JOINT SUPPLEMENTAL COMMENTS

Table of Contents

I. Eligibility for Non-Auctionable MAS Licenses Should Be Restricted to "Critical Infrastructure Providers" 2

A. Entities Eligible in the Former Power, Petroleum and Railroad Radio Services, Under FCC Rule Part 90, Need MAS to Maintain the Nation's Critical Infrastructure 2

B. Public Safety Radio Services Are Statutorily Exempt From Auction 4

C. Critical Infrastructure Industries Are Included Under the PSR Exemption 8

II. The 928/952/956 MHz MAS Channels and At Least 20 Channel Pairs in the 932/941 MHz Band Should Be Allocated for Licensing to Critical Infrastructure Providers 12

III. Incumbent MAS Operations in the 928/952/956 MHz and 928/959 MHz Bands Should Be Grandfathered Regardless of Any New Eligibility Restrictions 20

IV. Conclusion 22

Summary

Multiple address systems (MAS) in the 900 MHz band are relied upon by electric, gas and water utilities, oil and natural gas pipelines, petroleum companies, and railroads for critical telemetry and supervisory control and data acquisition (SCADA) operations. These Critical Infrastructure Industries (CII) are the primary users of the current MAS channels at 928/952/956 MHz, and have a strong need for additional MAS channels to meet current and future communications requirements.

In this proceeding, the FCC has requested comment on whether competitive bidding should be used to award licenses in the existing MAS bands as well as the 932/941 MHz band.

Under the Balanced Budget Act of 1997, "public safety radio services," including services used by the Critical Infrastructure Providers, are exempt from competitive bidding. The Joint Commenters therefore urge the Commission to allocate the existing 928/952/956 MHz MAS channels and at least 20 MAS channel pairs in the 932/941 MHz bands for the exclusive use of licensees who would be eligible for licensing in the former Power, Petroleum or Railroad Radio Services under Part 90 of the FCC's Rules.

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To: The Commission

Joint Supplemental Comments

The following parties hereby submit these Joint Supplemental Comments in the above-referenced rulemaking on the licensing of multiple address systems (MAS) in the 900 MHz band:

American Petroleum Institute
American Water Works Association
Association of American Railroads
East Bay Municipal Utility District
UTC, The Telecommunications Association

As described more fully below, recent amendments to the Communications Act of 1934 significantly alter the statutory basis on which the Commission's Notice of Proposed Rule Making, FCC 97-58, (NPRM) was issued.[1] The Joint Commenters offer their recommendations for rules and policies on MAS licensing that will meet both the Commission's goal of expediting service to the public and the new statutory requirements.

[1] 12 FCC Rcd 7973 (1997).

I. Eligibility for Non-Auctionable MAS Licenses Should Be Restricted to "Critical Infrastructure Providers"

A. Entities Eligible in the Former Power, Petroleum and Railroad Radio Services, Under FCC Rule Part 90, Need MAS to Maintain the Nation's Critical Infrastructure

The Comments and Reply Comments in this docket demonstrated that the predominant use of MAS is for supervisory control and data acquisition (SCADA) and telemetry operations by utilities, pipelines, and petroleum companies.[2] The record in this docket also demonstrates that, while many applications have been filed by other entities to provide subscriber-based services using MAS channels, there is little actual use by these private carrier applicants. Microwave Data Systems (MDS), a major supplier of MAS equipment, estimated that 90% of the newly licensed systems that have actually been constructed are licensed to private users, and that by far, the majority of equipment orders it has filled are from private users to meet internal communications requirements.

A number of commenters noted the use of MAS among utilities to remotely monitor and control electrical distribution substations, line switches and capacitor banks, to track and report power consumption, and for other real-time monitoring and control over widely-scattered utility system components. Similarly, the American Petroleum Institute (API) reported that MAS facilities are deployed in oil and natural gas production

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[2] See, *e.g.*, Comments of East Bay Municipal Utility District, p. 8; Delmarva Power and Light, p. 2; Southern California Edison, p. 2; Puget Sound Energy, p. 3; American Water Works Association, p. 10; American Petroleum Institute, p. 6; Washington Suburban Sanitary Commission, p. 6; Comsearch, p. 2; and Black & Associates, pp. 3-5.

fields and along pipelines to monitor and control a variety of operating parameters so as to satisfy safety and environmental objectives and to maintain optimal levels of production.

The Commission initiated this proceeding in order to examine ways of maximizing use of the spectrum allocated for MAS services. The Commission also notes its examination was prompted by additional considerations and objectives, specifically: (i) to provide opportunities for continued development of competitive new service offerings; (ii) expedite market entry (for new entrants and services); and (iii) promote technological innovation.[3]

These facts reveal the Commission's desire to move additional spectrum and capacity rapidly to market through -- what was then -- its relatively new-found auction authority, and to simultaneously facilitate the development of new subscriber-based services for the consuming public.

While the Joint Commenters believe these objectives are worthwhile, we caution that efforts to do so must be balanced with the public interest requirement that Critical Infrastructure Industry (CII) licensees and providers be assured of both the protection and

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[3] NPRM at 2.

overall spectrum capacity necessary to efficiently meet present and future needs. It is pursuant to these perspectives that the following is offered:

- Public Safety Radio Services (PSR) are statutorily exempt from auction authority;
- Use of designated spectrum by Critical Infrastructure Industry (CII) Providers is covered under the PSR exemption; and
- CII Providers require additional MAS channels to meet present and projected demand.

As explained more fully herein, Joint Commenters request that the Commission adopt the following proposals as part of its final determinations in this proceeding:

(a) Designate the 928/952/956 MHz MAS channels as CII spectrum, and restrict any future licensing to CII eligibles, defined as entities who would be eligible for licensing in the former Power, Petroleum or Railroad Radio Services under Part 90 of the FCC's Rules;

(b) Grandfather existing MAS facilities in the 928/952/956 MHz and 928/959 MHz bands; and

(c) Allocate at least 20 new channel pairs in the 932/941 MHz bands for exclusive licensing to CII eligibles.

B. Public Safety Radio Services Are Statutorily Exempt From Auction Authority

The Commission's authority to auction spectrum licenses was originally conferred in the Omnibus Budget Reconciliation Act (OBRA) of 1993,[4] but was limited to

[4] Pub. L. No. 103-66.

situations where the "principal use" of the spectrum "will involve, or is reasonably likely to involve, the licensee receiving compensation from subscribers" for the transmission or reception of signals on the licensee's frequencies. Despite the clear direction in the 1993 OBRA that the Commission was not to alter its traditional public interest criteria for allocating spectrum and that it was to use "engineering solutions, negotiations, threshold qualifications, service regulations and other means to avoid mutual exclusivity in application and licensing proceedings," the Commission adopted a standard approach to spectrum allocations that would permit it to justify use of auction authority in almost any frequency band:

(1) If a target frequency band is made available for geographic licensing for any permissible use:
    (a) There will likely be mutually-exclusive applications;
    (b) Auctions would be the most expedient means of selecting licensees; and
    (c) Providers of subscriber-based services are more likely to win licenses in an auction setting.
(2) Therefore, the target band should be subjected to auctions because the principal use of the spectrum is likely to involve subscriber-based service and there will likely be mutually-exclusive applications.

Through aggressive application of the limited auction authority conferred in the 1993 OBRA, the Commission has raised billions of dollars for the U.S. Treasury since auctions commenced in mid-1994.

In February 1996, Congress enacted the Telecommunications Act of 1996 (1996 Telecom Act),[5] which was intended to open local exchange markets to competition, increase competition generally within the telecommunications industry where it presently exists, and reform the system of universal service as local, access and exchange markets move towards cost-based competition. Hence, at the time this proceeding commenced the Commission was appropriately pursuing statutory directives contained in the 1996 Telecom Act, namely: to promote competition in the telecommunications industry and to expedite the implementation of new service offerings to the public.[6]

The instant NPRM was initiated while the Commission was in the midst of auctions for the C Block Broadband PCS spectrum which, at close, had gained attention as the largest public auction in U.S. history. It was against this backdrop -- of soaring perceptions *vis-a-vis* the value of licenses and perhaps unrealistic expectations -- that the Commission developed its proposals for the MAS proceeding. As framed, they are designed to streamline "...licensing procedures that provide licensees sufficient flexibility to use various technologies and offer a broad range of communications services."[7]

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[5] P.L. No. 104-104.

[6] Given the Commission's success in its auction program up to that point, it is logical to conclude that there were numerous incentives for making additional spectrum available as expeditiously as possible.

[7] NPRM at 3.

By 1997, however, Congress was in the midst of developing a balanced budget, and looked to spectrum auctions as an expedient means to secure additional federal revenues. At the same time, however, Congress had come to recognize the need to ensure that spectrum used to safeguard life, health or property should not be subject to the Commission's auction authority and, accordingly, exempted "public safety radio services" from such authority in the Balanced Budget Act of 1997.[8]

It is instructive here to review the specific language of the exemption contained in the Balanced Budget Act:

> The competitive bidding authority granted by this subsection shall not apply to licenses or construction permits issued by the Commission--
>
> (A) for public safety radio services, including private internal radio services used by State and local governments and non-government entities and including emergency road services provided by not-for-profit organization, that--
>
> (i) are used to protect the safety of life, health, or property; and
> (ii) are not made commercially available to the public....[9]

This provision reflects Congress's view that because such licenses are used by utilities, pipelines and railroads (i.e., Critical Infrastructure Providers) and others, to protect the safety of life, health and property, the public interest would best be served by

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[8] The Balanced Budget Act of 1997, P.L. No. 105-33 (enacted August 5,1997) ("1997 Balanced Budget Act").

[9] Id. at Title III, §3002, adding a new Section 337(f)(1) to Title III of the Communications Act of 1934.

ensuring that such public safety radio services are undisturbed by any auction activity. In the Conference Committee report that accompanied the 1997 Balanced Budget Act, Congress explained:

> [T]he exemption from competitive bidding authority for "public safety radio services" includes "private internal radio services" used by **utilities**, **railroads**, metropolitan transit systems, **pipelines**, private ambulances, and volunteer fire departments. Though private in nature, the services offered by these entities protect the safety of life, health, or property and are not made commercially available to the public. The conferees note that the public safety radio services exemption described herein is much broader than the explicit definition for 'public safety services' contained in section 3004 of this title (adding new section 337(f)(1) to the Communications Act).[10]

Thus, the plain language requires the Commission to forbear from imposing any auction requirements which would include licenses expressly exempted under the 1997 Balanced Budget Act.

C. Critical Infrastructure Industries Are Included Under PSR Exemption

It is significant to note that even as Congress was expanding the Commission's authority to place additional spectrum into the competitive bidding pool, it simultaneously barred the inclusion of public safety radio services, including private internal radio services used to protect the safety of life, health or property, and which are

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[10] See H.R. Rep. No. 105-217, at 572 (1997) ("House Report") (emphasis added).

not made commercially available. By carving this exemption from the Commission's auction authority, Congress plainly expressed its intent to include both the licenses as well as entities which used such licenses and/or their private networks to protect the safety of life, health and property. The plain meaning of the language -- particularly in view of the following facts -- support this premise: (a) Critical Infrastructure Industry Providers depend on internal radio systems in order to provide services that protect life, health and property; (b) Critical Infrastructure Industry Providers rely on the use of their internal radio communications systems to support the nation's infrastructure; and (c) these radio services are not made commercially available to the public.

The language of the exemption and the accompanying rationale reflect a well-established regulatory recognition that public safety radio licenses and services should receive additional protections. For example, the Public Safety Wireless Advisory Committee stated in its Final Report that "public service providers, such as transportation companies and utilities rely extensively on radio communications in their day-to-day operations, which involve safeguarding safety and preventing accidents from occurring."[11]

The Commission has also acknowledged the public safety nature of utility, pipeline and railroad communications. In the "refarming" proceeding, PR Docket No.

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[11] See Final Report, Public Safety Wireless Advisory Committee at 33, (September 11, 1996).

92-235, the Commission consolidated the private radio service pools below 800 MHz. In its consolidation plan, the Commission took into account the "critical, public safety-related services" provided by utilities and pipelines and provided special coordination protection for these services.[12]

> [S]ome types of radio users employ radio not just for day-to-day business needs but also to respond to emergencies that could be extremely dangerous to the general public. Oftentimes these communications systems are employed to meet Federal regulations... In this regard, there is broad support in the comments to protect operations in several radio services (Railroad, Power, and Petroleum) where radio is used as a critical tool for responding to emergencies that could impact hundreds or even thousands of people. Although the primary function of these organizations is not necessarily to provide safety services, the nature of their day-to-day operations provides little or no margin for error and in emergencies they can take on an almost quasi-public safety function. Any failure in their ability to communicate by radio could have severe consequences on the public welfare... Because interruptions in the ability of these entities to communicate could detrimentally affect the public welfare, we believe that it is important to maintain the integrity of communications on radio spectrum used for railroad, power, and petroleum operations.[13]

Finally, the recently issued Report of the President's Commission on Critical Infrastructure Protection (PCCIP) provides a broader view of both the categories of entities eligible under critical infrastructure considerations as well as national policy issues associated with the need to protect Critical Infrastructure.[14]

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[12] Second Report and Order (SR&O), PR Docket No. 92-235, 12 FCC Rcd 14307, 14309 (1997).

[13] 12 FCC Rcd 14329.

[14] *E.g.*, Critical Foundations, The Report of the President's Commission on Critical Infrastructure Protection (October, 1997).

Thus, with the advantage of hindsight, Congress has carved out an express exception for public safety radio service licenses and, by reference, use of such spectrum by Critical Infrastructure Providers, in order to protect spectrum and licenses used to safeguard life, health and property. Moreover, and in doing so, Congress determined it necessary to offer guidance on the scope of the definition to be employed in determining the broad protection to be accorded under this provision, and stated "...the exemption described herein [Section 3002] is much broader than the explicit definition for 'public safety services' contained in section 3004 of this title [which added] a new section 337(f) to the Communications Act."[15]

The foregoing makes abundantly clear that Congress intended the exemption for PRS (including private internal radio services) to encompass licenses used for (as well as licensees using such spectrum for) protection of the safety of life, health and property. Accordingly, the Joint Commenters urge the Commission to so affirm as part of its final determinations in this proceeding, adopt the joint proposals contained herein, and take appropriate steps to establish rules and regulations necessary to ensure that the exempted spectrum and Critical Infrastructure Providers are afforded the requisite protection.

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[15] House Report at 572.

II. The 928/952/956 MHz MAS Channels and At Least 20 Channel Pairs In The 932/941 MHz Band Should Be Allocated for Licensing to Critical Infrastructure Providers

The existing channels at 928/952/956 MHz are exhausted in many areas of the country, and critical infrastructure providers have a growing need for additional channels. The following sections highlight some of the communications and spectrum needs of these entities:[16]

Electric

Reliable electric power is critical to the modern economy and the U.S. Energy infrastructure is one of the best in the world. SCADA systems, particularly MAS-based SCADA systems, are an important component of the electric power industry's management of the power grid to address these common local disruptions, as well as second-by-second management of the nation's electric supply. SCADA systems are an integral link in the electric utility's energy management system, collecting system data from the field, maintaining status reports, initiating controls, and posting alarms. Individual electric utility SCADA systems may monitor 30,000 to 50,000 data collection points. SCADA systems may be interrogated at extremely rapid intervals, intervals measured in seconds. NSTAC summarized the nation's electric utilities as follows:

[16] In addition, the growing spectrum needs of electric, gas and water utilities and natural gas pipelines were documented in the June 30, 1998 Final Report of the Utility Spectrum Assessment Taskforce (USAT), a copy of which was filed with the FCC on July 16, 1998 in RM-9267, and is incorporated herein by reference. A copy of this report may also be downloaded from http://www.utc.org/usat/

> "... There are about 3,000 independent electric utilities in the United States. Each is interconnected with coordinated controls, operations, telecommunications networks, and sophisticated control centers. These utilities include investor-owned public utilities, government-owned systems, cooperatives, and manufacturing industries that also produce power." (NSTAC, 1997)

While this estimate provides a picture of the electric power industry today, the Energy Policy Act of 1992 began an ongoing deregulation initiative within the power industry. Additional deregulatory activities are underway in statehouses and public service commissions across the country, and debates on this issue are underway within the U.S. Congress. In this deregulated environment, SCADA will be an increasingly important component of power grid management–coordinated power production capacity and distribution systems will be critical to individual utilities. Because the industry is in a state of extreme flux, it is difficult to forecast specific spectrum requirements for the MAS band by electric utilities, but as the dominant users of the power pool MAS frequencies it is clear that electric utilities have a significant and ongoing need for MAS spectrum.[17]

With deregulation and industry restructuring, an integrated communications system encompassing power generators, transporters, and marketers will be critical. An implication of that forecast can clearly be applied to the MAS band as the properties of

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[17] UTC recently published the results of a year-long study of utility spectrum requirments. This report, demonstrating a need for approximately 6 MHz of additional spectrum, is available at www.utc.org/usat/. A copy of the report, which is incorporated herein by reference, was attached to UTC's Reply Comments, filed July 16, 1998, in RM-9267.

this band make it extremely important to power utility communications systems. These properties include: independence from land line interruption, over-the-horizon communication, and protected status (relatively immune from unauthorized interruption).

Water

The President's Commission on Critical Infrastructure Protection found that there is not a "typical" water treatment supply system in the United States, but did note that drinking water systems entail the management of source waters, treatment facilities, and distribution systems, the success of which is critical to the nation's critical infrastructure (Executive Order 13010). The Commission also noted that water infrastructure systems and other Vital Human Services are unique in that they "are highly localized in character". The Commission report, Critical Foundations, went on to say that "... Loss of confidence in these infrastructures [VHS] can greatly magnify the more objective costs to the economy and national security...".

Drinking water utilities rely on SCADA systems which utilize the MAS bands to prevent the losses of system integrity identified in Critical Foundations. The PCCIP report cited a number of specific examples of system failures that relate directly to the need for and utility of SCADA systems by water utilities: loss of water pressure from pump failure, therefore jeopardizing fire flow needs; management of "aging" infrastructure to prevent system surges; preventing water service failures to health facilities and industrial users; and disruption of power supplies. Water utilities are

implementing programs to prevent such catastrophic system failures and to insure that day-to-day operations provide a safe and adequate supply of potable water. A key component of efficiently managing these systems is the use of SCADA.

There are more than 8,200 community water systems serving populations of more than 3,300 persons (FY 1996 National Public Water System Annual Compliance Report, USEPA). The degree to which MAS plays a role in SCADA applications at any one drinking water utility may vary but it is reasonable to assume that any water system serving more than 3,300 persons has applications for which data transfer for control and system operations via MAS frequencies would be the most effective means of communications. Smaller community water systems can also benefit from use of MAS in SCADA applications particularly where systems are interconnected or managed by a single organizational entity.

With increasing regulatory pressure under implementation of the 1996 Safe Drinking Water Act Amendments, all drinking water systems will be seeking to:

1. Increase source water protection by monitoring water quality (including use of remote data acquisition systems);
2. Improve remote treatment management systems;
3. Increase distribution system operational control; and
4. Enhance system efficiency.

These modifications are directed at protecting the public from both acute pathogenic and chemical and reduction of chronic lifetime health risks. Because the management of water treatment and distribution is not simply the transport of an existing commodity from one place to another, but the delivery of a product that is subject to stringent safety requirements as it is delivered to the customer, drinking water management must be effectively controlled from source-to-tap. Many systems will need to either introduce or expand MAS SCADA applications to address this management issue as well as insure adequate water supply.

These pressures will translate into additional demand for MAS spectrum. Water utility MAS applications will be geographically unique and constitute key communication links in a critical infrastructure system recognized by PCCIP and NSTAC. In heavily urbanized areas -- and there are more than 330 water utilities with populations served greater than 100,000 persons -- existing users are already experiencing difficulty obtaining adequate spectrum in MAS bands appropriate for SCADA.

Since proliferation of 931 MHz common carrier paging established under Rule Part 22.531, MAS systems in major metropolitan areas began to suffer reliability problems caused by overwhelming interference. Metropolitan areas with this problem include: Washington / Baltimore, Miami, Houston, San Diego, Los Angeles, San Francisco, Chicago, Detroit, and many other areas. In these urban areas drinking water utilities compete with: paging services, financial systems, security systems, utilities, and

other users currently and find themselves constrained by (1) available resources (including those imposed by PUCs) and (2) the absence of unoccupied spectrum in the MAS band.

Oil and Natural Gas

The oil and natural gas industries rely heavily on MAS and SCADA applications to ensure the safe, efficient and environmentally responsible production, transmission and distribution of oil and natural gas products. For instance, MAS facilities are used along oil and natural gas pipelines to measure and adjust critical variables such as temperature, pressure level, and volume without constant manual surveillance. This capability is essential to satisfy Federal Energy Regulatory Commission, safety and environmental requirements and to maintain an acceptable level of systems throughput.

Similarly, MAS facilities are deployed in production fields to remotely monitor and control numerous oil and natural gas wells. Typically, a master transmitter polls each well site on a periodic basis to provide field management with reliable and current data with respect to a number of important operating parameters, including: (1) valve control settings; (2) flow rates; (3) volume; (4) pressure differentials; (5) meter pressure; (6) temperature; and (7) the functioning of alarm systems. This information is then used to, among other things, dispatch technicians according to demands, resulting in more efficient operations, enhanced safety and improved well production. In addition to these data functions, MAS facilities may be used to provide voice communications in

production fields through the attachment of a handset to a MAS remote terminal unit (known as an "orderwire system"). In this manner, field personnel may communicate promptly and efficiently with the company's field office in the event of a safety problem or other emergency.

Another important function of MAS facilities is to assist the natural gas industry in the maintenance of "peak performance" during blizzards and other severe weather conditions. At such times, the demand for natural gas often exceeds what can be provided from pipeline systems. As a result, gas companies typically build storage fields near major metropolitan population centers and load these fields with surplus natural gas during the summer months. MAS facilities enable these companies to remotely activate the wellheads at the storage fields during critical winter times so that heightened demand levels for natural gas can be satisfied.

Additionally, some oil producers rely on MAS channels to manage their related steamflood secondary recovery operations. In this regard, a single MAS may be used to monitor and control the passage of millions of gallons of water through softwater booster pump stations, water encroachment wells, waste water treatment systems, fresh water wells and waste water disposal systems.

Railroads

The railroad industry makes extensive use of MAS facilities for real-time switching and signalling functions throughout the nationwide rail network. MAS stations are deployed along the railroad right-of-way to carry the telemetry and data signals used for operating track switches from remote control locations. MAS networks also carry the telemetry signals which operate by remote control the illuminated wayside signal indicators located along the railroad right-of-way.

These MAS facilities are absolutely vital to the continued safe and efficient operation of the nation's rail network. Additional MAS frequencies are needed as the railroads replace outmoded "pole line" communications links with safe, more reliable radio-based circuits.

For all of the foregoing reasons, the Joint Commenters recommend that the 928/952/956 MHz MAS channels and at least 20 channel pairs in the 932/941 MHz band be allocated on an exclusive basis to Critical Infrastructure Providers, defined as entities eligible under the former Power, Petroleum and Railroad Radio Services under Part 90 of the FCC's Rules.

III. Incumbent MAS Operations in the 928/952/956 MHz and 928/959 MHz Bands Should be Grandfathered Regardless of Any New Eligibility Restrictions

In its NPRM in this proceeding, the Commission tentatively concluded that the operations of all existing MAS licensees in the bands 928/952/956 MHz and 928/959 MHz should be grandfathered. (Notice at ¶¶ 13, 19). The vast majority of commenting parties expressed strong support for this conclusion. So, too, the Joint Commenters believe that such grandfather rights are essential to preventing the disruption and/or dislocation of important MAS operations in the bands that will be subject to the Commission's new rules.

As discussed in Sections I and II above, the Joint Commenters urge the Commission to limit eligibility for subsequent licensing in the 928/952/956 MHz bands to "Critical Infrastructure Providers" -- i.e., entities eligible in the former Power, Petroleum and Railroad Radio Services under Part 90 of the Commission's rules. While such entities constitute the great majority of incumbent licensees in these bands, there are some incumbents who would not satisfy this new eligibility requirement and would, as a result, be prohibited from licensing additional MAS spectrum on these channels.[18] There is no reason, however, why such incumbents should not be allowed to continue operating their existing systems, as presently authorized, provided that they do not expand their systems or otherwise encroach upon the operations of Critical Infrastructure licensees.

[18] Such entities would presumably remain eligible for licensing on any channels in the 959 MHz band and the 932/941 MHz bands that are not reserved for the exclusive use of CII eligibles.

The same reasoning holds true in the event that the Commission decides to auction geographic licenses for available channels in the 928/959 MHz band to commercial entities. A significant number of "Critical Infrastructure Providers" presently use these channels for important public safety-related functions in areas where all MAS channel pairs in the 928/952 MHz band have been exhausted. The forced relocation of these licensees would entail the potential disruption of vital communications and the abandonment of costly systems that, in many cases, could have been operated for years to come.[19] Accordingly, the Commission should grandfather the existing systems of private (as well as commercial) licensees on this spectrum.

Grandfather rights should apply to any MAS system licensed pursuant to an application filed with the Commission prior to February 19, 1997 -- the effective date of the Commission's filing freeze on applications for new systems or major modifications in the 928/959 MHz band and non-private applications in the 928/952/956 MHz bands.[20] Grandfathered licensees would be able to continue operating in accordance with their existing authorizations, but would not be permitted any system expansions except for the

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[19] It is not even clear that appropriate alternative spectrum would be available, given that in almost every instance, the use by private licensees of 928/959 MHz MAS channels typically has been the result of congestion and channel unavailability in the 928/952 MHz MAS band.

[20] Grandfather rights also should be extended to licensees that submitted their applications prior to February 19, 1997, but subsequently made minor amendments to their applications (as determined by the Commission) in a timely fashion.

addition of remote units that communicate with previously authorized master stations or submaster stations and comply with the Commission's technical and operational requirements. In this way, the Commission could implement a new, forward-looking approach to MAS eligibility and licensing without jeopardizing existing systems and the functions they serve.

IV. Conclusion

Multiple address systems are an integral part of utility, pipeline and railroad communications systems, and are essential to the support of these critical infrastructure industries. With the passage of the Balanced Budget Act of 1997 and the explicit recognition by Congress that these and other public safety radio services should not be expected to compete in auction for spectrum licenses, the FCC should allocate the 928/952/956 MHz MAS channels and at least 20 MAS channel pairs in the 932/941 MHz bands for the exclusive use of licensees who would be eligible for licensing in the former Power, Petroleum or Railroad Radio Services under Part 90 of the FCC's Rules.

WHEREFORE, THE PREMISES CONSIDERED, the Joint Petitioners

respectfully request the Commission to promptly take action in this docket in accordance with these recommendations.

Respectfully submitted,

UTC, The Telecommunications Association

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